

## Trangformation of Women at Work in Asia

An Unfinisished Development Agenda SUKTI DASGUPTA• SHER SINGH VERICK


## Transformation of Women at Work in Asia

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# Transformation of Women at Work in Asia 

## An Unfinished Development Agenda

Edited by<br>Sukti Dasgupta and Sher Singh Verick

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## List of Abbreviations

| ACFTU: | All-China Federation of Trade Union |
| :--- | :--- |
| ACWF: | All-China Women's Federation |
| ADB: | Asian Development Bank |
| ADWD: | Asian Decent Work Decade |
| APRM: | Asia-Pacific and Arab States Regional Meeting |
| BBS: | Bangladesh Bureau of Statistics |
| BPS: | Budan Pusat Statistik |
| CAGR: | Compound Annual Growth Rate |
| CEDAW: | Convention on the Elimination of All Forms of Discrimination |
|  | against Women |
| CFPS: | China Family Panel Studies |
| CPC: | Communist Party of China |
| CPPCC: | Chinese People's Political Consultative Conference |
| CSES: | Cambodia Socio-economic Survey |
| CULS: | China Urban Labour Survey |
| CWB: | Construction Welfare Board |
| CWWN: | China Working Women Network |
| DDS: | Deccan Development Society |
| EPR: | Employment-to-population Ratios |
| EUS: | Employment and Unemployment Surveys |
| FDI: | Foreign Direct Investment |
| GCE: | General Certificate of Education |
| GDP: | Gross Domestic Product |
| GNP: | Gross National Product |
| HDI: | Human Development Index |
| HIES: | Household Income and Expenditure Survey |
| ICRW: | International Centre for Research on Women |
| ILO: | International Labour Organization |
| ISCED: | International Standard Classification of Education |
| ISCO: | International Standard Classification of Occupations |
| ISSS: | Institute of Social Science Survey |
| KILM: | Key Indicators for the Labour Market |
| Lao PDR: | Lao People's Democratic Republic |
| LFP: | Labour Force Participation |
| LFPR: | Labour Force Participation Rate |
| LFS: | Labour Force Survey |
| MFIs: | Microfinance Institutions |
| Luckow Mahila Sewa Trust |  |
| CD: |  |


| MGNREGA: | Mahatma Gandhi National Rural Employment Guarantee Act |
| :--- | :--- |
| MPCE: | Monthly Per Capita Expenditure |
| MoP: | Ministry of Planning |
| NBS: | National Bureau of Statistics |
| NFHS | National Family Health Survey |
| NGO: | Non-governmental Organization |
| NIIT: | National Institute of Information Technology |
| NIS: | National Institute of Statistics |
| NPC: | National People's Congress |
| NSS: | National Sample Survey |
| NSSO: | National Sample Survey Organization |
| OECD: | Organisation for Economic Co-operation and Development |
| PPP: | Purchasing Power Parity |
| RMG: | Readymade Garment |
| SHG: | Self-Help Group |
| SIDA: | Swedish International Development Agency |
| SOE: | State Owned Enterprise |
| UID: | Unique Identity |
| UNDP: | United Nations Development Programme |
| UP: | Uttar Pradesh |
| UPSS: | Usual Principal and Subsidiary Status |
| WTO: | World Trade Organization |

## Foreword

Women in Asia are increasingly better educated, have fewer children and live in countries with more urbanized economies. Yet, in spite of these trends, the participation of women in the region's labour force has either fallen or remained stagnant. This sets the Asian region apart from the rest of the world.

In 2006, the tripartite delegates to the 14th International Labour Organization (ILO) Asia-Pacific and Arab States Regional Meeting (APRM) committed to an Asian Decent Work Decade (ADWD) for the period up to 2015. During this period, it was agreed that the member states would make concerted and sustained efforts to promote decent work for all. Gender parity in participation and wages was prioritized as one of the areas of action. In the next APRM meeting in 2011, participants reaffirmed their commitment. This publication reviews the issues surrounding women's participation and access to jobs in the region, in the context of the commitment made by constituents towards improving gender participation gaps.

In particular, this volume examines the rather complex relationship between structural transformation and development in the region and women's labour market engagement. The volume also reflects on different aspects of societal, household and individual behaviour. Drawing on the experiences of a diverse set of Asian economies, the report seeks to answer two overarching questions. First, what has been the role of women in the process of economic transformation in Asia? Second, to what extent have women gained from the transformation witnessed in the region?

These issues are taken up both from a comparative perspective, placing the countries in the region in a global context, and in the specific context of the countries. In doing so, the authors highlight both the supply- and demand-side explanations for the barriers women face in the labour market-demographic shifts, technology, globalization, urbanization, skills and social norms and values.

The report also lays out clear recommendations that present a way forward for countries in the region to ensure that economic transformation both benefits women and drives economic growth.

I hope that these findings will promote discussions around issues that are critical to improving women's access to employment in the region. The debate is all the more timely because the ILO Centenary Initiative on Women at Work has been launched as part of the preparations for the ILO's 100th anniversary in 2019. This publication is, therefore, timely and highly relevant, and will make an important contribution to a better understanding of the challenges and opportunities for women in the world of work.

Tomoko Nishimoto

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## 1

## Introduction

## Sukti Dasgupta and Sher Singh Verick

## 1. Introduction

Asian economies have undergone considerable economic transformation over the last three decades. Home to 2.9 billion working-age people and roughly 55 per cent of the global population, Asia is one of the most dynamic regions in the world today, but there is enormous diversity in levels and patterns of growth across the region. While some countries have relied on low wage export-led growth, others have been largely service-oriented. Agriculture remains important though its share in gross domestic product (GDP) has fallen in most countries. Many economies have moved into middle-income status and poverty rates have declined significantly. Since the 1990s education levels have improved considerably, with gender parity in access to primary and secondary education achieved in most of the region. At the same time, fertility rates have fallen in all countries, by as much as 50 per cent in Bangladesh, Cambodia, Lao People's Democratic Republic and Nepal.

Consequently, women in Asia are increasingly better educated, have fewer children and live in countries with more urbanized economies with a shift away from agriculture. These trends suggest that women across the region have more opportunities to engage in the labour market, particularly in wage employment. However, as witnessed in a number of countries, participation of women in the labour force has either fallen or remained rather stagnant. On an average, female labour force participation declined in East Asia from 70.8 per cent in 1994 to 63.3 per cent in 2014, while it has fallen from 36.4 to 30.6 per cent in South Asia over the same period. Female labour force participation in Southeast Asia and the Pacific remained stable at roughly 59 per cent.

While these aggregate trends mask the diversity across countries, they are significant in that they set the region as markedly differently from the rest of the world. In other developing regions of the world, there has been an increase in women's labour force participation rates, which is in contrast to what we observe across Asia. Even the Middle East and North Africa, the region with lowest level of labour force participation of women, has witnessed an increase, from 18.1 per cent in 1994 to 21.7 per cent in 2014.

As evident, in the analysis of different countries' experiences presented in this volume, the relationship between women's engagement in the labour market and broader development outcomes is very complex, reflecting different aspects of societal, household and individual behaviour. Since the 1970s, there has been a vibrant literature on women in development-with an emphasis on analysing women's role as economic actors. Boserup's (1970) seminal work highlighted that women's work, both at home and in the paid workforce, has made a significant contribution to economic growth. This opened up a lively discourse on 'women in development', which strove to highlight the positive synergies between investing in women and reaping the benefits of economic growth (Razavi and Miller, 1995). Researchers have pointed to the positive spill over effects of women's employment in accelerating poverty reduction and spurring productivity (Morton et al., 2014). It is also widely accepted that women's participation at work helps enhance gender equality (ILO 2012b; Khandker, 2002; World Bank, 2012).

From macro-economic perspective, lower levels of female labour force participation reduce the potential growth rates of an economy. This implies that underutilization of female labour force would result in economic losses (World Bank, 2012). In a report jointly authored by the International Labour Organization (ILO) and the Asian Development Bank (ADB) in 2011, it was pointed out that the Asia Pacific region is losing US\$ 42 billion to US $\$ 47$ billion annually because of the limited access of women to employment opportunities (ILO and ADB, 2011). Some studies have shown that eliminating discrimination against women could increase productivity per worker by 25 to 40 per cent, depending on the worker type and extent of exclusion. ${ }^{1}$ ILO (2012a) estimates that should the gender gap in labour force participation rate (LFPR) drop half way in the next five years, assuming that more women are working, the GDP growth rate could increase by an additional 1.5 per cent in South Asia, 0.5 per cent in East and Southeast Asia and roughly 0.3 per cent in East Asia. There are, therefore, clear economic benefits to the region from raising the share of women in the workforce.

These figures capture the negative effect of gender inequality on economic growth and development. The contribution of women to the development process, though often overlooked in broader policy discourses, could not be more relevant to countries that are yet to sustain higher rates of inclusive growth, especially in many parts of Asia (Kabeer and Natali, 2013; Ghosh, 2009).

To better understand these issues, this volume tackles two interconnected phenomenon. First, women's empowerment and gender disparities in the labour market and second, the extent and nature of economic transformation and structural change that countries in Asia have experienced in recent decades. Using this framework, the empirical work presented in the volume seeks to answer two overarching questions: first, what has been the role of women in the process of economic transformation in Asia? and second, to what extent have women gained from the transformation witnessed in the region?

[^0]Feminist economists have long pointed out that the nature of economic transformation and growth have a direct impact on women's working lives (as noted by Aslanbeigui et al., 1994; Boserup, 1970; Jain, 2005; Nelson, 2005; and others). Moreover, structural transformation is most closely linked to the transition of workers from self-employment in agriculture to wage-employment in industry (and services). Therefore, if an analysis is to be made on the interlinkage between the nature of structural transformation and female labour force participation, it is best done through the lens provided by paid employment. Clearly, women's participation in paid work is strongly dependent on time spent in reproductive functions and their 'unpaid work' and the extent to which they are able to access support either through public policies and/or private help, including sharing of unpaid work within the family. The issues surrounding unpaid work and other related dimensions, such as home-based work, suffice for a separate volume.

It is also widely recognized that measuring women's work, especially in developing countries, is overlooked, undervalued and underreported-particularly their non-market activities, such as caregiving which have economic benefits for households (Beneria, 1982; Boserup, 1970; Donahoe, 1999; Hirway, 2005). The fact that women are often found to be unpaid family workers or piece-rate homebased workers, encourages their invisibility in national statistics. The freeing up of women's time would enable them to participate more in the labour market (Antonopoulos, 2009). Though not a major focus in this volume, measurement of female labour force participation is discussed in some detail, while the recommendations presented stress that policymakers need to consider measurement of women's work more seriously.

When delving into further detail in understanding the differences in the participation of women in the labour force within Asia, it is necessary to consider both demand- and the supply-side factors. As outlined, the nature of economic growth and structural transformation have fundamental implications for the types of jobs created. This process is, in turn, influenced by factors such as the pace and characteristics of technological change and globalization. Job creation is also impacted by urbanization; jobs created in urban areas, due to economic agglomeration and spillovers, are fundamentally different than those linked to more traditional, rural-based and agriculture-driven economies. Legislation, such as labour laws and government policies have the potential to influence the type of jobs generated. On the supply side the key factors are educational attainment, household characteristics, access to credit and assets and the prevalent cultural norms about women's appropriate behaviour and work, as well as women's responsibilities in the sphere of unpaid work that condition their rates of participation and choices of employment.

In a mechanical sense, an increase in educational enrolment, which is defined as 'out-of-the labour force', will reduce the labour force participation rate for young women. While this is, in itself, a positive trend, it is not the main trend addressed in this book. Rather, it is the indirect impact of the demand- and supply-side factors highlighted above, including educational attainment, on the level and characteristics of labour force participation of women in Asia. Thus, the
more important issue tackled here is why participation rates remain low for working-age women who have finished formal education.

Female labour market participation also depends on household characteristics, such as the level of income security, especially in less-developed countries, which are characterized by high levels of absolute poverty. Consequently, women are forced to participate in the labour market and engage in unpaid, unstable and precarious work arrangements such as short-term contracts and informal jobs. Therefore, a note of caution: the widespread entry of women into the labour market is not always a desired situation, as it may be distress-driven and not reflect increased access to decent jobs. 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). As this book notes, during periods of economic crisis the number of women working in informal employment can increase, as witnessed during the East Asian Financial Crisis of 1997-1998 in Indonesia.

Therefore, it is essential in the Asian context to look beyond the numbers of women working or in the labour force. Across the region, the share of women who work in family enterprises as contributing family workers is high and women are concentrated in the low-skill low-wage segments and in informal employmentall of which are correlated with poor quality employment. In many of the countries studied in this paper, especially Bangladesh, Cambodia and China, the growth of export-oriented industries promoted women's employment, but often resulting in low wages and poor working conditions.

The remainder of this opening chapter addresses the key insights of the literature in Section 2 and the structure and objectives of this volume in Section 3, before turning to the main findings in Section 4.

## 2. What Has Been Said Before

The importance of economic transformation for women's participation in the labour market is the central theme of this volume. The stylized concept of structural transformation has been a key tenet of economics since the Industrial Revolution shaped our understanding of economic growth and the development process. At the same time, a vast literature on women's role in development has emerged over a number of decades. In this section, both strands are reviewed but with stronger emphasis on the latter.

## Economic Transformation

Economic transformation is the process of change in the structure of the economy and the accompanying shifts in employment. Building on the tradition of classical economists, Lewis (1954) had propounded that in a dualistic labour market with
a traditional (agriculture) and a modern (industrial) sector, with unlimited supplies of labour in the former, there will be a reallocation of labour from the traditional sector to the modern sector, which will drive the economic growth. In Lewis' view, the reallocation of labour will continue until all surplus labour has moved out of agriculture. Kuznets (1971), in his attempt to describe the modern growth system, illustrated that economies moved from agriculture to industry to services in the process of economic growth, as per capita incomes rises.

It is widely argued that there is a special role for manufacturing in economic development and structural transformation. Kaldor (1967) shows that growth in output, productivity and employment are all related with the performance of the manufacturing sector. More recently, Rodrik (2013) proposes that the manufacturing sector exhibits unconditional convergence, which implies that labour productivity in this sector, which is lagging in developing countries, tends to converge to the frontier. This process, thus, helps poorer countries catch up to richer economies.

In the Asian context, this has indeed been the case for some East Asian 'miracle' economies. But many developing countries, especially in South Asia, did not follow this path; rather, these economies have moved from agriculture to services, while the share of employment in manufacturing has remained more or less stagnant. In countries in Asia where the manufacturing sector was a major impetus to growth, a large number of low-skilled workers are women. This is particularly so for the garment, electronics and toy industries. The identification of women as being honest, docile, productive and cheap labour makes them the preferred workforce for many enterprises, where contracts are often unstable and irregular. This is also one of the reasons for the garment sector's growth in Bangladesh and Cambodia, as noted in this volume. Indeed, it is argued that increased flexibility in the labour market is contributing to new forms of gender segregation (Standing, 1999).

As stated by the former Chief Economist of the World Bank, Justin Lin (2013), 'few countries have achieved economic success without industrializing'. If a country does not follow the classical path of development in terms of a dominant role for the manufacturing sector in the process of structural transformation, what are the implications for women in the world of work? Will female labour force participation remain lower in such economies? Furthermore, in those countries where classical structural transformation has taken place, are women doing better? What is the nature of jobs that women have?

The role of women in a Kuznets-kind of structural change is reflected in the much-discussed notion of a U-shaped relationship between economic transformation and female labour force participation, which has been a dominant paradigm in the literature, which is covered below in detail.

## Women's Labour Supply

The literature on female labour supply or participation can be viewed 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 (domestic duties, education, etc.).

Starting with the theoretical perspective, 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 (e.g., by spouse or through social transfers) will exercise an income effect on women's labour supply decisions, resulting in a potential withdrawal from the labour market. Mammen and Paxson (2000) stress that increase in the wage for women who are initially out of the labour force, can exert only substitution effects and thereby cause an increase in labour force participation.

Beyond the basic labour supply model, 'unitary' and 'collective' household models have also been used to explain the labour supply behaviour of households and its implications for women'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). As Warnicke and Mayo (2012) note, in this kind of modelling as used by Becker, the most 'economically efficient' means of production within the household is a division of labour where women invest in the development of skills related to child rearing and housekeeping while men pursue market-based activities. 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 that 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. However, 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).

This aspect, in turn, is related to household insurance mechanisms in developing countries (this hypothesis is rooted in the literature on the 'added-worker effect'). Where generally there is no unemployment insurance, women's labour supply can be counter-cyclical in nature, rising 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 tends to be more pro-cyclical (Bhalotra and Umana-Aponte, 2012).

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 'discouragedworker' hypothesis implies, therefore, that unemployment has a negative effect on female labour force participation.

The 'added-worker' hypothesis implies that unemployment in the household (especially of the spouse) 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. 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). Indonesia is often cited as an example of the added-worker effect (Manning, 2000). In wake of the East Asian financial crisis in 1997-1998, 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 U-shaped Hypothesis

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. One of the most discussed phenomena, as highlighted above, 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).

The U-shaped hypothesis describes the correlation of the female labour force participation rate with economic development. The basic, stylized argument is that when a country is poor, women work out of necessity, mainly in subsistence agriculture or home-based production. As a country develops, economic activity shifts from agriculture to industry, which benefits men more than women. Subsequently, education levels rise, fertility rates fall and social stigmas weaken, enabling women to take advantage of new jobs emerging in the service sector that are more family-friendly and accessible. At a household-level, these structural shifts can be described in the context of the neoclassical labour supply model: as a spouse's wage rises, there is a negative income effect on the supply of women's labour. Once wages for women start to rise, however, the substitution effect will induce women to increase their labour supply.

In support of the hypothesis, a number of studies argue that high-income and low-income countries report the 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 hypothesis ${ }^{2}$ is predominantly grounded on cross-country analysis based on the observed relationship between economic growth and women's 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. ${ }^{3}$

Empirical studies and the analysis presented in this volume 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: 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). At the same time, many other countries such as Bangladesh, do not follow such a path.

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

[^1]Turkey (World Bank, 2009). With urbanization comes the need for urban-based services, which spurred the demand for women workers in industrialized economies in the twentieth century.

Alongside urbanization, some Asian countries are moving rapidly towards population aging-China, Singapore and Thailand in particular. By 2025, the share of persons ages $65+$ of the population of China will account for 13.5 per cent of the total population and 17.3 per cent in Singapore. This may mean lower employment to population ratios and lower labour supply, which would lead to policies to ensure that women join the labour force in larger numbers. In Thailand, between 2010 and 2025, the working age population will contract by 1.1 per cent, increasing the importance of women's economic activity to sustain or expand current productivity and output levels. This trend of increasing demand for and relevance of, women in the labour force has been witnessed in some North European countries in the recent past.

In summary, ascribing the complex evolution of female labour force participation in developing countries purely to changes in per capita GDP, as captured by the U-shaped hypothesis, oversimplifies the reality of multiple forces at play. For this reason, this volume focuses on a more nuanced typology of countries, described later in this chapter.

## The Importance of Education

Education is one of the most important factors influencing labour market outcomes in general and female labour force participation in particular. 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). A number of studies have shown higher returns to education for women than for men (Duraisamy, 2000; Psacharopoulos, 1994; Schultz, 1994). 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.

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, studies documenting a U-shaped relationship between participation and 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. Several studies in South Asia document such a non-linear relationship between education and participation (Das, 2006; Klasen and Pieters, 2012; Olsen and Mehta, 2006), while others record a positive relationship (Bhalla and Kaur, 2011; Faridi, et al., 2009; Hafeez and Ahmad, 2002). Some earlier studies even find a negative relationship between education and female labour force participation (Das and Desai, 2003; Dasgupta and Goldar, 2005; Kingdon and Unni, 1997; Kottis, 1990). ${ }^{4}$

## Fertility

Much of the available literature has focused on the decision of married women 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 (Kind and Hill, 1997). 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. Brinton (2002) examined the participation of married women in the East Asian economies and highlighted the importance of the demand side of the labour market in structuring married women's opportunities for paid employment.

[^2]
## Social Norms

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. This is a global phenomenon but is seen as a persistent factor in the Asian context. These norms operate at multiple levels of society, for example, religion, caste and locality. 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) and limit women's rights in the workplace and their engagement in work.

The impact of social norms is especially relevant in the case of 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 widely discussed in various studies (Anker, 1998; Rustagi, 2010; Swaminathan and Majumdar, 2006). 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. Furthermore, women are often viewed as 'secondary earners'-an attitude, added to norms of patrilocality in marriage that reduces the range of options for married women. Even highly-educated professional women face a narrower range of options as a result.

## Economic Empowerment

This volume focuses on female labour force participation and consequently, the issues discussed in the following chapters are very much linked to the notion of economic empowerment. The concept of 'empowerment' and its measurement has been much debated (e.g., ASPBAE, 1993; Batliwala, 2007; Cornwall and Edwards, 2010; Kabeer, 1994; Kabeer et al., 2011). Empowerment refers to gaining greater control over one's own life-includes enhancement of mobility, of decision-making about spending one's earned income, as well as other aspects of life such as the right to choose a partner, children's welfare and education and so
on. As Sudarshan (2014) notes, an enhanced sense of self-esteem is at the core of empowerment as is commonly understood. It also refers to an increased ability of women to negotiate the constraints of their everyday lives (Cornwall and Edwards, 2010). Kabeer et al. (2011) argue that in the context of Bangladesh, change at the level of women's individual consciousness and personal relations, whether or not these lead to societal changes and changes in power relations between men and women, are significant and a pathway to broader and more comprehensive change.

As discussed in this volume, the necessary elements of women's economic empowerment comprise a mix of autonomy and dignity (associated with choice, mobility and freedom from violence), non-discrimination in work and women's rights to ownership and management of productive assets (e.g., land, house, technology and finances) as well as women's access to voice representation and organization. These, in turn, provide them with the ability to make decisions both within the home and outside in the labour market.

In her analysis of changes in women's work patterns in the United States and other Organisation for Economic Co-operation and Development (OECD) countries, Goldin (2006) suggests that a long period of 'evolutionary change' preceded the 'revolution' of the last few decades. Three key aspects of the 'revolution' relate to: (a) 'horizon', that is, whether women see their labour force involvement as long and continuous or brief and intermittent; (b) 'identity' or women finding individuality through their work; and (c) 'decision-making', that is, whether labour force decisions are made jointly by women who are married or are in a long-term relationship or whether women are secondary workers and base their decisions on those made by their husbands/partners. ${ }^{5}$

## 3. Structure and Objectives of Book

The centrality of women in development and more specifically in the labour market, has received increasing recognition as evident in the large literature that has emerged over the last few decades, some of which has been noted above.

However, the extent and nature of women's participation in the labour force is a dynamic phenomenon, depending on a host of factors that change over time. This volume seeks to build on the wealth of knowledge in the area, while taking a broader perspective on the topic of female labour force participation and women's work in Asia. It attempts to provide a more holistic perspective on women's work in Asia, one that is complex, one that has a direct impact on macro-economic development but is also itself highly dependent on the nature and course of economic development, its associated institutions and the accompanying mindsets.

First, this volume covers these issues in both a comparative manner, placing the countries in the region in a global context and explores the specific nuances of

[^3]labour market outcomes of women in individual economies. Second, the selection of countries is based on a more detailed typology of countries in terms of their level of development. This provides more insights than a strict interpretation and application of the U-shaped hypothesis. Third, most of the literature tends to focus on supply-side explanations for barriers women face in the labour market. In addition to this set of factors, this volume places considerable emphasis on the demand side, in particular, growth and the nature of economic transformation as drivers of women's participation.

Using the most recent data, Figure 1.1 graphs countries according to their female labour force participation rate ( $y$ axis) and the log of their per capita gross national income (Atlas method, $x$ axis). The three vertical bars denote the following thresholds: low, lower-middle and upper-middle income. These lines provide

Figure 1.1:
A Typology of Countries in Asia and Their Level of Female Labour Force Participation


Sources: ILO's Key Indicators of the Labour Market and ILOSTAT; World Bank's World Development Indicators database.
Notes: LIC=low-income country threshold; LMIC=lower-middle-income country threshold; UMIC = upper-middle-income threshold; thresholds based on World Bank's classification of countries: lowincome economies are defined as those with a GNI per capita, calculated using the World Bank Atlas method, of $\$ 1,045$ or less in 2013; middle-income economies are those with a GNI per capita of more than $\$ 1,045$ but less than $\$ 12,746$; high-income economies are those with a GNI per capita of $\$ 12,746$ or more. Lower-middle-income and upper-middle-income economies are separated at a GNI per capita of $\$ 4,125$; see: http://data.worldbank.org/news/2015-country-classifications. MLFPR=male labour force participation rate for advanced economies and the European Union; FLFPR=female labour force participation rate for advanced economies and the European Union, see ILO's Key Indicators of the Labour Market, http://www.ilo.org/empelm/what/WCMS_114240/lang-en/index.htm.
a matrix of countries based on their level of economic development. Note that a similar, but reversed picture, is provided by using the ranking of countries on the Human Development Index (HDI). The horizontal dashed lines represent the average female and labour force participation rates in developed economies and the European Union (ILO regional estimates).

Figure 1.1 reveals that Asian countries can be broadly categorized into three groupings:

1. Low to middle income and high female labour force participation (Cambodia, Lao PDR, Nepal and Vietnam);
2. Low to middle income and low female labour force participation (Bangladesh, India, Pakistan and Sri Lanka);
3. Middle to high income and medium female labour force participation (China, Indonesia, Japan, Republic of Korea, Malaysia, Mongolia, Philippines and Singapore).

The first group of countries, those with high participation and lower levels of per capita income, consists of Cambodia, Nepal, Lao PDR and Vietnam. These countries have an average female labour force participation rate of 74.2 per cent and per capita income of approximately US $\$ 1,217$. On the United Nations Development Programme's (UNDP) HDI ranking, the Southeast Asian countries are categorized as medium development, while Nepal is ranked as a low-development country and is an outlier in South Asia in terms of its level of female labour force participation, though this is partly driven by a broader definition used by the Nepal Central Bureau of Statistics. ${ }^{6}$ The average years of schooling among women are less than 4 years. These economies share a number of other similarities such as a large share of agriculture in GDP and employment. At the same time, Cambodia (as discussed in this volume in more detail) and Vietnam have made rapid transitions towards industrialization, especially labour-intensive manufacturing.

South Asia accounts for the four countries in the second group: Bangladesh, India, Pakistan and Sri Lanka. The average female labour force participation in these labour markets is just 30.1 per cent, though, as analysed in this volume, the trajectories of these four countries are very different. Bangladesh has experienced strong growth in female labour force participation in the 2000s, while in India it has declined. Pakistan has also witnessed a rise, but from a very low starting point. In Sri Lanka, despite a long history of progress in human and social development, female labour force participation has remained low and stagnant. Sri Lanka is indeed an outlier in the sub-region: its per capita income level is double the other three, while the country is ranked 73 on the HDI, giving it 'high development' status. This is also reflected in the mean number of years of schooling for women, which at 10.7 years, puts Sri Lanka up with high-income countries such as the Republic of Korea and Japan. The puzzle is that these underlying conditions have not translated into strong growth of women's employment in the country.

[^4]The final group is composed of a set of range of diverse, middle- and highincome countries: China, Indonesia, Republic of Korea, Japan, Malaysia, Mongolia, Philippines, Singapore and Thailand. In this group, per capita incomes average $\$ 17,693$, ranging from just $\$ 3,270$ (Philippines) to $\$ 54,040$ (Singapore). The female labour force participation rate averages 54.8 per cent, with the lowest rates witnessed in Japan (48.9\%) and the Philippines (49.9\%) and the highest rates found in China ( $63.9 \%$ ) and Thailand ( $63.3 \%$ ). There is even greater diversity in terms of their ranking on HDI: medium development (Indonesia, Mongolia and Philippines), high development (China, Malaysia and Thailand) and very high development (Republic of Korea, Japan and Singapore).

This trichotomy of countries does not imply that future of trends for Asian countries in female labour force participation is deterministic and will replicate the paths followed by more advanced economies in the region. Furthermore, since this is a snapshot of the relationship between per capita income and participation of women, it is not possible to extrapolate and make simplistic projections for low- and middle-income countries in the region, especially given the diversity that exists within the region.

Nonetheless, this categorization does reveal that there cannot be a simple expectation that participation rates will follow a $U$-shaped path and rise once a country becomes better off. Rather, it suggests that a range of factors continue to keep female labour force participation rates down, much lower than for men, even in countries which are some of the richest in the world (e.g., Japan and Singapore). Moreover, the typology presented shows that poorer countries can both have low and high levels of participation, which, as discussed throughout this volume, reflects not only economic factors, but also social norms. Thus, there is a more complex pattern in the correlation between women's labour force participation and economic growth and transformation. It is simplistic to assume that women behave as 'rational' agents and make the best choice that is available, independent of social norms and demand-side factors.

## 4. An Outline of the Rest of the Book

Taking on broad insights on these different factors, this volume reviews trends in and characteristics of female labour force participation in a comparative setting (Chapters 2 and 3) and in country-specific contexts in Bangladesh, Cambodia, China, India, Indonesia and Sri Lanka (Chapters 4 to 10). These countries cover the three categories identified in Figure 1.1: a) low to middle income and low female labour force participation (Bangladesh, India and Sri Lanka); b) low to middle income and high female labour force participation (Cambodia); and c) middle to high income and medium female labour force participation (China and Indonesia).

Differences across these three categories of countries leads to many questions: why are participation rates lower in South Asia than other parts of Asia? Why did the participation rate decline in India but increase in Bangladesh? Why is the rate

Table 1.1:
Typology of Countries in Asia

| Country | Code | Female labour force participation rate (\%) | $\begin{gathered} \text { Year } \\ \text { (FLPR) } \end{gathered}$ | $\begin{gathered} \text { GNI per } \\ \text { capita, Atlas } \\ \text { method } \\ \text { (current US\$) } \\ 2013 \end{gathered}$ | Human <br> Development <br> Index (HDI) <br> ranking 2013 | Mean years of schoolingfemale (2002-2012) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Group 1: High participation, low-middle income |  |  |  |  |  |  |
| Cambodia* | KHM | 77.8 | 2011 | 950 | 136 | 3.2 |
| Nepal | NPL | 79.4 | 2011 | 730 | 145 | 2.4 |
| Lao People's <br> Democratic <br> Republic | LAO | 66.3 | 2005 | 1450 | 139 | 3.8 |
| Viet Nam | VNM | 73.2 | 2013 | 1740 | 121 | 5.2 |
| Group average |  | 74.2 |  | 1217.5 | 135.3 | 3.6 |
| Group 2: Low participation, low-middle income |  |  |  |  |  |  |
| Bangladesh* | BGD | 36.0 | 2010 | 1010 | 142 | 4.6 |
| India* | IND | 27.2 | 2012 | 1570 | 135 | 3.2 |
| Pakistan | PAK | 24.4 | 2011 | 1360 | 146 | 3.3 |
| Sri Lanka* | LKA | 32.9 | 2012 | 3170 | 73 | 10.7 |
| Group average |  | 30.1 |  | 1777.5 | 124.0 | 5.4 |
| Group 3: Medium participation, middle-high income |  |  |  |  |  |  |
| China* | CHN | 63.9 | 2013 | 6560 | 91 | 6.9 |
| Indonesia* | IDN | 50.3 | 2013 | 3580 | 108 | 6.9 |
| Korea, <br> Republic of | KOR | 50.2 | 2013 | 25920 | 15 | 11.1 |
| Japan | JPN | 48.9 | 2013 | 46330 | 17 | 11.2 |
| Malaysia | MYS | 52.4 | 2012 | 10430 | 62 | 9.2 |
| Mongolia | MNG | 56.3 | 2013 | 3770 | 103 | 8.5 |
| Philippines | PHL | 49.9 | 2013 | 3270 | 117 | 8.8 |
| Singapore | SGP | 58.1 | 2013 | 54040 | 9 | 9.7 |
| Thailand | THA | 63.3 | 2013 | 5340 | 89 | 7.0 |
| Group average |  | 54.8 |  | 17693.3 | 67.9 | 8.8 |

Sources: See Figure 1.1; UNDP's Human Development Index database, http://hdr.undp.org/en/con-tent/human-development-index-hdi; World Bank's World Development Indicators database, http:// data.worldbank.org/data-catalog/world-development-indicators.
Note: ${ }^{*}$ - countries covered in this volume.
so high in Cambodia? Why has the participation stagnated in Sri Lanka despite the progress on human development and more robust economic growth in recent years?

Analysing the range of demand and supply-side factors provides an entry point into seeking explanations: for instance, the importance of education in influencing
the level and trends in female labour force participation which is already much discussed in the literature. Moreover, these factors have evolved, some quite rapidly, in the Asian context over recent decades. For example, social attitudes and norms towards women's role in the labour market have relaxed in certain contexts, including in some conservative societies. This is reflected in the rising educational attainment of girls and young women. Most countries have achieved gender parity in primary and, increasingly, secondary school enrolment rates. Another reflection of changing social norms is the rise in the age of marriage, partly as a result of increased educational attainment along with a fall in the fertility rate.

On the one hand, the challenge is whether young women leaving formal education have skills that facilitate the transition from school to work and on the other, whether there are jobs that they can access and also if they have the necessary support from their families and societies to work outside their homes. Hence, the focus of this volume is not only on the supply-side factors that promote women's participation, but more importantly on the demand side issues that create the space for women to be engaged in decent work.

There are many differences across the region: in terms of factors that drive higher levels of labour force participation of women in some countries and not in others. Which policy interventions support women's empowerment, participation and, more importantly, lead to decent work? Taking on board the typology and factors presented above, this volume seeks to address these complex overarching questions of what is distinctive about women's labour force participation rates (LFPR) in the Asian region, what role have women played in economic transformation and structural change and to what extent has this structural change been conducive for women's work and empowerment.

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## 2

# Women Labour Force Participation in Asia Trends and Issues 

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## 1. Introduction

T'here has been a growing consensus that gender equality is 'smart economics'. Recent studies have found that 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 (Elborgh-Woytek et al., 2013; Esteve-Volart, 2004; Tansel, 2001). In addition to boosting economic growth, increased women's participation and reduced gender gaps in the world of work have been found to have positive spillover effects in terms of improved child health and education, accelerating poverty reduction and spurring productivity, among others (IFC, 2013: Morton et al., 2014). Furthermore, women's participation in employment can help reduce gender inequality by 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, as Boserup's (1970) pioneering work concluded, in spite of the contribution of women to key economic sectors, development policies and processes remain biased.

Over half a century after the ILO convention promoting non-discrimination (1958), gender gaps in the labour market still persist. Women disproportionately confront challenges in access to employment, working conditions, job security, wage parity and balancing work and family responsibilities (ILO and ADB, 2011). As highlighted in Chapter 1, rising women's employment may be the result of

[^5]macro and micro factors, such as structural change, urbanization, increased education attainment, lower fertility rates, changing societal norms and available employment opportunities. But it is also often the case in developing countries that it results from declining household income during economic crises (Abraham, 2009; Attanasio et al., 2005; Bhalotra and Umana-Aponte, 2010). Moreover, many women are home-based and contributing to non-market activities, such as caregiving, which despite having economic benefits for households remain largely unseen and unaccounted for (Beneria, 1982; Boserup, 1970; Donahoe, 1999; Elborgh-Woytek et al., 2013). Ultimately, understanding the complex nature of female labour force participation requires taking into account a range of socioeconomic factors at the macro, local and household levels.

Home to 2.9 billion working-age people, roughly 55 per cent of the global population, ${ }^{2}$ Asia is and will remain one of the most dynamic economic regions of the world. Since the 1990s, 16 out of 18 continental Asia countries grew faster than the global average, proving relatively resilient to international crises. ${ }^{3}$ At the same time, education levels have improved among girls, while fertility rates have fallen. 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 labour force and employment outcomes.

To provide insights on this critical economic and development challenge, this chapter presents an overview of recent and current trends in women's participation in Asia, as well as intra-regional differences. In doing so, it attempts to answer three questions. First, how does women's labour force participation in Asia compare to that in other developing regions? Second, what is similar or different in women's economic participation among Asian sub-regions and countries? And third, in setting the stage for subsequent chapters, what accounts for these patterns?

## 2. Labour Force Participation in Asia and Beyond

Globally, women's participation in the labour force has remained relatively stable in the last two decades or so, at just above 50 per cent (ILO, 2015). At a more disaggregated level, the participation of women varies considerably across developing countries and emerging economies in terms of trends and levels (see Figure 2.1). From 1991 to 2014, women's participation increased the most in Latin America and the Caribbean, followed by sub-Saharan Africa and the Middle East

[^6]Figure 2.1:
The Labour Force Participation Rate of Women (Per Cent), Selected Regions: 1991 and 2014


Source: ILO—Estimates and Projections of the Economically Active Population (EAPEP), 2013 Edition (Update April 2014).
Note: For working-age population, ages 15 and above. 2014 data are estimates.
and North Africa, that is, in all developing regions outside of Asia. In contrast, rates have declined in South Asia, driven by the situation in India, and East Asia, albeit from a high starting point. Southeast Asia women's labour force participation rate remained stable. In turn, mirroring regional changes, the global labour force participation rate for men has declined steadily over the same period, from approximately 80 per cent to 77 per cent. This decline reflects mainly an increase in education enrolment rates among younger men.

Currently, less than one-third of women of working age participate in the labour force in the Middle East, North Africa and South Asia while the proportion reaches around half in Latin America and the Caribbean and two-thirds in the East and Southeast Asia and sub-Saharan Africa. Although, overall high disparities between men and women's participation rates-the gender gap-have narrowed in all developing regions but East and South Asia (see Figure 2.2). In Asia, differences across sub-regions are marked and the gender gap ranges from 14.7 percentage points in East Asia to 50.1 percentage points in South Asia.

It is important to make a distinction between quantity and quality of employment, which is not reflected in a comparison with labour force participation rates (see Figure 2.3). For instance, as addressed in more detail later, in advanced East Asian economies, female labour force participation rates that surpass the global average (see Figure 2.1) mask the issue of underemployment of female workers. Similarly, in Cambodia and Vietnam, high participation is accompanied by women's overrepresentation in unpaid household activities and concentration in low-skill, low-productivity and low-pay work. Overall, beyond labour

Figure 2.2:
The Gender Gap in Labour Force Participation Rates (Percentage Points), Selected Regions: 1991-2014


Source: ILO—Estimates and Projections of the Economically Active Population (EAPEP), 2013 Edition (Update April 2014).
Note: For working-age population, ages 15 and above. 2014 data are estimates.

Figure 2.3:
Employment by Status and Share of Vulnerable Employment (Per Cent), Selected Regions: 2014


Source: ILO—Estimates and Projections of the Economically Active Population (EAPEP), 2013 Edition (Update April 2014).
Note: For working-age population, ages 15 and above. 2014 data are estimates.
force participation, women remain at a disadvantage in securing employment, and are more often in vulnerable forms of employment such as self-employment and unpaid care work, concentrate in fewer industries and occupations (occupational segregation) and have lower wages than male counterparts.

Besides, a large number of women are found to be informally employed in all developing countries. As per the ILO and WIEGO report of 2013, informal employment in South and East Asia (excluding China) is more than 60 per cent of total non-agricultural employment (except Thailand). It ranges from 65 per cent
in East and Southeast Asia to 82 per cent in South Asia. Within East and Southeast Asia, it ranges from 42 per cent in Thailand to 73 per cent in Indonesia, and similarly in South Asia it ranges from 62 per cent in Sri Lanka to 84 per cent in India. The estimates for China (based on six cities), show that 33 per cent of nonagricultural employment is informal.

Further, the proportion of persons informally employed in the formal sector has increased in many cases and these informally employed workers are not recognized or protected under national laws and regulatory framework. Moreover, although there are similar percentages of men and women engaged in informal employment across the continent, the picture is mixed. There is a clear segmentation along gender lines. While men are more likely to be in the informal sector, women increasingly work in the informal employment (both in formal and informal sectors), for example, as domestic workers. Besides, contributing family workers account for a sizeable share of women's informal employment in South Asia. Furthermore, very few women in informal employment are employers: 0 per cent in South Asia, 9 per cent in East and Southeast Asia (excluding China) and 12 per cent in China.

Further, the proportion of persons informally employed in the formal sector has increased in many cases and these informally employed workers are not recognized or protected under national laws and regulatory framework. There is a clear segmentation along gender lines in the informal employment.

## Box 2.1: Measuring Women's Economic Participation and Gender Gaps in the World of Work

Gender disparities in the labour market are manifest in multiple dimensions. Women and men have differentiated access to labour markets, employment and choice of work, and often receive different wages. Increasingly, there is an agreement on the importance of incorporating gender aspects in macroeconomic and sectoral policies with a view to assure growth is inclusive and prosperity is shared. Statistical analysis can help identify economic, demographic and behavioural factors behind labour market trends and inform policy design (ILO, 2012). Some of the main indicators used to understand how women and men engage in labour markets include gender disaggregated labour force participation, employment, unemployment, labour underutilization, employment status, employment by sector and occupation and average wages, among others.

Employment is defined as those performing economic activities for pay or profit. Unemployment encompasses those not employed, but who are looking and available to take up paid work. In turn, the labour force comprises both the employed and unemployed populations, that is, all persons who offer their labour for the production of goods and services in exchange for pay or profit. ${ }^{a}$ These definitions may underestimate women's economic contributions, particularly in developing regions, for several reasons.

First, activities traditionally performed by women, including household production of goods and services for own use, although recognized as work, are not considered employment. ${ }^{\text {b }}$ For instance, in an agricultural community, women carrying out traditionally female activities, such as growing subsistence crops, retrieving water or collecting wood, which are not-for-profit, are not employed. Conversely, men concentrated on the production and sales of cash crops are employed. Second, in rural areas, women are often available to take up paid work but if, given limited opportunities outside of the harvest time, they are not actively looking for employment, they are not considered to be unemployed, rather they are outside of the labour force (Pollack, 1997). ${ }^{\text {c In sum, by restricting }}$ the concept of employment to paid and for profit work and of unemployment to those seeking and available, these definitions may reduce the level and rate of employment, unemployment and labour force participation, particularly of women who, more often than men, engage in unpaid household work.

Furthermore, by including in employment those who worked for at least one hour in the reference period, high employment numbers may mask inadequate or underemployment. ${ }^{\text {d }}$ In fact, in Asia, underemployment in many cases is a greater concern than unemployment. In developing countries, where provision of social protection is limited and persons are often obligated to permanently engage in market activities, even if marginally, unemployment data needs to be complemented by measures of labour underutilization (Pollack, 1997). ${ }^{e}$ This is particularly true for women who are more likely than men to divide their time between paid work and household activities. Assessing gender gaps in job quality requires looking at working times, status in employment and type of employment arrangement (e.g., temporary or subcontracts), among others.

Moreover, the male and female structure of employment, in terms of status, often differs significantly. Throughout Asia, and much of the rest of the world, employed women are over-represented in own-account and contributing family work. This has implications for the analysis of gender income disparities. Income measures, such as wage income, bypass a large number of women working in non-salaried positions, while non-wage income is nearly impossible to estimate (ILO, 2012).

It is also useful to look at employment by sector and occupation to gauge gender disparities in the world of work. Women and men tend to concentrate in particular occupations and sectors, which produces a number of inequalities (Pollack, 1997). These data, especially in conjunction with income and education, can help assess where women work, where they are better off and where gender disparities are greatest. In addition, other indicators such as labour force participation by civil status and number of children can provide valuable insights on women's position in labour markets and reconciling their role inand outside of the household.

In a nutshell, understanding how women and men engage in labour markets through statistical evidence is paramount for policy design. Individually, these indicators may present limitations, but together they are able to provide valuable insight into women's contribution to the economy in Asia and beyond.

Source: 19th ICLS International Conference of Labour Statisticians Resolution; ILO (2012); Pollack (1997).

## Notes:

${ }^{\text {a }}$ These refer to the working age population, usually ages 15 and above.
${ }^{\mathrm{b}}$ The latest ICLS resolution changed the definition of employment, which now excludes the production of goods for own-use. This means there will likely be a greater underestimation of women in employment and the labour force. However, these women would be captured under forms of work, which include employment, own-use production work of goods and services, unpaid trainee work, volunteer work and other work activities.
${ }^{\text {c }}$ The previous definition of unemployment comprises those available or looking for employment, whereas the new definition includes only those who are both available and looking for employment.
${ }^{d}$ Reference period is usually the previous seven days.
${ }^{e}$ Time-related underemployment, unemployment and the potential labour force-those who express interest in performing paid work but whose current conditions limit their active job search or availability-are all measures of labour underutilization.

## 3. Women at Work in Asia

In the early 1990s, it would have been reasonable to think women's position in the labour market as somewhat similar across Asia. The economic structure of subregions across the continent was not much disparate. East Asia, South Asia and Southeast Asia and the Pacific were all largely agricultural, with over half of employment in the sector, whereas approximately one in five workers were employed in industry and one-fourth in services (Figure 2.4). A quarter century later, differences are marked. East Asian countries have undergone significant structural change: the

Figure 2.4:
Sectoral Composition of Employment in Asia by Sub-region (Per Cent): 1991-2014


Source: ILO regional estimates from the TRENDS Model, October 2014.
Note: For working-age population, ages 15 and above. 2014 data are estimates.

Figure 2.5:
Female Share of Employment in Agriculture for Selected Asian Countries: Latest Available Year


Source: ILO's Key indicators of the labour market, Version 8.0.
Note: For working-age population, ages 15 and above. Latest available year.
share of agriculture in total employment more than halved while that of services doubled; the sector currently responds for half of employment. The service industry is now also the main employer in Southeast Asia and the Pacific, followed by agriculture and industry. In contrast, agriculture remains the main employer in South Asia, twice the size of industry and considerably larger than the service sector.

Every country undergoes a process of structural transformation, wherein the relative importance of the agriculture sector is reduced, in terms of its contribution to GDP and also the proportion of workforce it engages. This process of structural transformation, especially agrarian transition, has been deeply gendered. We have seen increased importance of women's role in agriculture in recent years, which has been referred to as 'feminization of agriculture'. As measured by the proportion of women engaged in agriculture as main employment, the extent of the feminization of agriculture is more pronounced in South Asia. South Asian countries such as Nepal, Pakistan, Bangladesh and India still account for a major share of female employment in agriculture ( 60 per cent or more), except Sri Lanka (37 per cent). Countries of Southeast Asia also report a significantly higher share of women than men in agricultural employment, such as in Cambodia, Vietnam, Indonesia and Thailand, though it has reduced in the Philippines (Figure 2.5).

In spite of commonalities between economic structures across the three subregions in the early 1990s, women's economic participation differed greatly. These sub-regional differences are carried through till today. At the onset of the last decade of the twentieth century, over 70 per cent of East Asian women were engaged in the labour force while in Southeast Asia and the Pacific, ${ }^{4}$ approximately 60 per cent of women were economically active. In comparison, only 36.0 per cent

[^7]of South Asian women were either employed or available and looking for employment. Today, 63.3 per cent of East Asian women, 59.2 per cent of those in Southeast Asia and the Pacific and 30.6 per cent of South Asian women partake in the labour force. We can, thus, conclude that economic structure alone does not explain women's economic participation. Macro determinants combine with local and individual level factors in shaping women's labour force participation.

## Box 2.2. The Garment Industry in Asia

Asia's thriving garment industry drives many national economies and provides employment for millions of workers, particularly women. In Bangladesh, the garment sector employs over 3.5 million workers, 80 per cent of which are women; export revenues reached US\$21 billion in 2013. In India, the industry is the second largest employer in the country, behind only agriculture, and responds for 11 per cent of export earnings and 4 per cent of GDP. The largest formal employer in Vietnam, the garment industry provides jobs to more than 2 million workers, largely young women from rural villages. Similarly, the industry employs over 400,000 Cambodian workers and responds for roughly 80 per cent of export revenues, US $\$ 4.5$ billion yearly. Despite a valuable source of employment and income, poor job quality remains a pressing issue.

Tragic events such as a deadly fire in Pakistan in 2012, the collapse of Rana Plaza in Bangladesh in 2013 and violent protests for better wages in Cambodia in 2014 have helped bring social responsibility to global attention. Historically, the industry relied on low wages and minimum standards of working conditions, but increasingly need to prioritize productivity and address international concern over exploitative working conditions.

Garment production throughout Asia is characterized by low wages and long working hours. The monthly minimum wage for unskilled garment workers, for example, is less than US\$70 in Sri Lanka and Bangladesh. In Cambodia, Pakistan and Vietnam, the rates range from US $\$ 85$ to US $\$ 128$, much lesser than the lowest relevant minimum wage in China (US\$156). Moreover, due to the low base wage, workers often depend on excessive overtime to supplement their earnings. In Cambodia, Lao People's Democratic Republic (Lao PDR), Pakistan and Vietnam, around one-half of wage employees in the industry work more than 48 hours per week. However, excessive overtime often has a cost in terms of workers' health and safety; it can also discourage the adoption of more productive work methods.

Economic and demographic conditions in China and the rise of an affluent consumer class in emerging markets in and beyond Asia present opportunities for growth. However, successfully attracting and retaining multinational buyers will depend on policy choices. In light of increasing international pressure for transformative change, ultimately, decent wages, better working conditions and continued productivity enhancements are the only way to secure the sustained growth of Asia's apparel industry.
Source: ILO (2014b).

Over the past twenty or so years, trends in the composition of Asian female employment have varied considerably (see Figure 2.6). In Southeast Asia and the Pacific, the share of employed women in contributing family work has declined steadily from 52.8 per cent in 1991 to 28.4 per cent in 2014 . At the same time, wage employment increased from 23.4 per cent to over 36 per cent of female employment and in the past few years, particularly after the crisis years of 2008-2009, women have increasingly become employers. Despite improvements in women's situation in the labour market, three in five female workers remain in vulnerable forms of employment with limited legal and social protection.

In East Asia, change has been even more pronounced. Women have increasingly become employed in wage and salaried work. The share of female contributing family workers declined from 59.5 per cent to 13.4 per cent of total employment; in turn, the share of women engaged in paid work more than doubled, to 55.8 per cent. Conversely, despite economic growth, women's labour market situation in South Asia has remained largely unchanged since the early 1990s. Four in five female workers are in own-account or contributing family work and only one in five employed women engage in the salaried work.

Over the past quarter century, Asian women's access to education expanded. Parity in access to primary and secondary education has virtually been achieved across the continent and increasing numbers of women continue on to postsecondary education. These developments reflect changing social and cultural norms. In traditional Asian societies, families have historically been less willing to invest in girls' education, given practices of early marriage, reservations regarding women working outside of their homes and expectations that women will do most of the household chores (ILO, 2014a). However, higher education levels do not necessarily translate into increased access to better jobs.

Despite advancements, educated women still face socio-cultural and practical constraints that pose barriers to making full use of skills in gaining appropriate employment. Occupational segregation remains a predominant feature of training and labour markets, limiting women's choices and confining them to lower-paid and lower-status jobs than men-with men often holding higher responsibility jobs, irrespective of education and skill level (ILO, 2014a). ${ }^{5}$ A previous study on Pakistan found that occupational outcomes vary with education for men much more than for women, being outweighed by the strong influence of culture and conservative attitudes; only beyond ten years of education did counter the effects of culture for Pakistani women (Aslam et al., 2008). Moreover, as will be explored

[^8]Figure 2.6:
Structure of Women's Employment in Asia by Sub-region (Per Cent): 1991-2014

## Panel 1. East Asia



## Panel 2. South Asia



Panel 3. Southeast Asia and the Pacific


Source: ILO regional estimates from the TRENDS Model, October 2014.
Note: For working-age population, ages 15 and above. 2014 data are estimates.
in the next section, in many instances, skilled women end up outside of the labour force. For instance, where the public provision of family-friendly welfare (such as childcare) is limited, childbearing remains an important reason that women leave the labour force. Therefore, it is important to look beyond education and the availability or supply of skills into the demand side as captured by the occupational distribution of workers.

Higher education attainment is reflected in the female distribution of employment by skill level in all Asian sub-regions, albeit to different degrees. ${ }^{6}$ In East and Southeast Asia, women's employment in high-skill occupations has been on the rise in absolute and relative terms (see Figure 2.7). Over the past quarter century or so, in East Asia, women employment in high-skill jobs increased faster than in other occupational categories; it rose 175.9 per cent or 31.8 thousand persons. East Asian women now account for approximately half of employment at this skill level. However, women's employment also expanded fast (and faster than men's) in low-skill occupations by 72.8 per cent.

In the same period, in Southeast Asia and the Pacific, women's employment in high-skill occupations rose from 9.5 million to 21 million or 170 per cent compared to 120 per cent for men. This is three times faster than growth in women's employment in medium-skill work and five times faster than in elementary work. High-skill female employment in South Asia grew slightly faster than men's, 211.0 per cent and 209.5 per cent increase respectively, but much less in absolute terms, 11.7 thousand jobs for women in contrast to 49.1 thousand jobs for men. Moreover, the gender gaps across all skill levels persisted, with women's employment much lower than men's. Men's employment in high-skill jobs in the sub-region is still more than four times higher than women's. In turn, there are three South Asian men employed in low-skill occupations for every woman, and the ratio in mediumskill jobs surpasses two to one.

Another critical dimension of gender inequality in labour markets relates to income. In recent years, wage growth in Asia and the Pacific continued to outperform most of the world. However, the benefits have not been equally shared and about one-third of the region's workers remain unable to lift themselves and their family out of poverty, measured as US PPP $\$ 2$ per day in purchasing power parity (ILO, 2014b). Furthermore, gender wage disparities persist (see Figure 2.8). Average wage gaps range from 40.5 percentage points in Nepal to 3.8 points in Thailand. As with other dimensions of gender inequalities, income gaps are most pronounced in South Asian countries, such as in Nepal, Pakistan and India. They are also marked in East Asia, exceeding 30 points in Japan. Countries in Southeast Asia and the Pacific present the least disparate average wages, with gender gaps in favour of women in Timor Leste ( +1.7 points) and the Philippines ( +6.1 points).

[^9]Figure 2.7:
Employment by Skill Level and Share of Women per Skill Level in Asia (Thousand and Per Cent): 1991-2014
Panel 1. East Asia


Panel 2. South Asia


Panel 3. Southeast Asia and the Pacific


Source: ILO regional estimates from the TRENDS Model, October 2014.
Note: For working-age population, ages 15 and above. 2014 data are estimates.

Figure 2.8:
Gender Wage Gaps in Asia and the Pacific as per the Latest Available Year (Per Cent)


Source: ILO Global wage Database 2014/15, based on National Statistics.
Notes: The figures give the unadjusted gender wage gap, which is defined as women's shortfall in wages, expressed as per cent of men's average wage.

* Based on average daily wage or salary earnings received by regular wage and salaried employees (activity status codes: $31,71,72$ ) of age 15 to 59 years, multiplied by $6^{*} 52 / 12$. The exchange rate is from Statistical Year Book, India 2014.
${ }^{* *}$ Refers to median gross monthly income from work of employed residents $15+$ excluding full-time servicemen (including employer CPF contributions).
${ }^{* * *}$ Based on an establishment survey with broad coverage; refers to full time employees.

It is important to understand that average wages is a proxy for income and, as such, has limitations. First, although wage employment has been on the rise in the continent, women and men still have differentiated access to wage work (see Figure 2.6 and Figure 2.9). We can assess whether women are over- or underrepresented in wage employment by comparing the share of women in the wage work relative to their share in total employment. In all cases, for Asian sub-regions, women are underrepresented in wage work. ${ }^{7}$ Moreover, in East Asia, women hold 42.6 per cent of wage jobs while men hold 57.4 per cent. In Southeast Asia and the Pacific, female workers account for 38.2 per cent of wage employment in contrast to 61.8 per cent for men. In South Asia, women hold one in five salaried positions while men hold the other four. In turn, women are more likely to be engaged as contributing family workers

[^10]Figure 2.9:
Share of Women Among Wage and Salaried Workers: 1991-2014 (Per Cent of All Wage and Salaried Workers)


Source: ILO regional estimates from the TRENDS Model, October 2014.
and are also often in self-employment, which means many employed women do not receive wages. Second, this crude wage gap does not account for the type of wage employment, for example, full versus part-time work. In sum, while the average wage gender gap remains a useful indicator, it is solely indicative of the broader trend in incomes and does not provide an accurate picture of gender income inequalities.

## Beyond Regional Aggregates: Country Level Trends

While it is useful to look at trends given shared traits, a more nuanced picture of women's participation in Asian labour markets can be obtained by looking at the structure of female employment at the country level as explored in Chapters 5 to 10 of this book. As stressed in Chapter 1, Asian countries vary widely in terms of stages of development and political systems and have disparate socio-cultural contexts. In this context, the labour market situation of women varies much more than men's (see Figure 2.10). Female labour force participation rates range from 24.4 per cent in Pakistan to 77.8 per cent in Lao PDR, with gaps varying from 57.5 percentage points in the first and three points in the later.

As proposed in Chapter 1, Asian countries can be categorized into three groupings. The first comprises low to middle income countries, with low female labour force participation. The second group is composed of countries in the low to middle income range but with high female labour force participation. Finally, the third group encompasses middle to high income countries with medium female labour force participation. In the light of this framework, the following sections examine trends within sub-regions and highlight the varied national realities that mark the continent.

Figure 2.10:
Labour Force Participation Rates by Sex (Per Cent) and Gender Gap (Percentage Points) in Selected Countries in Asia and the Pacific as per the Latest Available Year


Source: ILO calculations based on National Statistical Sources.
Note: For working-age population, ages 15 and above. Gap is measured in percentage points.

## East Asia

East Asia consists of countries in the third category, that is, middle to high income and medium female labour force participation. These economies face the imminent challenge of rapidly ageing societies. Low fertility rates and longevity have led to increasingly high old-age dependency ratios and shrinking labour forces across the region. Women are active labour markets participants but face limitations. In 2014, the female labour force participation rate for the Republic of Korea and Japan was approximately 50 per cent while that of China was 63.9 per cent in 2013. The gap between women and men was over 20 percentage points in the first two countries and 14.4 points in the latter. While overall female economic participation rates are relatively high, looking beyond access to employment, it becomes clear that women still represent untapped potential.

Women's labour force participation rates in Japan and the Republic of Korea are below OECD average. For the past twenty or so years, the labour force participation of Japanese women has remained relatively steady at approximately 49 per cent. Rates have increased in Korea from 48.8 per cent in 2001 to 51.9 per cent in 2014. Fertility rates are low and women are highly educated, on par with male counterparts. Nonetheless, women remain at a disadvantage in access to quality employment. Women are over-represented in non-regular work and the gender wage gap is stark.

In high-income Japan, strict gender roles have prevented women from entering the labour force. In 2013, one in four women, ageing 15 and above outside the labour force, was engaged in housekeeping. Those that are economically active are still subject to gender expectations; they face challenges in starting career-track positions and often withdraw from the labour force upon childbirth (Nakane and

Steinberg, 2012). Women are over-represented in the non-regular employment, comprising temporary and daily employees, at 60.6 per cent in 2013. A distinct Japanese feature is the low incidence of female managers. The share of women in managerial positions is lower than in Singapore, Philippines and other Asian countries, as well as the US and Europe (GoJ, 2013). Furthermore, the average wages gap is stark, with women's earnings at approximately half of men's. Women in the Republic of Korea face similar challenges.

The 2014 gender wage gap in the Republic of Korea was 31.9 per cent. Other labour market characteristics, such as high incidence of temporary work arrangements, may serve as disincentives to high-skilled female workers (Jones and Urasawa, 2013). A key social norm is that once a woman has established a family, caretaking becomes a priority, though expectations are changing (Ma, 2014). As with Japan, women often leave the labour force upon marriage and childbirth; when they return, it is largely to non-regular, lower-paid work-women make up more than half of non-regular workers. ${ }^{8}$ Long and inflexible hours associated with full-time regular employment prevent women from taking up these jobs and resort to non-regular lower-skilled work with limited security and benefits (Kinoshita and Guo, 2015)

Tapping into the dormant potential of female employment has been set as a priority in both countries. The Government of Korea is attempting to change social norms and promote shared care responsibilities, for instance, by promoting parental leave whereby both men and women are entitled to partially-paid childcare leave for up to a year. In addition, increased policy focus has been placed on improving flexible work arrangements to allow women to continue to work through child-rearing as well as supporting the re-entry of mothers into the labour market, such as with women-specific job centres (Ministry of Employment and Labour, 2014). In turn, the Government of Japan has established targets to increase women's economic participation to 73 per cent by 2020, has raised parental leave benefits and pledged to eliminate wait-lists for childcare in the country by 2017, facilitating mothers' engagement in the labour market (Chanlett-Avery and Nelson, 2014).

The level of women's economic participation in China is one of the highest in Asia and similar to that of OECD countries. This can be seen as a legacy of the communist rule and its egalitarian stance. Nonetheless, the labour force participation rate of women has been declining faster than that of men. Although gender equality is supported by legislation, in reality, there exists an increasing gap in the demand for women workers, as opposed to male workers. Women are still very much present in agriculture and constitute the majority of workers in service sectors such as hotels and catering, education, and health. It is further explored in Chapter 10 that as China moves up the manufacturing ladder, the share of women in manufacturing declines, including the traditionally female-preponderant

[^11]industries such as garments. Moreover, women are also overrepresented in the lowest-paying occupations, making up a large share of low and lower-middle income quintiles in both urban and rural areas. Recent studies argue that the gender employment and wage gaps have been on rise since the onset of liberalizing reforms (Magnani and Zhu, 2012; Maurer-Fazio and Hughes, 2002; Tang and Long, 2012). Chi and $\operatorname{Li}$ (2014) point to a declining trend in women's labour force participation rates since 1989. Du et al. (2006) believe that the downsizing of stateowned enterprises led to a sharper decrease in labour force participation for urban women than men, with laid-off female workers facing difficulties in finding new employment. These findings support that privatization has led to a resurgence of more traditional gender roles. For instance, the labour force participation of women ages 25-34, the child-bearing age, has declined.

## Southeast Asia

Southeast Asia is comprised of countries of all income status, from least developed Myanmar and Cambodia to high income Singapore, with a number of countries in the process of transitioning from low to middle-income, such as Vietnam. These countries include those in categories two and three outlined above. Although women's economic participation is lower than men's across the sub-region, country levels differ radically. Largely rural economies such as Cambodia and Vietnam maintain high women's participation rates, north of 70 per cent. In contrast, despite increases, Indonesia and Malaysia continue to have low female economic participation, at approximately 50 per cent, given social and cultural norms. In the Philippines, although gender disparities remain high, more women have been entering the labour market. Similarly, Singaporean women increasingly partake in the labour force, with a 10 percentage point increase in participation rates since the early 1990s. Conversely, even though participation remains high, Thai women have withdrawn from the workforce to the same magnitude. Women's labour market positions vary, but persistent vulnerability is a common challenge. Across all Southeast Asian countries, economically active women continue to face disadvantages in finding decent work. This quality of work challenge is very clear in countries with both high and low economic participation.

Although the gender gap in labour force participation rates in Cambodia is relatively small, in terms of percentage points, disparities persist. As outlined in Chapter 8, the country has experienced formidable socio-economic improvements since the early 1990s, following decades-long political strife. Per capita income tripled since the mid-1990s and the share of workers living on less than US PPP $\$ 2$ per day steadily declined, from over 80 per cent to approximately onethird in 2013. However, women continue to face difficulties in access to decent employment. Women are more likely to be in own-account or contributing family work and earn about one-fifth lower than male counterparts. Employment is concentrated in agriculture and increasingly, in low-skill export-oriented garment and textiles and wholesale and retail trade. Women's disadvantages can be partly
explained by significant gender differences in education attainment (ILO and ADB, 2013a). Cambodia has relatively low literacy rates and education attainment overall, but these are particularly low for Cambodian women.

The situation is similar in Vietnam. Labour force participation of women is relatively high, at 73.5 per cent, only 9 percentage points lower than men's. Similarly, the gender pay gap is low in comparison to many countries in Asia, at 11.2 per cent in the third-quarter of 2014. However, women's economic empowerment remains a challenge. Vietnam is among a few countries in the world where the gender pay gap expanded in the 2008-2011 period in comparison to the decade prior (ILO, 2012). This may be partly explained by education gaps in the adult population, though parity has been achieved in younger cohorts (World Bank, 2011). Yet, gender gap may also lie in social norms. While wage employment is relatively low and vulnerable forms of employment are pervasive across the economy, the incidence on unpaid family work is much higher for women than for men. Furthermore, a recent study found that gender discrimination in recruitment practices persist in Vietnam, with gender requirements often found in job postings (ILO and Navigos Search, 2015).

Some of these challenges are shared by women in countries in which they are less economically engaged, such as Indonesia and the Philippines. As Chapter 9 examines, gender gaps in Indonesia are among the highest in Southeast Asia. Only one in two women was in the labour force in August 2014, in contrast to four in five men. Those women who do participate in the labour force are slightly more likely to be unemployed than their male counterparts; in August 2014, the female unemployment rate was 6.3 per cent while male unemployment was 5.7 per cent. For those able to find employment, a major concern is poor job quality. Indonesian women are more likely to receive low pay, ${ }^{9}$ be in own-account or unpaid family employment and are more prominent in informal employment, often lacking legal and social protection. There have been efforts to support women to access job opportunities in the formal economy, such as gender quotas in parliament and flexible working hours; however, further efforts are needed to bridge the gender gap, particularly regarding discrimination, job quality in sectors dominated by women and provisions that allow for maternity leave (ILO, 2014c).

Women in the Philippines have low participation rates relative to other countries in the region, at 50.5 per cent in 2014. They are also much less likely than Filipino men to be in the labour force, with a gender gap of 27.8 percentage points. High fertility rates, 3.1 births per women in 2012, negatively affect women's ability to perform paid work outside of the home and reduces women's earnings (particularly in the lowest quintiles), though not that of men's (Adair et al., 2002; Orbeta, 2005). The burden of family care is disproportionately taken on by women; official statistics indicate one-third of working-age women are currently outside the labour force due to household duties, in contrast to 3.1 per cent of men. On the other hand, women's wage employment share has risen since the onset of the

[^12]century, reaching 55.8 per cent in 2013. In addition, women in wage work average daily basic earnings' slightly surpassed that of men in 2013. This can be explained by trends in education, whereby women have higher educational attainment and functional literacy rates than men. While 22.2 per cent of employed women have completed tertiary education or higher, only 11.2 per cent of employed men did so. However, wage employment has not translated into job security and decent working conditions; one-third of salaried women were low-paid employees in 2013 and only half of female wage employment in non-agricultural sectors were formal in 2009 (Heintz, 2010).

Social norms also affect women's economic participation in Thailand. In Thailand, previous studies have asserted there is a general perception that working women positively contribute to the country's economic development (Wacharaporn, 2008). ${ }^{10}$ The relatively high women's participation in the labour force, at 61.9 per cent in the last quarter of 2014, indeed seems to be accompanied by a certain degree of gender equality in the labour market. Women account for half of high-skill and low-skill employment and just under half of medium-skill workers. Average wage gaps are minimal. However, one in four employed women are unpaid family workers, in contrast to one in ten employed men, reflecting ingrained social and cultural norms which disproportionately place the burden of household and care work on women.

## South Asia

Composed mainly of countries in category two, that is, medium income and low female participation rates, South Asia has some of the lowest rates of female labour force participation witnessed anywhere apart from the Middle East and North Africa. Nepal's participation rate of 79.4 per cent is an exception. 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. The rate has also increased in Pakistan, albeit from a very low starting point, while participation has remained relatively stable in Sri Lanka. A deeper examination of the structure of female employment in these countries provides a more refined understanding of women's economic roles in the subcontinent and its determinants, which is the focus of Chapters 4 to 7 of this volume.

In Pakistan, only 28 per cent of working-age women participate in the labour force, in contrast to more than 82 per cent of men. According to the World Development Report 2013 (World Bank, 2012), household duties and lack of education are considered by more than 80 per cent of women, in Pakistan, as the major reasons for their non-participation in the labour force. Access to

[^13]employment and decent work is elusive for Pakistani women. Women's unemployment rate is 8.7 per cent while the unemployment rate for men is 4 per cent. In addition, wage employment represents a much lower share of total employment among women than among men. 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 (World Bank, 2012).

In Sri Lanka, women's labour force participation isn't much higher, at 34 per cent, while that of men's is 75 per cent. Sri Lanka's low rates are more surprising given the relatively reasonable pace of economic growth, which averaged almost 6 per cent a year since 1990s, and has been particularly high since the end of the civil war in 2010. Social and cultural factors have historically kept most South Asian women from entering the job market. As discussed in Chapter 7, social attitudes and issues of personal safety, transport and housing constrain women's job choices in Sri Lanka. Sri Lankan women who do decide to participate in the labour force face a different set of disadvantages. Finding employment is difficult. This may be because job opportunities for women are scarce and limited to only a few sectors, such as agriculture and export-oriented manufacturing, whereas males have a wider range to choose from. In addition, wage gaps persist.

In Bangladesh, as explored in Chapter 6, strong economic growth since the early 1990s and a significant decline in the incidence of absolute poverty have been accompanied by rising women's economic status. From 1996 to 2010, female employment expanded strongly, due to rapid growth of the ready-made garment sector, increased participation in poultry and livestock and a variety of rural nonfarm activities, mainly on account of the spread of micro-credit. However, the performance on the employment front has been less impressive if one takes into account that large proportions of the employed labour force remain in ownaccount and contributing family work and are still found in sectors and activities which are characterized by low productivity and returns (Islam 2009; Rahman et al., 2011). Women's informal employment as a percentage of their nonagricultural employment reaches 91.3 per cent.

Substantial challenges are also encountered by the women of India. Despite strong economic growth, the female labour force participation rate is low and declining. Female labour force participation (all ages) declined from approximately 40 per cent in the 1990 s to 22.5 per cent in 2011-2012. A substantially high proportion of women in India reports their activity status as attending to domestic duties (and, therefore, classified as 'not in the labour force'). In 2011-2012, 35.3 per cent of all rural females and 46.1 per cent of all urban females in India were attending to domestic duties. Furthermore, 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. As highlighted in Chapters 4 and 5, education, withdrawal from agriculture and the lack of job opportunities are key factors explaining the low and declining rates of participation for Indian women.

## Box 2.3. Women Domestic Migrant Workers Remain Vulnerable

Every year millions of labour migrants from developing Asia try to escape poverty and find employment opportunities outside of their countries of origin. Many go to other Asia and the Pacific countries, such as Hong Kong (China), Japan, the Republic of Korea, Malaysia, Singapore, Taiwan (China) and Thailand. In 2013, there were 32.6 million migrants in Asia and the Pacific, 90 per cent of which from within the continent. Women comprise 47.3 per cent of the overall international migrant stock in the region. ${ }^{1}$ In major sending countries, such as Indonesia, the Philippines and Sri Lanka, women constitute between 60 and 80 per cent of outward migrants (ILO, 2013).

Many female migrant workers in the region engage in domestic work. There are about 21.5 million domestic workers in Asia and the Pacific, the largest concentration in the world (ILO, 2013). Four in five of them are women, representing 7.8 per cent of all women in paid employment. In 2012, 86 per cent of Sri Lankan women migrant workers were in domestic work (Sijapati, 2015). In Malaysia, just over half of the 253 thousand domestic workers are non-citizens; domestic work is the main occupation of inward female migrants to the country ( 37.6 per cent in 2008) (ILO, 2013).

These workers positively impact sending and receiving countries. Countries of origin benefit from remittances and the transfer of ideas and skills upon return. Host countries gain, on the one hand, from consumption and taxes of migrant workers and on the other, from increased labour supply as migrants providing care work facilitate native women's labour force participation, which in turn, contributes to economic growth and productivity. Nonetheless, these women in search of better opportunities abroad are also confronted by a new set of challenges.

Many international labour standards allow for the exclusion of domestic workers, which remain largely unprotected in terms of working time, minimum wage and maternity protection, among others. Only 12 per cent of domestic workers in Asia and the Pacific are covered by statutory minimum wage, in contrast to more than half globally (ILO, 2014). Working hours largely exceed the 48 hours threshold. In Nepal, in 2008, domestic workers worked, on average, 53 hours per week, in contrast to 39 hours for the general employed population. Work weeks also exceeded the 48 hours threshold in Indonesia ( 51.6 hours, 2008), Malaysia ( 65.9 hours, 2008), the Philippines ( 52.0 hours, 2010) and Thailand (58.3 hours, 2003) (ILO, 2013). Statutory limitations of working hours and the stipulation of weekly rest or annual leave of domestic workers remains virtually non-existent in the continent.

The Domestic Workers Convention, 2011 (No. 189) seeks to bring domestic workers under the umbrella of labour law (ILO, 2013). However, in Asia and the Pacific, only the Philippines is signatory. Ensuring better protection for women as domestic migrant workers will require reform in key areas at both
sending and host countries. Sending countries can play a more active role in regulating women's migration. Indonesia has set a moratorium against sending migrant workers abroad without a formal written contract (ADB and ILO, 2014). The Philippines Migrant Workers and Overseas Filipino Act, 1995, sets requirements for labour migration and recognizes the particular vulnerabilities of women migrant workers. The receiving end should strive to fulfil the rights of documented migrant workers, and address those of undocumented migrant workers. For instance, the Employment Ordinance (Chapter 57) of Hong Kong (China) ensures protection of all workers, including migrant and informal workers (Sijapati, 2015).

Source: ILO (2013, 2014); Sijapati (2015); UN DESA: Trends in International Migrant Stock: The 2013 Revision-Migrants by Destination and Origin, 2013; UN DESA: trends in International Migrant Stock: The 2013 Revision-Migrants by Age and Sex, 2013.
Note: ${ }^{1}$ The data comprises all migrants as there is no available data by type of migration, though it may be assumed that a significant share of women migrating from and within Asia do so mostly for work purposes.

## 4. 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. Yet, in Asia, women face gender gaps in several dimensions, including labour force participation rates, access to employment, choice of work, working conditions, employment security, wage disparities and balancing the competing burdens of work and family responsibilities.

While women's position in the labour market improved in much of the developing world, positive change was slower in the continent. In spite of crosscountry differences, general trends are observed. Female labour force participation lags behind that of men in all countries, albeit to different degrees. Beyond access to employment, quality remains precarious. In all examined countries, women concentrate in vulnerable forms of employment, particularly overrepresented in unpaid family work. Gender pay gaps also figure prominently throughout the continent, with women earning, on average, less than male counterparts in all countries but the Philippines and Timor Leste. Gendered patterns are also often reflected in occupational segregation, whereby women's work is 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 legal and social protection lack.

These gender inequalities result from a combination of factors such as the structure of the economy, education, fertility, welfare provision, household and individual characteristics and sociocultural norms. However, they are also entrenched in the policy and institutional frameworks that shape the employment opportunities of Asia's female labour force. Addressing these concerns will require concerted policy action targeting supply and demand constraints. These include improving access to and relevance of education and training programmes, improving social provisions and family-friendly welfare, guaranteeing equal rights through legislation, and increasing awareness of women's rights, among others. Fully capitalizing on the female labour force has tremendous potential to spur growth and development in the region.

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## 3

## At the Threshold of Economic Empowerment

# Women, Work and Gender Regimes in Asia 

Govind Kelkar

## 1. Introduction

Women's movements, feminist researchers and civil society organizations across Asia have expressed concerns over the persistence of gender relations of inequality and discrimination during rapid economic development (Heintz, 2006; Kelkar and Nathan, 2002; Kelkar and Wang, 2007; Song and Jiggins, 2003; Song and Zou, 2003). They point out two aspects of the process of globalization: (a) the increased feminization of informal work and (b) the unequal distribution of employment with women concentrated in low-skilled, low-paid and vulnerable work. In labour market relations, women are less likely to be employed; they earn less than men for similar work, and are less likely to support themselves and their households even when they are employed. In the continued presence of domestic power imbalances, women spend a great amount of their time on housework and domestic care and much less time on economic work as men do (Berniell and Sánchez-Páramo, 2011; Hirway, 2008; Iversen, 2003). Regarding rights to productive assets, women in many Asian countries lack unmediated rights to own and manage land, property and finances.

This chapter problematizes the salience of transformative change in women's work and gender regimes in Asia. There are two important and related questions that need to be asked. First, how do we understand the changing nature of women's work and the quality of their engagement with both formal and informal sectors? And, second, as a result of such engagement, when women have acquired some power and autonomy in economic decision-making, what is the result in terms of gender outcomes, such as reduced violence against women and the development direction towards reduced poverty and inequality? These questions are explored
in two key economic sectors: agriculture and information technology (IT). This chapter, however, does not intend to consider the entirety of change in gender regimes in the Asian region or assert a plan of development strategies for the women's movement in the region. Neither does it look into the education, skills and political participation of women.

This chapter is divided into 9 sections. After the introduction, Section 2 discusses the conceptualization of women's economic empowerment. Section 3 discusses key gender concerns. The issues of incentive, productivity and economic security are addressed in Section 4 . Section 5 discusses women's access to finance and local markets. Agriculture and land governance are discussed in Section 6. The issue of women's inclusivity in the IT sector is addressed in Section 7. An analysis of transformative change towards economic empowerment is given in Section 8. The concluding Section 9 suggests changes that can be made in both policy and practice which would help overcome gender-based barriers in the economic empowerment of women.

## 2. Conceptualizing Women's Economic Empowerment

In the past, there has been a general concern over improvements in conditions of health, education and the social well-being of women. It was, however, rarely recognized that such development is contingent on the realization of women's economic empowerment and autonomy in management and ownership of productive assets. A study conducted by the International Centre for Research on Women (ICRW) says that a woman may be considered economically empowered when she has the ability to succeed in her economic endeavours and also has the power to decide (Golla et al., 2011). The International Labour Organization (ILO) promotes gender equality as a key element in its concept of decent work for social and institutional change. ${ }^{1}$ Such empowerment of women is critical to realize women's rights to achieve economic growth and social well-being.

A paper for the Swedish International Development Agency (SIDA) defines women's economic empowerment as 'the process which increases women's real power over economic decisions that influence their lives and priorities in society', which 'can be achieved through equal access to and control over critical economic resources and opportunities, and the elimination of structural inequalities in the labour market including a better share of unpaid care work' (Tornqvist and Schmitz, 2009, p. 9). As noted elsewhere (e.g., Kelkar, 2007), rural women define their dignity and empowerment against patriarchal social norms. Their aspirations reflect people's hopes for the future and lead to the creation of new needs which bring in change in the economic and social base of existing capabilities. This, in turn, leads to a shift in the productive objective-from subsistence production to maximization of income and saving-cum-accumulation to meet new

[^14]needs. 'I do not want my daughter to face this humiliation, so I want her to be educated', says an indigenous Chenchu woman from Andhra Pradesh, India (Nathan and Kelkar, 2004). The growth in the market for agricultural products, however, has allowed for new possibilities in acquiring income beyond immediate needs for health care and educational expenses.

In other parts of Asia, there are rural women and semi-literate women who have stated their strategic need for dignity, which, according to them, comes from having complex knowledge of the outside world (as against a domesticated existence), access to markets and technology, and, most importantly, with ownership and management of productive assets (Kelkar and Krishnaraj, 2013; Kelkar et al., 2004). These voices of women suggest a change in social norms of dependency and subjugation and seek a culture of autonomy and empowerment with access to technology and control on productive assets.

The necessary elements of women's economic empowerment comprise a mix of autonomy and dignity (associated with choice, mobility and freedom from violence); non-discrimination in work (associated with gender, parity of wages/ rewards/remuneration and rearrangement and counting of household work and care) and women's individual, unmediated right to ownership and management of productive assets (e.g., land, house, technology and finances). These, in turn, provide them with the capability to make decisions both within the home and outside in the labour market.

## 3. Key Gender Concerns in Economic Development

Economic development is conventionally seen in terms of the gross national product (GNP) and the shares of agriculture, industry and services in the GNP. It relates to the data assembled in the system of national accounts, which measures the value of goods and services exchanged in markets. Challenging the traditional approach to macroeconomic frameworks, the new gender-aware approaches question the economy-wide interactions of a few highly sex-segregated markets; the labour market, the asset market and the goods market (Cagatay et al., 1995).

The gender division of labour and distribution of income, property and productive inputs or technologies have major economic implications and result in gendered economic behaviour. The magnitude and intensity of unpaid work presupposes the forced labour of domestic caring by women in the reproductive sector (Elson, 1991). Violence against women within home and outside or its potential threat cannot be seen merely as a social problem, but also as a form of extraction of labour (Cagatay, 2003, p. 28; Kelkar et al., 2014). Despite official acknowledgement that women constitute a significant majority of the people affected by poverty, few development strategies go beyond treating them as instruments of poverty reduction. An increasing number of poverty reduction strategies and development plans do, however, state that women's participation can make poverty reduction projects 'more successful'.

### 3.1. Persistent Vulnerability and Sex Segregation in Labour Markets

The ILO report 'Global Employment Trends for Women 2012' reported that a larger share of women are engaged in vulnerable work: 50.4 per cent women were employed as contributing family workers and own-account workers compared to 48.1 per cent of men (ILO, 2012, p. viii). The sectoral segregation of women and men showed that a third of women were engaged in agriculture, close to a half in services and only a sixth in industry. East Asia made an exception with the rise in women's employment in industry to a quarter. Further, the gender gap in occupational segregation showed a concentration of men in crafts, trades, as plant and machine operators and in management positions compared to a concentration of women in jobs requiring low- and mid-skills occupations (e.g., as clerks, service workers and shop and sales workers). Women were rarely seen in higher-level management and technological positions.

Throughout Asia, a high proportion of women are engaged in low productivity informal work. In the case of India, National Sample Survey Office (NSSO) data shows that men's share in own-account work is higher than that of women; however, more women than men are reported to be working as contributing family workers, which places women in a subjugated position with limited control even of their own labour and productive assets (ILO, 2012). Further, high levels of sex segregation and the operating system of the gender tag on the labour market results in an unequal distribution of women and men in various sectors and occupations. The sex segregation in the labour markets limits women's choices for employment opportunities and further promotes gender biases in the organizational practices of firms and factories.

Unlike Southeast Asia, the market has traditionally been a taboo area for women in South Asia, more so in north India, Pakistan and Bangladesh. A widely accepted norm is that women's presence in the market degrades them to the status of immodest women. Women who go to the market lose social standing. If women do have to go to the market, they should be as quick about it as possible (Kelkar et al., 2004). In a time-use study conducted in 23 countries for the 'World Development Report 2012', Berniell and Sánchez-Páramo (2011) noted a clear pattern at all the levels of income, that is, women do a significant amount of housework and domestic caring and therefore, have limited time for market activities. With ' $30 \%$ more time spent on housework by women in Cambodia to 6 times more in Guinea, and $70 \%$ more time for childcare in Sweden to 10 times more in Iraq. These differences have an impact on women's activity to participate in market work' and consequently, they are likely to be engaged in casual, low quality, informal work (Duflo, 2012, p. 30). Many women's rights organizations and individual researchers have therefore raised the question of economic growth led by market fundamentalism.

Socialized with their primary responsibility of household work and domestic care, there are numerous cases where women prefer jobs which allow them the time to cook, clean and take care of their children along with their 'productive work'. These discouraged workers are over-represented in low-paid, low-skilled jobs and in services while men are selected for more dynamic jobs in construction and management (ILO, 2012).

In a review of growth in employment in the past two decades in India, an ILO study noted that the most dynamic occupations were dominated by men but women did not gain from overall employment growth in those occupations (ILO, 2012, p. 30). Women's share in India's fast-growing occupation was less than 50 per cent, with a mere increase of 6.3 per cent as managers, 11.4 per cent as other professional workers and 0.4 per cent as drivers and mobile plant operators. Rahman and Islam in this volume noted a steady growth in the informalization of work and the disadvantage of such informality for women in Bangladesh (see also, Rahman and Islam, 2013). In Nepal, the share of women in informal work is higher for men (83.7 per cent versus 69.5 per cent for men) (Human Development in South Asia, 2000, p. 60). As highlighted in this volume, gender inequalities in Sri Lanka show a labour force participation rate of 32.8 per cent for women compared to 66.6 per cent for men, thereby indicating that a large number of women are engaged in the informal sectors (see also, Energia and ADB, 2014).

China is a country with a higher level of female labour force participation than South Asia, a country that has also been discussed in detail in this volume. However, working conditions are not always ideal. The China Working Women Network (CWWN) produced a series of reports on the working conditions of women in the informal sectors of the country, which found that the violation of women's labour rights especially in the informal sector and migrant workers was reported to be rampant (CWNN, 2005). According to a survey in nine different types of rural factories in east and coastal regions, 65 per cent of women workers were exposed to toxic articles and 43 per cent of them felt dizzy and had nausea and skin problems. A 2003 survey of 158 sex workers in Guangdong province, conducted by Pan Suiming, noted that lower wages, no free time, lack of safety and poor working conditions in the informalized work were the main reasons for them to enter the sex industry.

### 3.2. Gender Wage Differentials

The wage structure in many countries in Asia has continued to be gendered, with women receiving lower wages than men. The wage differentials between female and male workers are often based on an assumed gender character. Employers and contractors simply offer lower wages to women, regardless of their performance on the job, particularly in the agriculture sector.

What is important to note, however, is the study by Wang and Cai (2006), who, in their analysis of China's urban labour market, concluded that the major share ( 93.5 per cent) of the wage differentials between women and men was attributed to discrimination rather than to human capital differences between the genders. This finding is also highlighted in more recent analysis on the gender wage gap in China. Hirway (2006) arrived at similar findings in her study of the labour market in India, which showed that the wage differential was largely due to gender discrimination which encourages women's engagement in low levels of occupation, such as unskilled and semi-skilled work, low-level management work and other related productive work.

Further, in Bangladesh, there is a substantial change in rural women's wages as compared to the proportion of men's wages, rising from 48 per cent in 1984-1985 to 75 per cent in 2000. This change in the proportion of rural women's wages to men's wages is the result of the large growth of women's economic activities through microfinance institutions (MFIs). This has reduced the extent of rural women's underemployment to almost half, from 74.6 per cent in 1993-1994 to 38.2 per cent in 1993-1994 to 38.2 per cent in 1999-2000.

Existing social norms dictate that women and girls shoulder the main responsibility of caring for children and the elderly, and running the household, including collecting water and fuel wood for cooking. The persistent and existing pattern of unremunerated household production is increasingly recognized as a crucial element of gender-based inequality in labour relations. However, women's burden of unpaid work continues to be ignored due to the limited understanding of the sphere of unremunerated activities and the fact that these activities outside market transactions are linked to the rest of economy. This adversely affects girls' and women's access to schooling or their ability to relate to the outside world and bargain for returns on their economic work and secure incomes (Antonopoulos and Hirway, 2010; Folbre, 1994).

As noted above, development policy is somewhat concerned about bringing limited changes in formal institutions, while paying much less attention to informal institutions that govern day-to-day life and working through informal constraints called codes of conduct or norms of behaviour. These form part of the tradition we call 'culture' and affects women's sense of the possible: 'For those at the end of hierarchy, it provides the means to maintain their high position, whereas for those at the low end, it can limit aspirations, create discrimination and block mobility' (North, 1990, p. 170). As Bourdieu (2001) argues, culture, therefore, is a form of capital which makes it possible for certain individuals and groups (men in this case) to maintain and enhance their social, economic and political power. This type of social order plays an important role in the reproduction or perpetuation of gender inequality.

## 4. Incentives, Productivity and Economic Security

Often, in assessing the impact of improved inputs (e.g., fertilizer and seed) on women and men, there is a tendency to look only at access rather than at ownership and control. However, evidence shows that where women have access to land or technology without ownership and control over how and when it can be used, the potential labour and technical inputs resulting into benefits are significantly reduced (Joireman, 2008; Kanbur and Spence, 2010).

There is an important principal-agent incentive problem involved even in the household system - the man as the principal landowner ensures that the woman who is the labourer (agent) has an incentive to maximize income. Women's lack of control and ownership rights to agricultural land and produce can affect the extent
and quality of work done on the farm. In Nandkhera village in Parbhani district of Maharashtra in India, while discussing the constraints involved in improving the productivity of sorghum fields, a woman farmer, with support from other women, said in the presence of 42 women and 20 men: 'When the land is in the husband's name, I am only a worker. When it is in my name, I have some position in society and my children and husband respect me. So my responsibility is much greater to my own land and I take care of my fields like my children.'.

Importantly, similar opinions were expressed by the rural women in Bangladesh, where microcredit group members bought or leased agricultural land in their own names, independently of the men of the household. The women cultivated these lands for paddy and vegetables and sold the produce in the nearby markets (Kelkar et al., 2004).

During a conclave on women farmers in Lucknow (January 2013), village women from the semi-arid region of Budelkhund in Uttar Pradesh, India, explained that land, like other productive assets, provides an opportunity for change. 'Our independent right to have land in our own names is a way to have access to other resources such as water, seeds, new technologies and bank loans. It further gives us the freedom from an unwelcome, violent marriage., ${ }^{3}$

In a similar vein, women chikan workers in the village of Khushalganj in Uttar Pradesh demanded the betterment of their conditions with new technologies and employment opportunities. A woman participant of a focus group discussion, Arbunissa, expressed the opinion of many others present in the meeting: 'We are not home-bound. We are willing to go out for work, provided we are assured of some employment with decent wages.' She further explained that when men are employed they give only 25 per cent of their earnings for household expenditure; with the remaining money they meet their own consumption needs and focus their energy on gaining privileged access to groups of other men outside the household. And, 'when we women earn, we invest in our children's education and healthcare. ${ }^{4}$

Economic security is worsened by policies and institutions that do not realize that promoting women's control over their incomes and resources would help boost growth and development. This is one of the major forms of gender inequality across the world and one which is systematically neglected in social policy and income statistics. In Asia, a large proportion of women are not able to retain their earned income-over 40 per cent each in Bangladesh, Gujarat and Indonesia (ILO, 2004, p. 86).

Secure and inalienable use rights with full control, if not full ownership, are necessary for investment. In the absence of this security of use rights, which is now partially available because of the law, women would clearly not invest their own money in improving the land. Of course, the security of use rights in requiring a wife's signature is still limited. It is not the same as having a plot of land registered

[^15]in your own name. When women purchased land in their own names, as a number of women had in India and Bangladesh, they were obviously much more secure in their right to land.

Women's unmediated ownership of land can lead to higher and better quality production and, more importantly, it can enable them to control the use of household income for their own well-being and that of other household members. It also leads to reduced domestic violence against women. An increasing range of econometrically robust studies show that compared to the assets owned by men, land and asset ownership by women has significantly better outcomes for their economic agency as well as for child survival, education and health (GoI, 2004; Kanbur and Spence, 2010; Kelkar, 2013; World Economic Forum, 2005).

The 2012 'World Development Report' (World Bank, 2012, p. 286) underlines four political economy issues that are relevant for enabling a policy environment for enhancing women's economic agency and gender equality: (a) building coalitions (political parties, trade unions, private sector and women's organizations) that mobilize around policy reforms and generate broad-based support; (b) facilitating business reasons for small and big firms for gender equality and drawing attention to the growing market power of women; (c) providing windows of opportunity for women's advancement and decision-making roles in social, political change or dislocations caused by natural disasters and climate change; and (d) addressing the pace of change with bold government action for transformative reforms to overcome women's dependence and persistent institutional rigidities about gender inequality and exclusion. Importantly, there is a growing realization in policy circles that incremental reforms, such as joint titles to land and property, have not worked and sociocultural norms have impeded the process of policy reforms for women.

## 5. Access to Finance and Markets

Major advances in women's livelihoods condition can be attributed to better access to finance and their participation in local markets. Starting in Bangladesh, through the innovations of Grameen Bank and BRAC (Bangladesh Rehabilitation Assistance Committee), MFIs, whether in the form of non-governmental organization (NGO)-run credit groups or the Indian variety SHGs (self-help groups) are now a ubiquitous feature of women's livelihood programmes. Microfinance in India covers over 11.6 million poor households accessing banking services through their 0.77 million SHGs and the SHG-Bank Linkage Programme is reported to be the largest in the world in terms of its outreach. In Bangladesh, microfinance has promoted women's entry into wage employment and has had an impact on women's empowerment (Kabeer, 2011; Kelkar et al., 2004).

Overall, what MFIs promote through the mechanism of loans and their repayment is the widening sphere of commercial production. Commercial production may not necessarily be a satisfying activity in itself, though it might also
be that, but as something instrumental for earning the income to satisfy one's needs or preferences. This, at the micro-level, is a justification for the growth of the market and thorough commercialization of economic life, which is the base of a market economy.

Of course, underlying earned income is the development of capabilities, not just assets or credit which are instruments to developing capabilities. However, there is an understandable reification of money itself as the measure of status, a reification which then promotes the acquisition of more money as the goal of economic activity and the measure of success. In the course of changed economic practices, with women becoming income earners, they have also articulated new norms of gender relations.

The major change, however, is in women going to the market to buy something; for example, clothes for themselves and their children, schoolbooks, cosmetics and jewellery, among other things. Going to the market for such purposes, either accompanied by their husbands or as a group of women, has become a regular feature of women's activities in rural Bangladesh. What is interesting is that women do not go to these markets to buy groceries, which is still very much the work of men, though there are few instances of women doing the grocery shopping, as is the case in the districts of Kishoreganj and Tangail. The difference in the two kinds of purchases is possibly that in the case of clothes, cosmetics and jewellery, women would like to exercise their choice, something that is now acceptable, while there is not much personal choice in the matter of groceries. The husbands continue to remain superior and still buy major items like rice, meat, building materials and seeds (Kelkar et al., 2004). The Indian National Family Health Survey (NFHS) (2005-2006) reported that only one in three women were allowed to go out alone to places such as the local market, the health centre or visit friends or relatives outside the community (IIPS, 2007).

## 6. Women in Agriculture and Land Governance

Feminization of agricultural work: On average, women constitute 43 per cent of the agricultural labour force in developing countries and close to 50 per cent in Africa and Asia (FAO, 2011, p. 8). Figure 3.1, based on the data from the International Standard Industrial Classification of All Economic Activities (revised in the years 1968, 1990 and 2008), gives the female share of employment in agriculture in major Asian countries.

Moreover, it is argued that labour force participation statistics underestimate women's work in agriculture; in many cases the women socialized in cultural norms consider men as the bread winners and tend to evade questions by answering to their agricultural work as housework. A general pattern throughout Asia however is that, the poorer the area, the higher the women's contribution-largely as subsistence farmers who work for small pieces of land of less than 0.2 hectares (Kelkar, 2007).

Figure 3.1:
Female Share of Employment in Agriculture for Major Asian Countries


Source: ILO Key Indicators of the Labour Market.

Data on women farmers are limited. Most women engaged in farming are counted within a household production unit and their activities are not usually separable from those of the household as a whole. This situation of data limitation is better in Africa where women and men often work on separate plots. However, male-controlled landholdings are generally larger and more fertile than womencontrolled landholdings (FAO, 2011). The issue of women's landownership, like that of employment with decent conditions of work, remains a policy concern in most of Asia. It is not just landownership but also all that goes with it such as access to institutional credit, technology and extension facilities. Equal property rights for women are relevant for developing production. Research-based evidence suggests the following:

> If input-use difference between women and men could be overcome, women farmers could achieve the same yields as men farmers. When women have command over productive assets (land, technology and house) and their own earnings, there are positive spillover effects for other household members. (Behrman and Deolalikar, 1988; Doss, 2005; Haddad, 1999; Katz, 2000; Seebens, 2011). Evidence from Bangladesh confirms that the nutritional status of children is higher when women have their influence over economic decisions. (Bhagowalia et al., 2010)

Several issues related to traditional social norms and conventional development policies embedding social norms impede women's access, management and ownership of land and other productive assets; these in tandem influence women's ability to seek employment opportunities. The issues that came to the fore in the civil society discourse include: (a) the patriarchal system of landownership in most of Asia; (b) the continuing tradition of the man as the head of the household with his veto
right on governance of assets and skill development needed for any employment opportunities; (c) women's ignorance and reluctance to assert their right to productive assets, land and employment; and (d) women's lack of economic power which leads to their silence and lack of bargaining power within the household and outside (Abhiyan, 2011). Women are not perceived as farmers, even when they do much farm work partly because they are not landowners. As a result, agricultural extension and information on new technologies are mostly directed at men.

Towards securing rights to land and resources: There are, however, some examples that suggest that secure land rights of women, with full control and ownership, are necessary both for women's economic empowerment and to increase productivity or investment in agriculture.

Microfinance has become a source of capital for women to acquire access to land. MFIs in Bangladesh, in fact, discourage women from using loans to acquire land, since the return from land is neither quick nor regular. Nevertheless, women use loans to lease land, often leveraging their own capital with finance from their husbands. There are few purchases of land, but leasing in land has become quite common for women members of credit groups. Out of 261 women of several microfinance groups in Bangladesh, 117 reported land acquisition through purchase or lease. In 87 instances (including three of inheritance), the land was in women's names. Out of these instances, 10 were those of two groups of women leasing land for vegetable production. In four instances, land was acquired in the joint names of husband and wife, while in 26 instances the land was in the name of the men alone (Kelkar et al., 2004).

During 1997-2010, in a poverty reduction programme (called Indira Kranti Patham, earlier called Velugu) in the state of Andhra Pradesh in India, the government, in partnership with the World Bank, purchased land from owners who wished to lease their lands and transferred it in the names of women from landless households. Over 5,000 women got land in their independent names. In all the villages visited in 2004-2005, as part of the review of the UNIFEM (United Nations Development Fund for Women) project on 'Women's Empowerment in the Market Place', both women and men said that it was a good thing that the land was registered in women's names. In Musalimadagu village, it was also pointed out that having land in their names had strengthened women's say in negotiating with men in the household. They could threaten the men who overspent on alcohol and thus influence men's behaviour (Nathan and Kelkar, 2004). Women were able to use more household income to buy food and other household necessities. Several women of the village jointly managed a procurement centre for forest products and two of these women set up a grocery shop within the village. Many more children in the village were attending school.

With the overall higher income from land and with more being available for household needs, women are confident of their ability to borrow and repay loans from the SHGs. Interestingly, more women have taken loans for rearing goats. Subsequently, this economic activity has also provided work to the men-it is the men's responsibility to graze and manage the goats. Women in the village of Petralchenu and the men too, expressed their satisfaction with the development of
some work for men. The project's success in giving women rights to land and related capabilities, including control over a major portion of cash income for the sale of agricultural produce, has allowed women to influence men's behaviour in a system of limited production to an income maximizing system of production.

There are also other types of market-mediated land reforms, for instance, in which those wishing to lease land acquire it from those wishing to lease out land. Unlike many of the state-sponsored schemes for distribution of governmentowned land, in this case, relatively good quality land is transferred to the landless women in groups. In India, the Deccan Development Society (DDS) in Andhra Pradesh and Kudumbashree in Kerala have deliberately used savings and credit to enable groups of women to take land on lease. Leasing land as a group makes women stronger in the lease market. It also enables them to lease larger areas of land. In DDS, two women Sanghams (groups) have developed 1,000 acres of common land in and around their village by raising neighbourhood forests in 28 villages. They now own tree pattas (title deeds) in their own names.

Kudumbashree is an innovative community-based women-oriented initiative and is one of the largest women's organizations in Asia with a membership of $3,780,000 .{ }^{5}$ Importantly, 46,444 women's groups participated in collective farming and brought 62,655 acres of land under cultivation. Kudumbashree organizes women-specific training programmes to enhance their members' marketing capabilities and to improve their entrepreneurial skills.

## 7. Women's Inclusivity in IT

Countries in Asia, such as India and the Philippines, have emerged as IT hot spots with significant shares of women employed in the IT sector. In India, for example, the percentage of women employees steadily increased from 21 per cent in 2003 to 36 per cent in 2008, and to 52 per cent in 2011-2012, especially at senior levels (NASSCOM, 2003; NASSCOM and Mercer, 2009; Punit, 2015). Importantly, the percentage of women working in human resources (for long, an assigned career for women) dropped from 55 per cent in 2006 to 25 per cent in 2008, which shows that women are opting for non-gendered careers.

In a study undertaken for United Nations Development Programme (UNDP) (2004) of nine Asian countries (China, India, Indonesia, Malaysia, Mongolia, Pakistan, Sri Lanka, Thailand and Vietnam), the authors noted that despite the absence of gender segregated data at national levels, the role of the IT industry in promoting gender equality was positive. On an average, among professionals, there is one woman employee for every seven men employed in the IT industry. Women professionals in India constitute 12.5 per cent of the industry, with the National Institute of Information Technology (NIIT) having the highest

[^16]proportion of women employees ( 29 per cent), and Rolta the lowest (4 per cent). Nearly 20 per cent of Tata Consultancy Services employees, 19 per cent of Wipro employees and 17 per cent of Infosys employees are women (Rani and Mahalingam, 2003). There is definitely a male preference in hiring and promoting at the senior levels of management in the IT industry; there are fewer women in the upper echelons of the industry. The higher the position in the corporate ranks, the more serious is the gender divide.

Notwithstanding the glass ceiling in the industry, the development of IT in Asia has had a clear impact on women. Studies of the 'Village Pay Phones' in rural Bangladesh (Richardson et al., 2000), and computer-aided technologies and teleworking in India (Gothoskar, 2000; Mitter, 2000) have observed that household income has increased and women have more mobility and say in household matters. However, with women's responsibility for housework, domestic caring and the office work, their work burden has multiplied. Further, communication via the Internet is itself gendered and strongly shaped by patriarchal yardsticks of class and gender (Veena and Kusakabe, 2004).

A major concern of feminist scholarship has been the impact of new technologies on women's lives, particularly on women's work (Cockburn and Furst-Dilic, 1994; Folbre, 1994; Kelkar and Nathan, 2002; Mitter, 2000; Omvedt and Kelkar, 1995). While employment in the IT industry has decreased, the time available to women for domestic work and their responsibility for these tasks has not diminished. Women are expected to balance both home and work.

The primacy of domestic work has several consequences for women who seek wage employment. Given the patriarchal structure of the Indian family, women are swamped in never-ending demands of housework and domestic care. Women in IT can become agitated by the culturally defined gender-based division of labour, which they feel is unfair to them. A 30-year old woman, employed in a call centre in Delhi, reported, 'I am frustrated when my unmarried junior colleagues are promoted. However because of my household responsibilities, I cannot work long hours and therefore, cannot expect or progress at work. ${ }^{6}$

IT is characterized by a production system of networking, outsourcing and sub-contracting which requires individualization of capacities. The nature of work in the IT industry is different compared to other industries. In the IT industry, labour loses its collective identity and individualizes the capacities of workers. The positions of owners, producers, managers and workers are increasingly blurred in a production system of variable geometry of teamwork, networking, outsourcing and sub-contracting (Castells, 2000). The networking of capacities required by IT increases women's capabilities to take decisions on their own and construct a greater space to enhance their agency, though within the limited terms of socially sanctioned structural inequalities of women.

Importantly, women's presence in decision-making positions as partners or entrepreneurs makes a difference to the recruitments and promotions of women

[^17]in higher positions. One woman, a partner in a growing IT company, said that her physical presence at interviews led to more women being recruited. Otherwise, even gender-sensitive men do not look for alternatives or other ways of recruiting women. The attitude of the people in charge of recruitment plays an important role in the number of women and their positions. ${ }^{7}$

Mobility: During the last 20 years, women's participation in IT-enabled services has been increasing. Many women have moved from the hotel industry, sales, fashion, designing, teaching and so on to IT-enabled services. They view the IT sector as an emerging phenomenon-an ideal working environment for women. Gender differences operate in how women and men are differently placed in availing these opportunities. Men, for example, move from one company to another as they find better opportunities. However, the percentage of women who move from one company to another for better opportunities is very small. Restrictions on women's mobility due to household responsibilities and societal barriers make it difficult for them to change jobs frequently. Women have fewer locational choices than men. This makes them less competitive with regard to exploiting opportunities. Married women cannot spend a lot of time on commuting to work unlike single women and men who can. So they negotiate for lower positions in companies near their homes. One woman in a call centre in Delhi said, 'Although the work is monotonous, I do not want to quit this job because it is close to my house.'.

Strangely enough, women's lower mobility has influenced recruitment policies in the industry in their favour. Several instances during discussions at Delhi and Bangalore in 2009 have shown that women (and men), who are unable to enter the more competitive areas of the industry, such as multinationals or large Indian firms, join the IT-enabled sector. Therefore, they do not opt for more challenging and better-paying jobs. Hence, employers prefer married women with children, as they are not too mobile and would be willing to stay in 'a boring job' for domestic reasons. Women were viewed as 'efficient in the work and would not leave the company as they get better opportunities'.

Good practices: In exploring some of the good practices, it was noted that 70 IT companies in India have implemented policies on sexual harassment, flexible working hours, transportation policies and flexible leave usage as the most common policies while the others (as shown in Figure 3.2) remain less common. Few companies provided a counsellor for female employees. There were others who have institutionalized 'gender neutral career advancement opportunities' followed by grievance management committees and reward for increase in women's inclusivity in the IT industries (NASSCOM and MERCER, 2009, p. 17). As Figure 3.2 shows, 68 per cent of women employees have flexible work schedules.

Most importantly, there has been an undeniable improvement in the social mobility and work participation rate of women in the IT industry. The nature of

[^18]Figure 3.2:
Best Practices to Support Women at Work

|  |  |  |  |  |  |  | 69\% |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Anti-sexual harassment policy |  |  |  |  |  |  |  |  |
| Flexible work schedules/hours |  |  |  |  |  |  | 68\% |  |
| Flexible leave policy |  |  |  |  |  |  | 64\% |  |
|  |  |  |  |  |  |  |  |  |
| Transportation policy |  |  |  |  |  | 55\% |  |  |
| Health \& wellness awareness program |  |  |  |  |  |  |  |  |
| Creche for kids/parenting workshops |  |  | 27\% |  |  |  |  |  |
| Women's lounge/recreation |  |  | 3\% |  |  |  |  |  |
| Team management |  | 18\% |  |  |  |  |  |  |
| Round tables across groups/regular communication |  | 18\% |  |  |  |  |  |  |
| Women's forum |  | 18\% |  |  |  |  |  |  |
| Surveys (internal and external) |  | 14\% |  |  |  |  |  |  |
| 0\% | 10\% | 20\% | 30\% | 40\% | 50\% | 60\% | 70\% | 80\% |

Source: NASSCOM and MERCER, 2009.
work (such as flexitime, teleworking and working from home), the tools, (such as email and internet) and the individualization of capacities required by IT, make women more capable of taking decisions on their own and construct greater scope to enhance their agency.

Importantly, women's groups in various parts of Asia are able to keep in touch with each other and with their counterparts globally through email and other such communication systems. The resulting networks of such organizations are able to work in close coordination in conducting campaigns on various issues affecting women. Women's groups, indigenous people's organizations, organizations protesting against large dams-all such groups are now networking in a manner made possible by the new communication technologies. The transformation of IT does not end power inequality, but it does allow women and disadvantaged groups with more scope to project themselves. The opportunities in such sectors as IT confirms that the relationship between economic transformation and women's economic empowerment is by no means straightforward. New growth sectors also offer employment paths for women.

## 8. An Appraisal of Change in Gender Regimes

Over the past couple of decades, there has been a slow, partial and fitful change in women becoming independent income earners in their own right. Does such a movement represent a capability development of women, an increase in their well-being and of their choice? Has the movement of women into the traditional sectors, such as agricultural work, and into the technologically advanced IT sector, brought benefits to the women concerned? Has it weakened the grip of patriarchy? Or, does it function within the confines of the traditional systems of power and hierarchy between women and men?

These questions are examined, keeping in mind two major sites: (a) women as producers in agriculture and the informal economy and (b) women as employees in the IT industry. In both cases, there is the role of women as income earners, one which is different from their former and traditional status as dependent, contributing family workers. There is an increase in the economic identity of women that works in tandem, being producers of agriculture and income earners and even the providers for the family. This is different from women's work as contributing family workers in agriculture where women's contribution would have been subsumed in the general household labour and not even acknowledged as productive labour, given that men are generally the owners of productive assets and property in Asia. Further, with the spread of IT, and more so with the mobile phone technology, women learn new methods of work organizations as against the earlier methods of agricultural production or the ever more confined methods of domestic care and household work.

With both IT employment and agricultural work, women have gained greater prestige in the households and have also increased control over how their income
is spent, which is what Amartya Sen's (1990) theory of household bargaining as cooperative-conflict would predict. In his analysis of gender and cooperative conflict. Sen proposes that household members do not necessarily share the same preferences and that they try to pursue their own interests and claims in the pluralistic level of existence. The household members face two types of problems at the same time: (a) working in cooperation and adding to total availabilities; and (b) conflict related to dividing the total availabilities among the members of the household. Arrangements regarding the division of paid and unpaid work, differential consumption patterns and decision-making have an impact on the combined problem of cooperation and conflict. If the household allocation of paid and unpaid work and asset ownership is not gender balanced, it may influence intra-household bargaining, inter-spousal decisions concerning production, consumption entitlement and formation of human capabilities, thereby enabling them to access employment and entrepreneurial opportunities.

The commercialization of what was formerly domestic production (micro businesses, chikan embroidery, weaving of shawls, etc.) has led to an enhancement of the capabilities of women. In the first instance, although based on an earlier form of household activity, even if the nature of the labour performed was the same, it is now performed not for its use value but for its monetary value. Second, production for the market usually means a generalization of the type of labour. For instance, chikan embroidery workers now not only reproduce designs handed down to them by their grandmothers, but they also learn new motifs of design as they respond to market demands. From relatively fixed designs, specific to a particular community, women now learn to embroider or weave any design that is given to them, particularly any design demanded in the market. In the process, there is generalization of the capacity to embroider or weave. There is even some local development of the capacity to innovate and make new designs.

These are all definite advances in women's economic work, the mode of self-activity of the producers. While the older, traditional forms of production gave satisfaction from a limited standpoint, the modern forms of production, despite following the dictates of the market, have a higher satisfaction in the labour, even if it appears to be only for the money that it will bring. Clearly visible in the transformation of the decorative, new designs of chikan embroidery and weaving from a subsidiary household activity of women into a commercial embroidery production, is that it has become the major income source of women and their households. The advances in the capability of women's labour, income earned, respect and dignity at home, greater control over the disposition of household income and increased well-being of women themselves and their children are the advances associated with the change of women from subordinate household workers to becoming income earners, whether as wage workers or as own-account producers.

NSS data between 2004-2005 and 2009-2010 show an increase in the proportion of Indian women as regular workers from 16.5 to 19.5 per cent. This increase was seen in both rural and urban areas. It shows a relative improvement in the work status of women and an improvement in the proportion of women who have an
independent work status. Along with the decline in the overall work participation rate of women, this increase in the proportion of women workers is a positive development, given that it is associated with cash earnings or wages, which is likely to increase women's bargaining power and ability to influence decisions concerning distribution of household resources. Such a positive change was also seen in a 2011 study on the feminization of labour in rural China during the period 1991-2006 (Chang et al., 2011, p. 117). The study noted that the time 'allocated to the paid offfarm sector increased for both men and women, but the changes were smaller for women than men ( 1.091 and 0.629 hours a day for single and married women versus 1.492 and 1.093 for single and married men)'. Further, the study also noted an increase in women's share of household work time. Hence a note of caution - a positive effect or increase in paid work of women needs to be weighed against any possible increase in the intensity of her domestic work.

Individual identities of women: Importantly, at the functional level, women's individual identities have been recognized, as seen in the case of MGNREGA (Mahatma Gandhi National Rural Employment Guarantee Act) payments, which, through a smart card or unique identity (UID) or Aadhaar card system in India, can only be made to the women concerned. Through the Aadhaar identity card, women are now being given a foundational individualized economic identity. This foundational identity can be used in various economic situations-to secure payments and entitlements or for financial inclusion. The personal identity goes against the norms of many traditional gender regimes where women are referred to and known by their relationships to the men in their lives (e.g., as someone's mother or as someone's wife) rather than by their own individualized personal identity. Such relational identity is more of a problem for poor women than it is for poor men. Both poor women and men could face problems in establishing their identities due to lack of documentation in their individual names. However, in the various development schemes and government entitlements, it is the men who are individually recognized and acknowledged as 'head of the household'. Women remain subsumed under the category of dependent household members, irrespective of their economic contribution. As a result, women are less likely to manage and own productive assets and hold a position of power.

The introduction of Aadhaar however, has not changed the social norms that determine women's economic dependence on men. The old structure of gender division of labour and the associated social norms still determine the direction and the form of these changes. However, men continue to dominate the public sphere and wield power, especially economic power in production, whereas women continue to remain in their assigned roles in the domestic sphere; women also tend to work in subordinate functions in the labour market and are usually paid less than men. Other things being equal, women are generally appointed to lower positions with the same qualifications, and above all, they are proportionately more affected by redundancies and insecurity of employment, and more often relegated to part-time positions, which in turn, excludes them from decision-making and career upgrading.

Sticky areas: There are three areas resistant to transformative change in gender regimes in Asia. The first area is the gender division of housework and
domestic care. Public policies, social norms and familial grooming nurture men to be 'breadwinners' and head the households. In most situations, the men are, therefore, reluctant to be responsible for either housework or domestic care which could affect their market work and potential advancement through promotions. This position of men within the household and outside in social and economic institutions as well as in development planning provides them with the power to disregard women's household work and its long working hours without any public recognition and economic remuneration. This housework and domestic care-so critical for the maintenance of human society-is condemned to remain invisible and sexually characterized as women's duty. And, women's strategic interests for advancement with market work continue to be ignored.

The question of dignity is important in understanding the gender division of work. There is a connection between the deployment of women for domestic and farm labour and the caste-based labour systems in India and some other countries in South Asia. Leather tanning, the occupation of birth attendants and manual scavenging (the latter with some policy attention in recent years) are some examples of caste-based labour of women which have continued to be stigmatized as the labour of Dalits (and more so of Dalit women) and also remained outside the framework of technological upgradation (Gopal, 2013). The duality of complex inequalities (based on gender and caste or ethnicity) of women's work has received limited attention in both policy measures and civil society discourse. Importantly, the concern for caste differences does not deflect attention-in policy and practice-away from the strategic concerns of Dalit women and gender relations among caste-based social groups and indigenous peoples, where the most defiling, low-skilled and low-paid jobs are assigned to women.

Second, there is a general reluctance to recognizing women's unmediated authority to ownership and management of property, land and other factors of production. Women's significant work in agricultural production is well accepted in agriculturalrural development official circles. This acceptance, however, does not translate into women being recognized as legitimate farmers who are entitled to own land and manage crop production. Such denial of the right to productive assets is likely to have adverse economic implications (FAO, 2011; Kelkar and Krishnaraj, 2013). Since, at one level, women perform the most difficult tasks associated with farming, at another level, because they do not own land, they cannot obtain credit and claim other benefits provided by government schemes for agricultural development.

The third sticky area that has been largely resistant to change is the gender tag in the labour market: the segregation of women and men in market work and occupational structures. Employers tend to hire women for 'women's jobs' and men for 'men's jobs'. Firms generally consider women to be efficient in their traditional occupations, as assistants and caregivers, and men therefore are not threatened by the loss of skilled work or their technologically superior position, which was the case with the keyboard operators in Kabyle society in Africa. The Kabyle society, studied by Bourdieu, shows that 'women's entry into the publishing trades as keyboard operators aroused formidable resistance on the part of men who saw a threat to their occupational mythology of highly skilled
labour' (Bourdieu, 2001, pp. 60-61). It was only after a long struggle by women that their keyboard operating skills were recognized. However, women's technological work was arbitrarily redefined as of lower quality, while maintaining the higher value of men's 'skilled work'.

Discussing how norms affect economic behaviour and choice of gender identity in labour market relations, Akerlof and Kranton (2010) in their study concluded that men do not generally dislike working with women. Their dislike is job-specific, for example, women as secretaries and men as executives. Therefore,

- Women invest in skills for jobs that are appropriate for women (education rather than business schooling or engineering).
- Women may have a lower attachment to the labour force because of wider gender norms (women are expected to stay home and raise children).
- The real problem is the norms that regulate that women and men should do particular jobs, irrespective of their individual tastes and abilities.

Firms do not have much incentive to change gender norms which are generated within the household and then manifested in the labour market. Furthermore, whatever gains have come up as a result of the feminist critique of labour market relations and of conventional economic interpretations of work, they are likely to be at risk with the new forms of women's incorporation in global production systems. The uncertainties and risks of own-account workers, low wages and sexual harassment for those in the workplace, all are associated with the new ways of women's incorporation in global chains and reflect the lack of 'decent work'.

To advance the struggle of women workers for decent work, two major issues need to be confronted. First, the gender differentiation of labour force between a core of men who have somewhat decent work standards and the flexible mass of women workers who do not have these standards, which largely proceeds on the basis of presumed skills. Women are kept out of skilled categories or their labour, even though skilled, is classified as unskilled (Bourdieu, 2001; Mason et al., 2000). This skill-based gender differentiation of the labour force needs to be confronted and changed, if the conditions of women workers are to change. Second, since it is considered to be women's responsibility to do most of the household work, the enormous increase in women's work burden with their entry into income earning needs to be tackled, if women are not to continue mining their bodies.

## 9. Conclusions: Towards Women's Economic Empowerment

How should one react to the inadequacies of women's working conditions, whether in a formal or an informal economy? On the one hand, one can decry or adjust to it as an inevitable concomitant of globalization. On the other hand, one can find new ways of changing the terms of incorporation in labour markets. The big problem in changing the terms of incorporation is the flexibility of capital. There is the
threat of relocation to ever-cheaper sites of labour, understanding cheapness to be not just as matter of wages but of wage cost per unit of output, and therefore related to not just the level of wages but also the productivity of labour. Consequently, success in demands for improving the conditions of women's work-whether in areas of formal economy of the IT sector or self-employment and agricultural work in the informal economy-will have to be accompanied by improvements in the productivity of labour. Such improvement in the productivity of labour is possible only through women's enhanced capabilities, their adequate participation in the national polity and economic governance as well as in the social practices of equality and non-discrimination.

To improve labour market prospects for women, it is important to encourage changes in males' attitude towards the conventional roles of women, and for the men to share in household work and domestic care responsibilities as well. These can be instituted through the firm's and factory's policies for: (a) regular gender sensitization workshops or discussions on gender-responsive work practices within the home and in the labour market; (b) publicly-funded childcare programmes along with subsidized low-cost commercial care; and (c) a concerted effort at changing the gender segmentation of labour markets.

Undoubtedly, these create challenges for labour markets and threats for social norms, cultural institutions, state machinery and employment policies. Despite frequent declarations for mainstreaming gender equality in labour markets and state policies, feminist analysis shows that traditional gender roles are reinforced not just by cultural norms but also by economic policies (Sandberg, 2013; Seguino, 2007). The existing employment policies and labour market relations encourage the maintenance of traditional gender roles and do not encourage changes in the gender division of labour. Based on a panel study of income dynamics for 1981-2009, Elizabeth McClintock found that occupational interaction influences the gender division of work at home (McClintock, 2013). Her study points out that when men of the household are employed in traditionally female occupations (e.g., nursing, childcare or teaching), they spend more time doing housework compared to men who are employed in the traditionally male occupations (as machine operators, masons or supervisors), and that their wives or partners spend less time in caring and household activities. Further, when married women or women in live-in-relationships work in traditionally women's jobs, they tend to increase the amount of time on housework and caring compared to when they are employed in traditionally male occupations.

Is there no change in social norms and labour-market relations? In urban systems of major cities in Asia, men are reportedly taking on more household responsibilities. However, this change is taking place very slowly and women are still far from achieving parity in household work as well as in ownership and control of productive assets. While economic policies tend to present motherhood as the most important and challenging work of all, women who are mothers are not rewarded or recognized for their contribution. In contrast, all the work related to motherhood is seen as a woman's duty. In most cases, women end up paying big penalties in terms of their career for raising the
human resources of the future. In a gender analysis of the labour market in North America, Stephen Rose and Heidi Hartmann noted: 'Controlling for education and hours worked, women's annual earnings decrease by 20 per cent if they are out of the workforce just for one year. Average annual earnings decline by 30 per cent after two to three years, which is the average amount of time that professional women off-ramp from the workforce' (quoted in Sandberg, 2013, p. 102).

Burdened by housework and childcare, women find it difficult to move up in their careers. Once laid off, it is very difficult for them to be re-employed in any formal sector job and they, therefore, have to seek informal employment with poor working conditions lacking any social security. Can the achievement of gender equality and women's empowerment be assisted by change in employment policies?

Some preliminary steps towards economic empowerment of women require a bold and transformative change in the social norms which prohibit women (and also some castes and indigenous peoples) from accessing employment opportunities. Discussing the limits of women who are employed or are seeking employment in the IT sector, Sheryl Sandberg, chief operating officer, Facebook, observed: 'Women must be more empowered at work, and men must be more empowered at home' (Sandberg, 2013, p. 108).

Indeed cultures are not static, not for all the time. The sources of change in a culture are varied, including intercultural discussions and communications where IT has a major role to play. As correctly pointed out by Duflo (2012), outsourcing of telemarketing and related tasks present market opportunities for women who have traditionally been kept out of the labour market. This leads to a rapid increase in women's freedom of movement to access market work and increase in capacity with English-based education. The cultural ceiling that effectively prohibits women from being recognized as economic contributors needs to be overcome in order to increase the potential of human society, including women's agency and empowerment.

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## 4

# Decline of Women's Labour Force Participation in India <br> Explaining the Puzzling Trend 

Steven Kapsos, Andrea Silberman and Evangelia Bourmpoula

## 1. Introduction

According to the National Sample Survey Organization (NSSO) survey on the Employment and Unemployment Situation in India conducted in 2009-2010, the labour force participation rate for women aged 15 years and above fell by 10.1 percentage points as compared with the previous survey round, corresponding to 22.6 million fewer women in the labour force in 2010 than in $2005 .{ }^{1}$ This was driven by declines in female participation rates in both rural and urban areas, which dropped by 11.5 and 5.0 percentage points, respectively. In comparison, male participation in India declined by only 3.4 percentage points over the same period. Based on the most recent survey (NSSO, 2014), female participation declined further in rural areas-a drop of two percentage points since 2010, while in urban areas the rate increased by 1.1 percentage points. The overall female participation rate declined by 1.3 percentage points while the male participation rate dropped by 0.8 percentage points.

These declines in participation occurred at a time when India was experiencing high average annual GDP growth of around 8 per cent (World Bank, 2012). It is expected that such a high rate of annual growth over a sustained period would create many new job opportunities and reduce the incidence of poverty. In addition, fertility rates have declined steadily over the past several decades, at 2.6 in 2011 compared to 3.1 in 2000 and 3.9 in 1990, which would tend to be supportive of increased female participation in the labour market (World Development Indicators). India also enacted a large-scale public programme promoting employment in rural areas (Mahatma Gandhi National Rural Employment

[^19]Guarantee Act, [MGNREGA]) in 2005. Against this backdrop, the declines in participation appear very puzzling.

The overall female participation rate in India has been persistently low in comparison to other countries in the world. In 1994, India ranked 68th out of 83 countries with available data in terms of the rate of female participation. As of 2012, it ranked 84th out of 87 countries. The recent sharp decline in women's participation in the labour market must, therefore, be viewed in a longer-run context of low and stagnant female participation rates.

Low levels of female labour force participation can have negative economic effects like reducing potential growth rates. An ILO report estimated that global GDP could grow by US\$1.6 trillion (in PPPs [purchasing power parity]) versus the current trajectory, if gender gaps in participation rates moved half way towards the median gap observed across all countries in the European Union and North America in 2012 (equivalent to the observed gap in the Netherlands) by 2017 (ILO, 2012). Specifically for India, Lawson (2008) estimated that per capita income could be 10 per cent higher by 2020 and 13 per cent higher by 2030 than in the baseline scenario if India's gender participation gap could be halved. Given the large potential economic and social benefits of raising female participation in India, this chapter attempts to identify the key factors that may explain why women's participation rates have fallen sharply in recent years and why they have stagnated at low levels for a long period of time.

A number of competing hypotheses have been brought forward to explain the steep decline observed between the 2004-2005 and 2009-2010 survey rounds; see Chowdhury (2011), Chaudhary and Verick (2014), and Neff et al. (2012). In attempting to shed light on both the recent decline and longer-term stagnation in female participation, this paper distinguishes between four main hypotheses of the root causes: (a) Increasing attendance in educational institutions; (b) Increased household income, which reduces the need for female labour; (c) Changes in measurement methodology related to some types of female employment; and (d) Insufficient job opportunities for women. The official reports (Planning Commission, 2011, p. 6) suggest that the overall decline in participation for both men and women has been due to an increase in young adults attending educational institutions. While this may have depressed the most recent participation rates, it is expected that an increase in educational attainment leads to improved job prospects and higher labour market attachment in the future.

The second hypothesis is based on the literature of long-run changes in female labour supply that observes that there is a U -shaped relationship between national income and female labour force participation; see Lincove (2008) and Mammen and Paxson (2000). One of the explanations for this relationship is that an increase in household income first leads to a decline in participation through household income effects. That is, as households become wealthier, increasing number of women move out of low-productivity, often subsistence employment, and become economically inactive. This often coincides with higher female enrolment in education, as households can better afford to send girls and young women to school. Only later in the development process when more jobs that are acceptable to women become available, do women increase their labour market participation.

The third hypothesis relates to data collection and changes in measurement precision across surveys and is based on the argument that the NSSO used more contract workers than usual and that interviewers failed to ask crucial follow-up questions when conducting the 2009-2010 survey (Seth et al., 2011). Other researchers have pointed to detrimental effects on participation from the global financial crisis and from the deficient monsoon rainfalls in 2009 (Chowdhury, 2011). These one-off shocks, which may have disproportionately affected the 2009-2010 survey data, need to be distinguished from long-term trends in labour supply in India.

The fourth hypothesis is based on the evidence that available employment opportunities for women in India have declined (Chowdhury, 2011). This may be because employment generation has not kept up with the rise in the working-age population, due to increased competition with men for scarce jobs and an increasing reluctance of women to take up informal (and poorly-remunerated) work. A related possibility is that industrial and occupational segregation may be hindering an increase in female employment. That is, if industries and occupations that are experiencing job growth tend to be male-dominated, women would be less likely to benefit from overall job gains and may remain out of the workforce given the limited opportunities.

The remainder of the chapter is structured as follows. Section 2 reviews the literature on determinants of female labour supply and participation in developing countries, with a focus on India. The trends in female labour force participation are analysed for India based on the five most recent employment and unemployment surveys in Section 3. The section also analyses potential changes in measurement methodology vis-à-vis female participation across survey rounds. The main quantitative results are presented in Section 4. This includes a summary of scenarios providing estimates of the impacts of the four factors discussed above on changes in female participation rates, a scenario examining the potential role of occupational segregation in hindering female employment growth, and the main econometric results, which seek to identify longer-term determinants of female participation rates. Section 5 concludes and offers some policy directions.

The analysis presented in this chapter is based on the 50th (1993-1994), 55th (1999-2000), 61st (2004-2005), 66th (2009-2010) and 68th (2011-2012) rounds of the employment and unemployment surveys, each of which were carried out over the course of 12 months, from July to June. The definitions, concepts and approaches are very similar across all five survey rounds. Very few questions were added or dropped across the various rounds which allows for a comparison of labour market outcomes over time. Throughout the chapter, 1994 will refer to the 1993-1994 survey, 2000 to the 1999-2000 survey, 2005 to the 2004-2005 survey, 2010 to the 2009-2010 survey and 2012 to the 2011-2012 survey. ${ }^{2}$ The most recent survey is excluded from the empirical analysis as the monthly per-capita expenditure data appear to be non-comparable with the earlier rounds.

[^20]
## 2. Literature Review on Drivers of Female Labour Force Participation

Female labour force participation represents a woman's decision to be part of the employed or unemployed population as opposed to being part of the economically inactive population (comprised of those not in work and not seeking work). The economic literature distinguishes between male and female participation in the labour market due to observed differences in trends and determinants of each. Substantial increases in female labour force participation in most developed economies since the 1950s have generated a large body of literature on the subject. For a review, see Killingsworth and Heckman (1986).

The traditional framework for analysing the decision of women to join the labour market goes back to Mincer (1962), who considers that agents allocate their time between leisure, work at home and work in the market. Leisure is treated as a normal consumption good for which demand is derived from maximizing utility subject to a budget constraint. This is the basis of the static labour supply model in which an agent's preferred number of working hours are estimated based on information on household income and the expected market wage which represents the opportunity cost of not working and individual preferences. In a fairly recent study, this model was applied to analyse changes in female labour supply between the 1980s and 2000 in the US (Blau and Kahn, 2007).

The decision to participate in the labour market is driven by different factors across developing and developed countries. Models for developed countries treat labour supply as the result of individual utility maximization over consumption and leisure, subject to a budget constraint (Blundell and MaCurdy, 1999). In contrast, labour supply decisions in developing countries are often modelled for the household as the decision-making entity and are closely linked with labourdemand decisions (Bardhan and Urdy, 1999). As Sen (1987) demonstrates, in any model of economic development, it is crucial to take into account that cooperation and conflict exist simultaneously in gender divisions.

The focus on the household stems from observations that household ties impose important constraints on individual decision making. Skoufias (1993) finds that an increase in the market wage of a household member can have substantial effects on the time use of other household members. Moreover, a large part of many households' incomes is earned through work in household enterprises (e.g. a farm in rural areas or a small business in urban areas). Such households can be understood as simultaneously taking consumption and production decisions when determining the amount of household labour to allocate to different activities.

Aside from the focus on the household as decision-maker, analysis of labour markets in developing countries identify multiple heterogeneous segments among which labour mobility is restricted. The literature suggests segmentation between agriculture, industry and services (Lewis, 1954), between rural and urban locations (Todaro, 1969) and between the informal and formal sectors (Fields, 2009; Maloney, 2004).

Around 70 per cent of the Indian labour force resides in rural areas where most households are engaged in agricultural activities. ${ }^{3}$ Labour supply in rural areas is characterised by the seasonality of the crop cycle and weather conditions which can lead to large and partly unpredictable fluctuations in economic activity over the course of a year. As Behrman (1999) notes, the absence of insurance markets to mitigate the effect of weather conditions on agricultural production may lead risk-averse households to seek additional casual labour arrangements to supplement household income. In addition, low productivity of employment in agriculture has led to higher returns in non-agricultural activities. Recent evidence (Coffey et al., 2011) suggests that short-term migration to urban areas in search of employment is very common among rural households. This fits with the general view on India as a labour-surplus economy (Dasgupta and Goldar, 2005), with supply posing no constraint on labour-market outcomes and prevalent underemployment in rural areas. Yet, given the segmentation between urban and rural labour markets, there are also examples of labour shortages in India (e.g., for skilled workers in the construction sector), pointing to the existence of structural barriers to employment (Hajela, 2012).

In urban areas, labour markets resemble developed countries more closely: activities are more heterogeneous, there is larger variation in wages, returns to education are higher and institutions enforce more regulations (Behrman, 1999).

In India, social norms tend to attribute the primary responsibility in securing household income through employment to men, while women are expected to devote their time to domestic care (Das, 2006). This leads to gender differences in employment outcomes, such as sectoral and occupational segregation, and to differences in determinants of participation for men and women. In comparison with men, women in India are on average less skilled and less educated. Women also have less access to land, credit and financial capital, which may inhibit their ability to find paid work. Norms affecting female participation often differ by region, religion and social group.

Empirical evidence shows that women are predominantly engaged in work that can be regarded as an extension of their domestic responsibilities (e.g. maids, tailors, teachers and nurses). In addition, a large proportion of women prefer to participate in home-based work, which is more easily combined with domestic care responsibilities (Rani and Unni, 2009). This may create difficulties in correctly measuring the amount of market work relative to domestic care (non-market) work carried out by women.

A prominent observation concerning female labour supply in India is that participation by educational attainment follows a U-curve. Women with less education tend to have higher participation rates than women with primary or secondary education. This observation may be related to socio-economic status, as

[^21]women in poorer households may be required to complement their household's income through market work in order to meet minimum subsistence needs (Dasgupta and Goldar, 2005). As household income increases, women drop out of the labour force as domestic non-market work is perceived to have a higher status than market work. In contrast, women with higher levels of education and those living in affluent households also have higher participation rates than women in middle-income households. Some authors suggest that these women benefit from increased investment in their human capital and may be able to obtain jobs with better working conditions and adequate remuneration (Klasen and Pieters, 2012).

## 3. Recent Female Labour Supply Trends in India and Potential Measurement Issues

### 3.1. Recent Trends in Female Labour Supply

The analysis of participation in this chapter is based on the basis of UPSS. ${ }^{4}$ Individuals who were employed based on the subsidiary status are counted among the active population irrespective of whether they were classified as inactive or active in the usual status. Participation rates based on the UPSS are higher than rates based on the usual principal status alone and tend to be higher than the weekly and daily statuses. While analytical results may differ depending on which definition is applied, the overall participation rates for both men and women for each definition have followed the same trends.

As shown in Figure 4.1, while female participation in urban areas is much lower than in rural areas, the overall fluctuations over time are similar across regions and different age groups. There is a decline in participation rates across all age groups between 1994 and 2000, an increase between 2000 and 2005 and sharper decline between 2005 and 2010. However, the trend for rural and urban areas differs for the period 2010 and 2012. For all age groups, the rural rates declined and the urban rates increased. More specifically, the overall rural female participation rate declined by two percentage points while the urban rate increased by 1.1 percentage points.

[^22]The sharp decline in labour force participation among females aged 15 to 24 years old, falling from 35.8 per cent in 1994 to 22.2 per cent in 2010 and further down to 20.2 per cent in 2012, was likely driven in large part by increased attendance in education. However, as women in the 25-34 and the 35-54 age groups also experienced substantial declines in participation, this explanation can only account for part of the recent decline in overall female participation.

In comparison, male participation among 25 to 54 year old was extraordinarily stable between 1994 and 2012. Males aged 15 to 24 years experienced a similar trend as females, with a decline in participation rates in both rural and urban areas.

When disaggregating total employment by status in employment (see Figure 4.2), we find that the proportion of female wage and salaried workers in both rural and urban areas has been steadily rising since 1994, though their proportion remains very low in rural India ( 9.4 per cent in 2012). Increased wage employment is a

Figure 4.1:
Female and Male Labour Force Participation Rates by Region


Source: Authors' calculations on the basis of NSS data.

Figure 4.2:
Female Employment by Status and Location Over Time


Source: Authors' calculations on the basis of NSS data.
Note: Age group is $15+$.
positive development as wage and salaried workers are more likely to obtain decent working conditions and more adequate remuneration as compared with ownaccount workers or contributing family workers. The share of wage employment for both women and men remains low in comparison with many developing and emerging countries as India ranks 135th among 145 countries with available data. ${ }^{5}$

Educational attainment is an important factor in determining the employability of a worker and is likely to affect women's labour force participation decisions in India. Indeed, the relationship between female labour force participation and educational attainment for India resembles a U-curve. Across both rural and urban locations and for all years, women with secondary education had the lowest participation rates. As can be seen in Figure 4.3, the participation rates in 2010 shifted downwards as compared to 1994 for all levels of educational attainment apart from pre-primary and primary education in urban areas. Between 2010 and 2012, female participation rates at all educational levels increased in urban areas and the largest increase occurred at the pre-primary level (2.7 percentage points). In contrast, over the same period in rural areas, female participation rates dropped for all educational levels with the largest decline occurring in the pre-primary level (3.7 percentage points).

Underlying these changes in participation rates by educational attainment are substantial changes in the level of educational attainment of the female workingage population. Despite substantial progress in raising female literacy, the proportion of working-age illiterate women remained very high in 2010, at 49.8 per cent in rural areas and 23.6 per cent in urban areas. In 2012, this share dropped to 47.5

[^23]Figure 4.3:
Female Participation Rates by Educational Attainment

|  |  |
| :---: | :---: |

Source: Authors' calculations on the basis of NSS data.
Note: Age group is $15+$. Illiterate means no schooling.
per cent in rural areas and to 22.6 per cent in urban areas. These shares have declined sharply compared to 1994 , from 70.8 per cent and 36.3 per cent for rural and urban areas respectively. Overall, 23.1 per cent of working-age women in India had a secondary education or higher in 2010 ( 17.5 per cent with a secondary education and a further 5.6 per cent with a tertiary-level education). In 2012, 25.7 per cent had completed a secondary or higher level of education (19.5 per cent with a secondary education and 6.2 per cent with a tertiary degree). While still representing only a small share of the female working-age population in India, this is a significant improvement compared with 1994, when only 11 per cent had a secondary or higher level of education ( 8.6 per cent with a secondary education and 2.4 per cent with a tertiary level education).

Between 2005 and 2010, while the proportion of females with tertiary education grew the fastest, the largest increase during this period was among women with secondary-level education ( 19.8 million), followed by women with primary-level education ( 14 million). As these two groups have the lowest shares of economically active women, this would tend to contribute to a decline in the overall female labour force participation rate.

Another important determinant of female labour force participation is household income. It is expected that women living in households with increased incomes are less likely to participate in the labour market. This effect has been observed in literature and it has been argued that higher caste families encourage female seclusion (Das and Desai, 2003). However, this may be mitigated by the fact that household income increases if more household members, including women, participate in the labour market.

During the past two decades of high average annual economic growth, the proportion of individuals living on less than 100 rupees (in constant prices) declined from 16.6 per cent in 1994 to 9.7 per cent in 2010, with substantial growth in the shares of households in the 150-250 rupee and greater than 250 rupee per-capita consumption groups.

Figure 4.4 shows that participation rates were highest among women in the poorest households and lowest among women living in households with high monthly per capita expenditures. Surprisingly, the differences in participation across income classes diminished considerably in 2010 for both rural and urban women. This may in part be due to an income effect but this also suggests that measurement issues may have affected estimates of the female labour force. The decline is particularly sharp for poorer women, whose participation rates declined by more than 10 percentage points. In 2010, around 74 per cent of women living below 150 rupees were engaged in agriculture.

The above trends indicate a number of potential factors that could explain the observed decline in female labour force participation rates in India. One hypothesis is that there are insufficient formal wage employment opportunities for the country's growing population, which has adversely affected employment prospects for both women and men, and could have contributed to declining activity rates. Another possibility is that increased educational attendance and higher levels of education among the female population contributed to the decline in participation, though these factors are unlikely to account for the bulk of the decline. Higher household income levels may also have contributed to the decline, however, declining participation among poor women also points to potential measurement issues.

### 3.2. Problems in Identifying Female Employment

In conducting its household surveys on employment and unemployment, the NSSO defines economic activity as the 'production of all goods and services for market (i.e. for pay or profit) including those of government services, and, the

Figure 4.4:
Female Participation Rates by Monthly Per Capita Expenditures (Constant ₹)


Source: Authors' calculations on the basis of NSS data.
production of primary commodities for own consumption and own account production of fixed assets' (NSSO, 2011, p. 11). This definition has been consistently applied in each of the survey periods under consideration and is broadly in line with the definition adopted by the UN System of National Accounts. ${ }^{6}$

However, contradictory definitions appear to have been adopted when distinguishing between contributing family workers, classified as employed, and individuals engaged exclusively in domestic care work, who are treated as economically inactive. Despite considering activities such as the free collection of uncultivated crops, forestry, firewood, hunting and fishing for own consumption as economic activities, individuals who attended domestic duties and were also engaged in the free collection of goods for household use are classified by the NSSO under Code 93, which is considered economically inactive. In addition, it is not clear how survey investigators distinguish between contributing family workers and individuals engaged exclusively in domestic duties within a household. It may be difficult to identify a contributing family worker when work is spread over time in an irregular fashion or when multiple jobs are carried out for short durations (Hirway and Jose, 2011).

As a result, a number of individuals may have been classified as inactive in each of the four survey periods under consideration, despite their engagement in market work. In this case, estimates of the labour force participation rate would have suffered from a downward bias. It is expected that this bias would affect women more than men, as evidence from time use surveys in India has shown that women are disproportionately engaged in unpaid work performing domestic duties or care work (Antonopoulos and Hirway, 2010). Particular concern applies to the survey conducted in 2009-2010 as it has been reported that this survey round made increasing use of contract workers. These contract workers may not have been trained adequately in classifying individuals according to the definitions adopted by the NSSO. ${ }^{7}$ It should be noted here that while this section is concerned with identifying whether measurement issues were a likely contributor to the observed low female labour force participation rates, a separate but closely related issue concerns the continued allocation of women to unpaid work.

Table 4.1 shows the evolution of the share of the working-age population classified as engaged exclusively in domestic duties (and hence economically inactive) according to the UPSS. The difference between women and men with regard to the shares estimated to be engaged solely in domestic duties is striking, with less than 1 per cent of working-age men in this category (with little change), as compared to nearly 50 per cent of rural working-age women and over 61 per cent of urban working-age women in 2012.

The data show a marked decline in the share of working-age rural women engaged exclusively in domestic duties between 2000 and 2005 (from 43.9 to 39.8

[^24]Table 4.1:
Shares of the Working-age Population Engaged in Domestic Duties

|  | 1994 | 2000 | 2005 | 2010 | 2012 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Female rural | 42.4 | 43.9 | 39.8 | 49.4 | 49.9 |
| Female urban | 60.7 | 61.9 | 59.3 | 62.1 | 61.1 |
| Male rural | 0.4 | 0.4 | 0.4 | 0.5 | 0.5 |
| Male urban | 0.5 | 0.4 | 0.4 | 0.6 | 0.3 |

Source: Authors' calculations on the basis of NSS data.
Note: Domestic duties correspond to codes 92 and 93 according to usual principal activity (UPA) status.
per cent). This trend subsequently reversed sharply after 2005, rising to 49.4 per cent in 2010 and further to 49.9 per cent in 2012. The changes among the urban female population are smaller in magnitude but directionally the same except between 2010 and 2012, in which the share of working-age urban women declined slightly. Such a large fluctuation in the share of rural women estimated as engaged in domestic duties between the 2000 and 2005, and 2005 and 2010 survey rounds is difficult to explain, more so in light of the comparatively modest changes among the urban female population and among the overall male population.

Table 4.2 shows the evolution of participation rates for both men and women on the basis of the UPSS definition and of an augmented definition. For the augmented definition, we added to the UPSS economically active population, those people who were engaged in domestic economically gainful activities such as collection of firewood, poultry and so on. ${ }^{8}$ For men, the trends corresponding to both definitions are consistent over the years. However, for women, especially in rural areas, the augmented definition has followed a smoother trajectory as opposed to the UPSS definition. In 2005, the augmented rate declined in rural areas by 0.7 points and it further dropped by 6.2 and 3.2 percentage points in 2010 and 2012, respectively. In contrast, the rural UPSS rate increased in 2005 by four percentage points and dropped by 11.5 and two percentage points in 2010 and 2012, respectively.

To investigate this issue further, we divide the rural female working-age population into mutually exclusive labour market status categories, as shown in Figure 4.5. In addition to the categories of regular employee, employer, own-account

[^25]Table 4.2:
Labour Force Participation Rates (\%), UPSS and Augmented Definition by Sex and Area

|  | UPSS definition |  |  |  |  | Augmented definition |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1994 | 2000 | 2005 | 2010 | 2012 | 1994 | 2000 | 2005 | 2010 | 2012 |
| Women |  |  |  |  |  |  |  |  |  |  |
| Rural | 49.0 | 45.4 | 49.4 | 37.8 | 35.8 | 80.8 | 77.0 | 76.3 | 70.1 | 66.8 |
| Urban | 23.8 | 20.8 | 24.4 | 19.4 | 20.5 | 45.2 | 38.5 | 39.1 | 35.9 | 32.1 |
| All areas | 42.7 | 38.9 | 42.7 | 32.6 | 31.2 | 71.8 | 66.8 | 66.4 | 60.3 | 56.4 |
| Men |  |  |  |  |  |  |  |  |  |  |
| Rural | 87.6 | 85.3 | 85.9 | 82.5 | 81.3 | 87.9 | 85.3 | 86.2 | 82.8 | 81.6 |
| Urban | 80.1 | 78.7 | 79.2 | 76.2 | 76.4 | 80.2 | 78.7 | 79.3 | 76.3 | 76.4 |
| All areas | 85.6 | 83.4 | 84.0 | 80.6 | 79.8 | 85.9 | 83.4 | 84.3 | 80.9 | 80.0 |

Source: Authors' calculations on the basis of NSS data.
Note: Age group is $15+$. The augmented definition for the labour force includes women who are engaged in domestic economic activities.

Figure 4.5:
Distribution of Rural Female Working-age Population by Labour Market Status


Source: Authors' calculations on the basis of NSS data.
Note: Age group is $15+$.
worker and contributing family worker (together with the employed population) and the unemployed, we divide the economically inactive female population into four categories: (a) those engaged in domestic duties only; (b) those engaged in domestic duties and also engaged in economically gainful activities such as free collection of goods (vegetables, roots, firewood, cattle feed and so on), sewing, tailoring, weaving and so on for household use; (c) those that are in education; and (d) those who are unable to work.

Focusing on the first three categories within this disaggregation provides insights into potential changes in measurement methodology across the surveys. First, looking at the economically inactive groups, there is substantial change over time in the share of women engaged in the two 'domestic duties' categories. The share of women engaged in domestic duties declined by 4.8 percentage points between 2000 and 2005, then increased by 7.3 percentage points between 2005 and 2010, and subsequently declined by 3.3 percentage points between 2010 and 2012. The share of women engaged in domestic duties and who undertook some economic activities increased over the period by 0.7 percentage points between 2000 and 2005, by 2.3 percentage points between 2005 and 2010 and by 13.6 percentage points between 2010 and 2012. These two groups together saw a 4.1 percentage point decline between 2000 and 2005, a 9.6 percentage point increase between 2005 and 2010 and a 10.3 percentage point increase between 2010 and 2012.

Turning to the economically active categories, the contributing family worker category also saw substantial changes but in the opposite direction. The share of women engaged as contributing family workers rose by 4.4 percentage points between 2000 and 2005, dropped sharply by 8.3 percentage points between 2005 and 2010 and further dropped by 5.4 percentage points between 2010 and 2012. If we aggregate the contributing workers category together with the two domestic duties categories (shown by the triangles in the figure), they exhibit a gradual increasing trend across the survey periods.

The other categories do not exhibit any confounding trends. The share of female own-account workers in rural India has been on a steady decline, which accelerated somewhat between 2005 and 2010 and further in 2012. The share of women in education has been on an increasing trend that again accelerated from 4.9 per cent in 2005 , to 7.2 per cent in 2010 and to 8.7 per cent in 2012. These are both consistent with favourable economic growth that accelerated in recent years in India. The category of women declared unable to work remained fairly stable over time.

These trends point to changes in the way women who were engaged in contributing family work and domestic duties were classified across the survey rounds. Problems in correctly classifying women in either of these three groups comes as little surprise given the conceptual similarities between persons engaged in domestic duties and those working as a contributing family worker. It appears as though in the 2005 survey round, an increased proportion of this aggregated 'contributing family worker/domestic duties' group was classified as contributing family workers, which boosted the estimated female labour force in rural India. In contrast, in the 2010 and 2012 survey rounds, an increased proportion of this overall group was classified as attending to domestic duties and not as contributing family workers, which reduced the estimated size of the female workforce. While the available data do not allow for a definitive conclusion on this point, the trends do point to likely changes in the de facto measurement methodology employed in 2005, 2010 and 2012 NSS survey rounds as compared with the earlier rounds.

## 4. Empirical Results

### 4.1 Summary of Scenarios: How Are Different Factors Driving Changes in Female Participation Rates?

Kapsos et al. (2014) present a series of scenarios that provide quantitative estimates of the relative contributions of the four key factors (increased education, higher household income levels, changes in measurement of economic activities, and limited employment opportunities and other factors) on the observed changes in female labour force participation rates.

Table 4.3 provides the summary of these estimates for each period in the analysis. It is important to note that the estimates provided in Table 4.3 are based on a number of assumptions (described in each of the scenario descriptions in Kapsos et al. [2014]) and are not intended to be precise measurements of the impact of these factors on female labour force participation rates. Rather, the figures should be considered as indicative of directions and general magnitudes.

Our estimates indicate that the impact of increased attendance in educational institutions has been fairly modest in most periods, particularly between the 2005 and 2010 survey rounds. In this period, we estimate that increased attendance rates accounted for 0.9 percentage points of the 10.1 percentage point drop in overall participation rates, or only around 9 per cent of the total decline. The finding that increased attendance in education has had only a fairly modest impact on overall female participation in most periods comes as little surprise given the large declines in female participation rates across all age groups.

The shift in the distribution toward higher household consumption levels also had a negative impact on overall participation rates in India in each of the periods under investigation. This is estimated to have accounted for around 9 per cent of the total decline in female participation between 2005 and 2010. Thus, we estimate that the effects of increased education and higher levels of household consumption together account for around 18 per cent of the total decline in female participation over this period. We estimate that measurement methodology changes accounted for 4.1 percentage points of the decline observed in the period from 2005 to 2010, or 40 per cent of the total change. Adding in the 18 per cent decline due to increased education and higher household income, we estimate that around 42 per cent of the decline in female participation was due to a general lack of employment opportunities for women and other factors.

Looking at other periods for which estimates are available for all scenarios, Table 4.3 reveals an important pattern with regard to measurement effects: every period in which we find that changes in measurement methodology played a predominant role either started or concluded with the 2005 NSS survey round. In each of the three survey periods that include the 2005 survey, the estimated measurement effect has been large. For the periods that do not utilize the 2005 survey data (1994 to 2000, 1994 to 2010 and 2000 to 2010) we find only a fairly modest measurement methodology effect. One potential conclusion from this
Table 4.3:
Summary of Scenarios: Estimated Impact of Key Factors on Changes in Female Participation Rates and Percentage Point Contributions

|  | Short-run changes |  |  |  |  | Longer-run changes |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1994-2000 | 2000-2005 | 2005-2010 | 2010-2012 | 1994-2005 | 1994-2010 | 1994-2012 | 2000-2010 | 2000-2012 | 2005-2012 |
| Total change in female participation rate (percentage points) | -3.8 | 3.9 | -10.1 | -1.3 | 0.1 | -10.1 | -11.4 | -6.3 | -7.6 | -11.5 |
| Increased attendance in educational institutions (percentage points) | 0.5 | -0.4 | -0.9 | -0.5 | -0.9 | -1.4 | -1.7 | -1.1 | -1.4 | -1.2 |
| Increased household consumption levels (percentage points) | -0.8 | -1.0 | -0.9 |  | -1.6 | -2.4 |  | -2.0 |  |  |
| Changes in measurement of economic activities (percentage points) | 1.2 | 4.3 | -4.1 | 2.5 | 5.5 | 1.4 | 4.0 | 0.2 | 2.7 | -1.6 |
| Changes in employment opportunities and other (percentage points) | -3.7 | 1.0 | -4.2 |  | -2.9 | -7.7 |  | -3.5 |  |  |

[^26]Figure 4.6:
Summary of Scenario Analysis: Estimated Percentage Point Contributions to Changes in Female Participation Rates in Selected Periods


Source: Authors' estimates on the basis of NSS data.
analysis is that the way in which women's economic activities were measured in the 2005 survey round may have differed in comparison with the other survey rounds, leading to an upward bias in the female labour force participation rates estimated in 2005.

Given the consistency between the standard and augmented participation rate series in the 1994, 2000 and 2010 survey rounds, we focus on these three rounds to derive a final set of estimates of the contributions of different factors to the observed decline in female participation. The results are provided in Figure 4.6, which includes the decomposition for three periods: the full period from 1994 to 2010, along with 1994 to 2000 and 2000 to 2010. As the measurement effect is small in each of these periods, we disregard this and provide the decomposition only for the three factors under consideration: education, household consumption, and employment opportunities and other factors.

We find that over the full 1994-2010 period, increased education and household consumption levels accounted for 3.8 percentage points ( 38 per cent) of the 10.1 percentage point decline in female participation with diminished employment opportunities and other factors contributing the remaining 6.2 percentage points ( 62 per cent). The effect of increased education and household consumption increased from the 1994-2000 period to the 2000-2010 period, together accounting for 3.0 percentage points ( 48 per cent) of the decline between 2000 and 2010 versus 1.3 percentage points ( 34 per cent) between 1994 and 2000. We estimate that the impact of diminished employment opportunities and other factors on female participation rates accounted for 3.3 percentage points of the decline between 2000 and 2010 ( 52 per cent) versus 2.5 percentage points ( 66 per cent) between 1994 and 2000.

### 4.2. Is Occupational Segregation Limiting Employment Growth for India's Women?

A possible explanation for lack of available job opportunities for women is that men benefit disproportionately from increased demand for highly skilled workers. This is likely in India as men remain more skilled and more educated on average than women. In addition, occupational and sectoral segregation by gender may have confined women to search for market work in particular sectors and occupations, in line with prevailing social norms. If the sectors and occupations in which women are more likely to work have not registered much employment growth, this could limit employment opportunities for women, posing a barrier to their participation.

Indeed, a comparison of male and female employment by occupation shows that female employment growth between 1994 and 2010 largely took place in occupations that were not growing overall. Excluding occupations that saw employment declines, these 10 occupations accounted for around 90 per cent of all employment growth.

The data reveal a large degree of gender-based occupational segregation in India. Less than 19 per cent of the new employment opportunities generated in India's 10 fastest growing occupations were taken up by women. The share of women increased in only three out of these 10 occupations over this period: other professionals, personal and protective services workers, and labourers in mining, construction, manufacturing and transport, while it declined in the other seven occupations. Three occupations that are not among the fastest growing, but in which the female share of total employment in the occupation grew substantially include teaching professionals, life science and health associate professionals, and customer service clerks.

To get a sense as to how the country's large degree of occupational segregation may be affecting overall employment opportunities for women, a scenario was devised in which a distribution of women was assigned across occupations in India in 1994 equal to the actual distribution of men across occupations in that year. Using the actual employment by occupation as a benchmark, women's hypothetical share in employment in that occupation was calculated. This share was then multiplied by the actual employment growth in each occupation over the period from 1994 to 2010.

The scenario, therefore, shows the amount of employment growth that women would have enjoyed in each occupation had female employment been distributed across occupations in the same manner as men and had women accounted for a share of future employment growth in each occupation equal to their initial (hypothetical) share. While this is a highly stylized example, it illustrates the extent to which women have suffered from occupational segregation in terms of reduced employment opportunities. Under this scenario, female employment in India would have grown by 29.3 million between 1994 and 2010, 20.7 million more than the actual female employment growth of 8.7 million (Table 4.4). This points to large potential benefits from policies aimed at reducing occupational segregation

Table 4.4:
Employment Growth Scenario Accounting for Occupational Segregation: 1994 to 2010

| Employment by occupational category |  | Actual female change in employment, 1994-2010 <br> (in thousands) | Hypothetical female employment change, 1994-2010 (in thousands) | Difference <br> (in <br> thousands) |
| :---: | :---: | :---: | :---: | :---: |
| Major Division | Subdivision |  |  |  |
| Legislators, Senior Officials and Managers | Legislators and senior officials | 7 | 30 | 24 |
|  | Managers | 783 | 4,430 | 3,648 |
| Professionals | Physical, mathematical and engineering science professionals | 129 | 505 | 376 |
|  | Life science and health professional | 99 | 119 | 21 |
|  | Teaching professionals | 866 | 571 | -295 |
|  | Other professionals | 646 | 2,468 | 1,823 |
| Technicians and Associate Professionals | Physical and engineering science associate professionals | -123 | -188 | -65 |
|  | Life science and health associate professionals | 402 | 229 | -172 |
|  | Teaching associate professionals | 1,992 | 617 | -1,375 |
|  | Other associate professionals | -332 | -710 | -378 |
| Clerks | Office clerks | 292 | 731 | 439 |
|  | Customer service clerks | 201 | 250 | 50 |
| Service <br> Workers and Shop and | Personal and protective services workers | 893 | 1,522 | 628 |
| Market Sales <br> Workers | Models, salespersons and demonstrators | -87 | 877 | 963 |
| Skilled <br> Agricultural and Fishery Workers | Market-oriented skilled agricultural and fishery workers | -7,878 | -5,457 | 2,421 |

(Table 4.4 Continued)
(Table 4.4 Continued)

| Employment by occupational category | Actual female <br> change in <br> employment, <br> 1994-2010 | Hypothetical <br> female employment <br> change, 1994-2010 <br> (in thousands) | Difference <br> (in |
| :--- | :--- | :---: | :---: | :---: |
| Major Division | Subdivision | (in thousands) |  |

Source: Authors' calculations based on NSS data.
in India such as challenging gender stereotypes and promoting skills development for women in industries and occupations with the greatest potential for employment growth.

In conclusion, excluding survey periods that involve the 2005 survey round, we find that changes in female participation cannot be explained by measurement changes across NSS survey rounds. Over the period from 1994 to 2010, as well as in the sub-periods from 1994 to 2000 and 2000 to 2010 , we find that while
increased education and higher levels of per-capita household consumption have been important factors contributing to the decline in female participation rates in India, other factors such as occupational segregation have played an even greater role.

### 4.3. Econometric Analysis: Evidence on Drivers of Female Participation in Rural and Urban India

Kapsos et al. (2014) present econometric models of female participation in India, with the aim of providing additional details on some of the underlying factors driving trends in participation and clarifying key policy areas for promoting employment opportunities for India's women. These models include a number of individual, household and local labour market characteristics as potential explanatory variables for female participation rates. We present the main results separately for rural and urban areas (see Kapsos et al. [2014] for further details).

## Rural Areas

The model for rural areas shows that women with pre-primary to secondary education and women aged between 15 and 19 are less likely to participate in the labour market than other women. When looking at household characteristics, women from Muslim households to households of type 'other' or self-employed in non-agriculture, to households in the top MPCE (monthly per capita expenditure) class and those belonging to larger households, also have a lower likelihood of participating in the labour market. These results confirm that the probability of participation is positively associated with age but this relationship is less strong after a certain age (e.g., 55 years and above). The results also confirm that having no schooling increases the probability of participating as compared to other education levels except the tertiary education level, indicating a U-curve relationship between education and participation. In addition, belonging to a scheduled tribe or caste and belonging to a household where the head is a female and the household cultivates some land, increases the probability of women's participation in the labour market. Having a child of less than five years old or living in a household with many members has a negative effect on this probability. Moreover, a woman in a rural household with low consumption expenditure is more likely to be economically active compared to a woman from higher levels of household expenditure. These results confirm that women belonging to households that derive their primary income from agricultural activities are most likely to participate in the labour market. Thus, the decline in agricultural activity associated with economic development is likely to have had an important impact on rural female labour force participation in India. ${ }^{9}$

[^27]With respect to regional characteristics, women living in regions with a lower sex ratio and a higher index of occupational segregation have lower predicted probabilities of participation in market work, as expected. This indicates that perceptions of women's status in society and discrimination in terms of limited access for women to different types of occupations matter in rural India in terms of the likelihood of women to be economically active. Rural women in the west and north of India have higher participation rates than women in the south of India. These results hold across all four survey years with varying intensity, though both effects were greatest in the 2010 survey. The negative impact of occupational segregation increased over the survey periods with the estimated effect in 2010 more than double that of 1994 in the standard probit and more than triple in the heteroskedastic probit.

After controlling other factors in the model, the year 2005 exhibits an upward shift effect while the year 2010 exhibits a downward shift effect, potentially suggesting a bias in these survey years. This could have occurred because of changes in measurement methodology and is consistent with the findings reported in Section 5-namely that changes in measurement methodology in which an increased share of women engaged in domestic duties may have been classified as contributing family workers in 2005, whereas in 2010 an increased share of these women were classified as economically inactive.

When focusing on the year 2010 and comparing it with previous survey years, it appears that women aged 55 to 64 were more likely to engage in market work than women aged 15 to 19 . This may be due to the younger cohorts staying in education longer. Surprisingly, the coefficients controlling for household expenditure levels are not statistically significant in 2010. This contradicts the U-shape relation and suggests that all other things being equal, women in affluent households were equally as likely to engage in market work as women from poorer households which differed from prior years. Again, this may point to methodological changes in measuring what activities are counted as employment versus domestic duties. Finally, women living in the north of India were significantly more likely to participate in the labour market than women from the south of India in 2010, a contrast to the three prior survey rounds.

A separate probit regression for the survey in 2010 was performed to assess the importance of the MGNREGA programme. The results show that women belonging to a household that obtained work in the MGNREGA programme were more likely to participate in the labour market, all else being equal. Part of this positive effect is likely due to women taking up work themselves through the MGNREGA programme. Another explanation for this result is that those households that got MGNREGA work were among the poorest households and thus women belonging to these households could not afford to stay outside of the labour market.

## Urban Areas

In urban areas, there is a negative effect on the predicted probability of participation from being married (much more important as compared to rural areas). Other characteristics that decrease the predicted probability of participation for urban women are: primary and secondary education (as compared
to illiteracy); being aged 15 to 19 (as compared to older age cohorts); the presence of a child in the household, living in a household that is either Hindu or Muslim; ${ }^{10}$ belonging to a household of type salaried or other based on the most important source of household income (as compared to belonging to a household of type self-employed); belonging to a household defined as middle or top economic class in terms of consumption (as compared to the lowest consumption class); and belonging to a larger household in terms of number of household members. ${ }^{11}$

Klasen and Pieters (2012) suggest that women in urban areas with tertiary education participate in the labour market because they are able to find appealing employment and earning opportunities, while women with less education participate because of economic difficulties. Our results are similar. We find that only well-educated women have a higher probability of participating in the labour market than women with no education in urban areas in India. Thus, economic development in urban areas creates opportunities for highly educated women.

Occupational segregation is significant for only some survey periods (1994 and 2005 for both the standard and heteroskedastic probit models), while the sex ratio has a significant impact in all four survey periods. With respect to location, only urban women living in central India had statistically significantly lower participation probabilities across all four survey years than women in the south.

## Results Using the Adjusted/Augmented Labour Force Participation Rate Definition ${ }^{12}$

In general, most results from regressions using the augmented labour force participation rate in place of the UPSS rate are consistent with the previously stated findings. However, there are a few interesting contrasts that provide additional insights. Marriage in rural areas is associated with a greater likelihood to participate in the labour market based on the augmented participation rate, whereas it is associated with a lower likelihood to participate (based on the UPSS). This may reflect a tendency for married women to take on a traditional domestic role that often includes economic activities that are not considered to be employment based on the UPSS definition. In contrast, in urban areas, the effect of marriage is negative for both the augmented and UPSS participation rates.

Tertiary education takes on the opposite sign in urban areas with the augmented participation rate than in those based on the UPSS. That is, taking domestic duties into account, women with tertiary education are less likely to participate than their uneducated counterparts. This may reflect that a disproportionate

[^28]number of women engaged in domestic duties of an economic nature are uneducated in urban India.

In contrast to UPSS participation, belonging to a Muslim household is no longer negatively associated with women's participation based on the augmented rate. This may reflect social norms that inhibit women from Muslim households from engaging in economic activities outside the home, while allowing for economic activities domestically.

Similarly, in contrast to the previous results, the findings with augmented participation rate definition show that rural women living in regions with a lower sex ratio have higher predicted probabilities of participation in the labour market or domestic economically gainful activities. This would seem to indicate that prevailing social norms and/or discrimination are keeping women away from taking up economic activities outside the home and instead leading them to take up domestic activities.

## 5. Conclusions and Policy Recommendations

This chapter has attempted to shed light on the causes behind the recent sharp decline in female labour force participation in India, paradoxically coinciding with a period of rapid economic growth, and to identify factors underpinning the long-term stagnation in female participation. Through an examination of labour market trends, a series of scenario exercises, and econometric analysis, we have analysed four prominent hypotheses of the root causes of declining female participation, including women's increased attendance in educational institutions, increased household income, changes in measurement methodology across survey rounds and insufficient job opportunities for women, stemming from factors such as social status and occupational segregation.

In our scenario exercises, we estimated that the effects of increased education and higher levels of household consumption together accounted for around 18 per cent of the total decline in female participation between 2005 and 2010. We also estimated that around 42 per cent of the decline in female participation was due to a general lack of employment opportunities for women and other factors, while changes in measurement methodology between survey rounds accounted for the remaining 40 per cent of the observed decline. Over the full 1994-2010 period, we estimated that increased education and household consumption levels accounted for 38 per cent of decline in female participation, with diminished employment opportunities and other factors contributing the remaining 62 per cent.

Through a stylised scenario designed to provide insights into the adverse effect that occupational segregation has on women's employment opportunities, we estimated that female employment in India could have grown by an additional 20.7 million between 1994 and 2010 in the absence of occupational segregation, far exceeding the actual female employment growth of 8.7 million. Due to a number of factors including social norms, women in India have limited choice in terms of occupation. And as they are disproportionately engaged in occupations
experiencing little to no employment growth, this has limited their overall opportunities to seek and find employment.

The econometric results indicate that religion and social perceptions of women, women's level of education, household size and income and the presence of young children in the household, all influence the likelihood of India's women to participate in the labour market. We find that structural characteristics in the labour market have played a more important role than changes in the underlying characteristics of the female working-age population in influencing participation rates. These structural barriers, such as norms that inhibit women's labour market options, in conjunction with a consistent decline in agricultural employment, are likely to be key factors in explaining the long-term stagnation in female participation rates.

Indeed, we find that a multitude of factors have contributed to the recent, sharp decline and long-term stagnation in labour force participation rates among India's working-age women. Some of these factors, such as increased attendance in education and higher household income levels, are without doubt a net positive for society and a reflection of India's rapid economic development. The largest issue over the long-run, however, has been a lack of employment opportunities for India's women. Persistent informality and slow growth in wage and salaried employment are limiting employment prospects of both women and men in the labour market. But India's women have additional disadvantages stemming from social norms, including gender-based discrimination and occupational segregation. These findings point to large potential benefits from policies aimed at reducing occupational segregation in India such as discouraging discriminatory employment practices and promoting skills development for women in industries and occupations with the greatest potential for employment growth. Further analytical work in this area is clearly needed.

As measurement issues also appear to have played a role in changes in female participation estimates across survey rounds, our findings indicate a need for a careful investigation by the NSSO into measurement of female activities, particularly with regard to difficulties in differentiating between domestic duties and contributing family work. Reliable measurement, including the design of further time use surveys across future survey rounds will be essential for the design of policies and programmes to enhance employment opportunities for India's women.

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## 5

# Declining Female Employment in India 

# Insights from Gujarat and Uttar Pradesh* 

Partha Saha, Sher Singh Verick, Santosh Mehrotra and Sharmistha Sinha

## 1. Introduction

Amartya Sen noted that women can become agents of change if four conditions are fulfilled: they acquire more than basic education, have legal rights of ownership of property, have an independent source of income and finally, they can work outside the home (Sen, 1999). In India, most rural, and perhaps the majority of urban women, have begun to enjoy only the first of these conditions, and that too only in recent decades. The remaining three conditions still remain absent. ${ }^{1}$ Not surprisingly, therefore, India ranks very low on any indicator of gender equality in the world. ${ }^{2}$ There also remains the fact that the conditions of women's work

[^29]are extremely poor with low-paid, piece-rated, often unpaid, informal work structure among women (Mehrotra and Biggeri, 2007). ${ }^{3}$ And these inequalities that women face in the world of work-be it paid or unpaid-have larger implications for social outcomes and most importantly to economic growth.

Women comprise nearly half of the population but their participation rate in the labour market (labour force participation rate (LFPR)) is only 22.5 per cent (2011-2012) as per the Employment and Unemployment Surveys (EUS) conducted by National Sample Survey Organization (NSSO). And this share has been declining, albeit gradually, since the 1970s, with 2004-2005 being the only outlier. Post 2005, the decline had been all the more sharp, thus leaving the policymakers and academia baffled, since this is also a period of unprecedented economic growth ( 8.4 per cent per annum between 2003-2004 and 2010). Although some of this low female LFPR is accounted for by undercounting of women's work, the fact remains that it is unlikely that measurement error may have increased, so the issue of falling LFPR remains a real policy concern. This falling female LFPR raised concerns regarding the inclusive nature of growth and progress on gender equality in the country. In his speech to the Indian Labour Conference on 14 February 2012, the prime minister stated: 'One of the most under-utilized resources in our country is our women...In order to bring more women into the work force, it is necessary to understand the constraints that they face in balancing their family and work responsibilities.'

As a response to the growing concern over declining female employment in India, a primary study was conducted in Uttar Pradesh (UP) and Gujarat to understand some of the reasons behind this phenomenon. Furthermore, this study also focuses on problems and constraints that females often encounter relating to their participation in the labour market. The broad overarching objective of this study is to get insights as to what determines female work participation in rural and urban areas of the study locations.

The remainder of the chapter is structured as follows. Section 2 analyses female employment trends, particularly during the period 2004-2005 and 2011-2012 based on the unit-level data from the NSS's EUS. This analysis identified states which experienced the most significant decline in recent years. Section 3 briefly lays out the methodology of the primary survey, while the following section (Section 4) analyses the dominant factors impacting female employment in the study locations. Problems faced by working females (both at the workplace and in the household) and constraints that non-working females encounter in order to participate in the labour market are discussed in Section 5. Section 6 provides some concluding remarks along with policy recommendations.

[^30]
## 2. Analysis of Secondary Data on Female Employment

As noted in Chapter 4, there has been a consistent decline in female labour force participation in India since the 1970s, with 1999-2000 to 2004-2005 being the only exception (Figure 5.1). Also, the decline in rural female LFPR was much sharper in the case of principal and subsidiary status taken together as compared to only principal status, thus implying that a larger share of the decline could be attributed to a decline in subsidiary status employment (referring to those who work between 30 and 181 days in the year as opposed to those in principal status employment, i.e., working 182-365 days in the year).

The decline in subsidiary status employment is sometimes considered a positive development because people, especially females, resort to such employment as an additional source of household income. Increasing participation in education to some extent has contributed to female withdrawal (Mazumdar and Neetha, 2011; Rangarajan et al., 2011). NSS rounds show that there is evidence of a growing absence of under 25 s from the workforce. Since it was the exclusion of girls from school that had contributed to lower enrolment rates earlier, the Right to Education Act has had a positive effect in the form of declining female workforce participation.

However, other factors might not be so positive for women's empowerment. Reasons put forward to explain recent trends are factors such as reproductive roles and household responsibilities of females, cultural sanctions, patriarchal hierarchies (Sudarshan and Bhattacharya, 2009); increasing household incomes and a change in preferences from work to domestic duties (Himanshu, 2012; Unni 1989); lack of non-agricultural employment opportunities (Raveendran, 2010) and measurement issues leading to under-reporting of female employment (Hirway, 2012).

Figure 5.1:
Female Labour Force Participation Rates (Rural and Urban): 1977-1978 to 2011-2012


Source: NSSO, EUS.

Disaggregating female employment into rural and urban locations, the data reveals that during 2004-2005 to 2009-2010, the decrease in principal and subsidiary status employment occurred in both rural and urban India, even though the magnitude of decline was much greater in rural India (Tables 5.1 and 5.2). The bulk of the decline in both principal and subsidiary rural female employment was due to a fall in unpaid family work. At the same time, there was an increase in casual wage employment in public works where employment opportunities increased not only in its subsidiary form but in principal status as well. This decline in female employment seemed to have stopped in urban India during 2011-2012. In rural India, the decline in principal status employment continued during 2011-2012 as well, but the subsidiary employment indicated a turnaround.

The majority of states experienced a decline in principal status as well as subsidiary status female employment between 2004-2005 and 2009-2010 in rural areas (Figure 5.2). The states which experienced an increase in principal status employment were Assam, Haryana, Kerala and Himachal Pradesh. Except Jammu and Kashmir, Uttaranchal and Rajasthan, all other states experienced a fall in female subsidiary employment, the highest being in Gujarat, followed by UP.

A comparison across states indicate that Karnataka, Bihar, UP and Gujarat experienced decline in female employment to a significant extent between 2004-2005 and 2009-2010 in both principal and subsidiary status. From among these four states, UP and Gujarat were selected for the purpose of this study, and a

Table 5.1:
Status of Female Employment (in million) in Rural India (All Ages)

|  | Principal status only |  |  |  | Subsidiary status only |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Status | $2004-2005$ | $2009-2010$ | $2011-2012$ |  | $2004-2005$ | $2009-2010$ | $2011-2012$ |
| Own account <br> worker | 12.9 | 11.2 | 11.7 |  | 6.5 | 5.1 | 6.8 |
| Employer | 0.5 | 0.4 | 0.3 |  | 0.2 | 0.2 | 0.1 |
| Unpaid family <br> worker | 38.7 | 29.2 | 26.5 |  | 20.9 | 12.1 | 14.9 |
| Regular/salaried <br> wage employee | 4.4 | 4.5 | 5.5 |  | 0.2 | 0.1 | 0.2 |
| Casual wage <br> labour in public | 0.1 | 0.8 | 1.2 | 0.1 | 1.7 | 3.0 |  |
| works |  |  |  |  |  |  |  |
| Casual wage <br> labour in other <br> types of works | 35.8 | 35.0 | 26.8 | 4.8 | 4.2 | 4.8 |  |
| All female <br> workers | 92.4 | 81.2 | 72.1 | 32.8 | 23.3 | 29.7 |  |

Source: Calculated from NSS Database, EUS, 61st, 66th, 68th Rounds.

Table 5.2:
Status of Female Employment (in million) in Urban India (All Ages)

|  | Principal status only |  |  | Subsidiary status only |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004-2005 | 2009-2010 | 2011-2012 | 2004-2005 | 2009-2010 | 2011-2012 |
| Own account worker | 4.1 | 4.1 | 5.2 | 2.1 | 1.4 | 1.8 |
| Employer | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 |
| Unpaid family worker | 4.3 | 2.8 | 3.3 | 1.8 | 1.0 | 1.3 |
| Regular/salaried wage employee | 8.9 | 8.8 | 11.4 | 0.4 | 0.2 | 0.3 |
| Casual wage labour in public works | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Casual wage labour in other types of works | 3.7 | 3.9 | 3.4 | 0.6 | 0.5 | 0.5 |
| All female workers | 21.2 | 19.8 | 23.3 | 4.8 | 3.0 | 4.0 |

Source: Calculated from NSS Database, EUS, 61st, 66th, 68th Rounds.

Figure 5.2:
Change in Female Employment during 2004-2005 and 2009-2010 in Rural Areas of Major States in All Ages


Source: Calculated from NSS Database, EUS, 61st and 66th Rounds.
primary household-based survey was conducted to analyse the factors determining female participation in labour market. In 2011-2012, there was an improvement in female subsidiary employment and many states which registered a decline during 2004-2005 and 2009-2010 experienced an improvement during 20112012 (Tamil Nadu, Karnataka, Andhra Pradesh, Maharashtra, Gujarat, Madhya Pradesh, Chhattisgarh etc.) (Figure 5.3). The following section briefly summarizes the methodological issues related to the primary survey conducted in rural and urban areas of UP and Gujarat.

Figure 5.3:
Change in Female Employment during 2009-2010 and 2011-2012 in Rural Areas of Major States in All Ages


Source: Calculated from NSS Database, EUS, 66th and 68th Rounds.

## 3. Insights from the Field Work

As mentioned in Section 2, among the major states, UP and Gujarat along with Bihar and Karnataka, experienced a significant decline in female employment until 2009-2010 in both principal and subsidiary status. For this reason, Gujarat and UP were selected for conducting the primary household survey in rural and urban locations. For the selection of districts, work participation rates for females based on the 2001 Census (GoI, 2001) have been used to identify those above and below the state average. The two districts chosen were Surat and Bhavnagar in Gujarat, and Varanasi and Lucknow in UP. In each district, two urban towns and two villages were selected for the survey. From each urban town, 50 households were selected from across different socio-economic localities. From each village, 75 households belonging to different social groups were surveyed. The number of households surveyed from each social group was in proportion to the overall distribution of households belonging to different social groups in the village. In total, 1,000 households were surveyed.

A household-level questionnaire collected information on basic amenities, demographics, occupational pattern of household members, problems and constraints faced by adult female members regarding the participation in labour market, skill training programmes, household decision-making and time use in both economic and non-economic activities. It was canvassed in both rural and urban areas and the primary respondent was an adult female member of the household willing to cooperate with the investigators.

## 4. What Role Does Education Play in Determining Women's Outcomes in the Labour Market?

Women's employment not only has a positive effect on their own quality of life but it also significantly improves the living standard of the entire household (Dreze
and Sen, 1989; Subbarao and Rainey, 1993). Drawing women into the labour force by imparting necessary skill training is important for the country in order to reap the benefits of demographic dividend. Studies have demonstrated that literate women generally have a better understanding of nutrition and health care practices and therefore, contribute significantly towards a healthy society (Mehrotra and Jolly, 1997). The correlation between female illiteracy and incidence of poverty was quite strong both in an economic sense and a broader sense of deprivation (UNESCO, 2006). In India, education has been identified in literature as one of the important factors restricting female employment. Rangarajan et al. (2011) observed that of the total decline in workforce between 2004-2005 and 2009-2010, 44 per cent was on account of people who opted out of the labour force to pursue education. However, Kannan and Raveendran (2012) argued that out of the total dropout of women from labour force, only 27 per cent could be accounted for by enrolment in education.

The field survey in Gujarat and UP showed that the incidence of illiteracy was still quite high among females both in rural and urban areas, despite significant improvements in literacy rates in the last two decades. There is a gradual decline in the proportion of females educated at successively higher standards. The proportion of illiterate working females was much higher as compared to better-educated women in the study regions of both states. The majority of working illiterates (and educated up to primary level) in both rural and urban areas were working as casual wage labourers, while a small proportion were home-based workers (both earning as well as working as helpers to other members of the family without any wage payment).

The study noted that the proportion of working females was higher than revealed by NSS data. However, there was some difference regarding recall period between NSSO surveys and our primary survey. The NSS definition is based on the major time criteria for the reference year (and over 30 days in the reference year for subsidiary employment), while the definition we used is major time criteria for the last one month from the date of survey. The obvious advantage of shorter recall period is better response. In UP, as per NSS 2009-2010, female LFPR (15-59) was 28.2 in rural areas and 11.8 in urban areas. In Table 5.5, we have considered the major activity of females for 15 years and above according to their level of education from our surveyed villages. Overall, 47.3 per cent of women were working in the surveyed villages in UP (Table 5.3). In urban locations, it was 48.4 per cent (Table 5.4).

In urban areas of UP, the relationship between the level of education and proportion of working females was U-shaped (which is also found using NSS data). Illiterates have to work for their survival and with improvement in access to schools, young women tend to continue in education. Such opportunities existed in urban areas and those continuing in education did so with the hope of getting a better job. Therefore, the lower participation of females at higher levels of education is a positive phenomenon as it could possibly ensure better quality jobs for the educated females in future (taking a life cycle perspective). Also, women with postgraduate and above level of education had greater opportunities of work in the urban areas, particularly in the service sector. As can be observed from Table 5.4, in urban UP, a large share of women with middle, secondary and higher secondary education continued pursuing education at graduate level. They are the ones located in the

Table 5.3:
Major Activity of Females (15 years and above) by Education Level in Rural UP: 2012

| Education | Working (\%) | Household chores (\%) | Educated (\%) |
| :--- | :---: | :---: | :---: |
| Illiterate | 55.8 | 24.1 | n.a. |
| Primary and below | 49.8 | 19.6 | 13.7 |
| Middle | 42.6 | 16.8 | 26.3 |
| Secondary | 28.1 | 12.5 | 43.8 |
| Higher Secondary | 41.4 | 17.1 | 37.1 |
| Graduate | 39.1 | 17.2 | 34.4 |
| Postgraduate and above | 32.7 | 16.4 | 30.9 |
| Total | 47.3 | 19.8 | 16.5 |

Source: Primary Survey, 2012.
Note: The proportion of females into different activities did not add up to 100 because of aged women who could not be classified in any of the categories.

Table 5.4:
Major Activity of Females (15 years and above) by Education Level in Urban UP: 2012

| Education | Working (\%) | Household chores (\%) | Educated (\%) |
| :--- | :---: | :---: | :---: |
| Illiterate | 53.7 | 22.7 | n.a. |
| Primary and below | 51.0 | 19.2 | 19.9 |
| Middle | 46.8 | 11.9 | 33.9 |
| Secondary | 33.9 | 13.6 | 39.0 |
| Higher Secondary | 39.2 | 12.2 | 39.2 |
| Graduate | 41.9 | 20.9 | 22.1 |
| Postgraduate and above | 65.1 | 14.0 | 14.0 |
| Total | 48.4 | 17.9 | 19.5 |

Source: Primary Survey, 2012.
Note: The proportion of females into different activities did not add up to 100 because of aged women who could not be classified in any of the categories.
downward zone of the U-shaped curve. Analysing the long-term trends in female employment in urban India, Klasen and Pieters (2012) observe that the participation of poorly educated women in the labour force was driven by necessity, while the availability of employment opportunities with reasonable wages determined the participation of highly educated females into the labour force.

Women with a postgraduate degree and above are mostly in household responsibilities in rural UP. In urban areas, on the other hand, due to more employment opportunities, they were employed in the service sector including education (e.g., as para-teachers). In Gujarat, the proportion of working females was even higher with two-thirds of women in the age group of 15 years and above reporting to be working (Tables 5.5 and 5.6). Also, the proportion of working females with higher levels of education was higher in Gujarat as compared to that in UP.

Table 5.5:
Major Activity of Females (15 years and above) by Education Level in Rural Gujarat: 2012

| Education | Working (\%) | Household chores (\%) | Educated (\%) | Unemployed (\%) |
| :--- | :---: | :---: | :---: | :---: |
| Illiterate | 74.6 | 0.9 | n.a. | 17 |
| Primary and below | 80.7 | 0.0 | 1.1 | 17 |
| Middle | 75.7 | 0.5 | 6.5 | 19 |
| Secondary | 60.5 | 0.4 | 21.5 | 32 |
| Higher Secondary | 45.6 | 0.0 | 35.0 | 26 |
| Graduate | 38.8 | 0.0 | 53.8 | 17 |
| Postgraduate and | 44.9 | 0.0 | 34.7 | 30 |
| above |  |  |  |  |
| Total | 66.8 | 0.4 | 13.6 | 19 |

Source: Primary Survey, 2012.
Note: The proportion of females into different activities did not add up to 100 because of aged women who could not be classified in any of the categories.

Table 5.6:
Major Activity of Females (15 years and above) by Education Level in Urban Gujarat: 2012

| Education | Working (\%) | Household chores (\%) | Educated (\%) | Unemployed (\%) |
| :--- | :---: | :---: | :---: | :---: |
| Illiterate | 70.2 | 0.6 |  | 19 |
| Primary \& below | 76.0 | 0.0 | 0.0 | 20 |
| Middle | 73.6 | 0.6 | 8.6 | 16 |
| Secondary | 61.2 | 2.4 | 21.4 | 14 |
| H. Secondary | 65.0 | 0.0 | 25.0 | 8 |
| Graduate | 62.3 | 0.0 | 31.1 | 7 |
| Postgraduate and above | 53.3 | 0.0 | 26.7 | 15 |
| Total | 67.5 | 0.8 | 13.3 | 17.4 |

Source: Primary Survey, 2012.
Note: The proportion of females into different activities did not add up to 100 because of aged women who could not be classified in any category.

It is to be noted here that contrary to their counterparts in UP, women not involved in any economic activity in Gujarat identified themselves to be 'unemployed' instead of being housewives. Therefore, in Tables 5.7 and 5.8, an additional column (unemployed) has been added, which is not there in corresponding tables relating to UP (Tables 5.5 and 5.6).

Gujarat is one of the very few states in India which have demonstrated a much higher rate of agricultural growth in the last decade relative to the rest of India, and so higher employment in agriculture (male or female) in Gujarat should not come as a big surprise. Along with a boom in construction, this was where most of the female illiterate workers found employment in the Gujarat study areas. Women with primary education in rural Gujarat, in addition to own farm work and agricultural labour, were also employed in diamond

Table 5.7:
Problems Faced by Working Females at Home

|  | UP |  |  | Gujarat |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Problems Faced | Rural (\%) | Urban (\%) |  | Rural (\%) | Urban (\%) |
| No problem | 58.0 | 42.3 |  | 68.0 | 58.0 |
| Family members do not approve | 6.0 | 4.0 |  | 0.0 | 0.0 |
| due to caste prejudice |  |  |  |  |  |
| Domestic responsibilities | 20.0 | 28.0 |  | 28.3 | 30.0 |
| Family members do not approve | 8.3 | 15.0 |  | 0.0 | 1.0 |
| going out to work |  |  |  |  |  |
| Others | 7.7 | 10.7 |  | 3.7 | 11.0 |
| All | 100.0 | 100.0 |  | 100.0 | 100.0 |

Source: Primary Survey, 2012.

Table 5.8:
Problems Faced by Females Working as Agriculture Labourers

| Problems | \% of females facing <br> problems in rural UP | \% of females facing <br> problems in rural Gujarat |
| :--- | :---: | :---: |
| Male Harassment | 28.9 | 0.0 |
| Distance/Transport | 1.0 | 46.5 |
| Long Work Hours | 33.0 | 27.9 |
| Lower Wages | 36.1 | 25.6 |
| Lack of Technical skills | 1.0 | 0.0 |
| Lack of Basic Facilities at Workplace | 0.0 | 0.0 |

Source: Primary Survey, 2012.
polishing work within the village. ${ }^{4}$ With a higher level of education, lower proportion of women were working as agricultural labour and those working in diamond polishing work increased. Diamond polishing work is a form of manual labour which does not require an educational qualification. Their shift in favour of diamond polishing work might be out of self-esteem without much change in earnings.

In urban areas, with secondary education, females got employment in clerical work and few of them were also self-employed. Clearly, there was an upward mobility for women with higher levels of education. Among the occupation category 'others', most women were into education and unpaid family work, while some were vendors. With higher secondary and college education, some females in

[^31]rural Gujarat got employment as an ASHA (Accredited Social Health Activist) or Anganwadi worker, or a clerical position in the local panchayat office or as parateachers in elementary schools. Therefore, a relatively active and well-functioning public delivery system can actually generate employment at the local level. In urban areas, women with college or higher secondary education were employed in the service sector (low-paying) and also in home-based work-zari work and other decorative items. Such work was available on piece-rate basis and was not very remunerative, but it gave them an opportunity beyond household chores.

A comparison between the study locations in the two states brings out some important features related to female participation in labour market. Firstly, the proportion of women who were working was much higher in Gujarat, indicating greater employment opportunities in both rural and urban areas as compared to UP. However, the fact that close to one-fifth of adult women identified themselves as unemployed makes the case for creating more employment opportunities, which can provide decent and productive employment particularly for those with higher education.

Secondly, a qualitative improvement in employment was related to attainment of higher levels of education. However, this process was not continuous and attainment of a minimum threshold level of education was needed for improvement in employment. In urban Gujarat, there was some evidence of a shift away from manual labour with the attainment of secondary education, while in UP and also in rural Gujarat, this threshold level was at the higher secondary level. Therefore, the benefits of education vary across regions and to a large extent are dependent on the local economy. However, one overarching policy conclusion could be extending financial support (scholarship) to female students at least up to the higher secondary level. The close linkage between education and better job opportunities was also highlighted by the World Bank study on employment in South Asia (World Bank, 2012). The study noted that in rural India, transition to better jobs was more likely to come with the attainment of higher secondary education. The study further noted, 'Workers with less education were more likely to experience a transition in the opposite direction-from non-farm work to agriculture.'

Thirdly, in terms of their own perceptions, there was a crucial difference between women in the two states as to how they identified themselves. The proportion of females who reported domestic responsibilities as their major activity was quite low in Gujarat. This does not mean that women in Gujarat had less domestic responsibilities. Women in the study regions of Gujarat considered themselves to be a part of the labour force and hence, identified themselves as unemployed even if they were doing only household activities. Non-availability of suitable job opportunities or the burden of household responsibilities is what kept them out of the workforce. This was in sharp contrast to females in UP who reported household chores as their major activity and identified themselves not as unemployed, but as housewives whose principal responsibility lies within the threshold of domestic boundary. Effectively, for both sets of females (those reported to be unemployed and primarily involved in household chores), the activity status was the same. They were unemployed with household chores as their major activity.

### 4.1. What is the Nature of Women's Work?

The primary survey also collected information on occupations, hours worked, average days of employment per month and average earnings per day of all adult members of the household. Although there were variations in these dimensions across occupational categories, there were certain common traits that could be observed. First, average wages for males were higher than that of females. Second, on an average, wages in urban areas were higher than that in rural areas. Third, days of employment and average wages were higher in Gujarat as compared to that in UP, which can be attributed to higher growth rates in Gujarat and the higher level of per capita income in the state.

The survey indicated that one problem that females encountered was the availability of suitable employment opportunities in the vicinity. Due to household responsibilities, females preferred working in their close neighbourhood, which reduced their bargaining power vis-à-vis their employers. This compulsion of finding employment in the neighbourhood resulted in lower days of employment for females compared to males. In one of the surveyed villages in the Lucknow city of UP, the respondents pointed to declining agricultural employment over the years primarily due to changes in land use. Due to its proximity to urban centres, land values had appreciated significantly, so large landowners started selling their land to developers (for non-agricultural uses). Agricultural employment opportunities had gone down, while there had not been a concomitant increase in nonagricultural employment for the villagers. The developers mostly worked through contractors who had their own team of workers. Moreover, many construction works were yet to start, even though land transfer had already taken place. Therefore, there had been a decline in employment opportunities particularly for females in the village. The decline in agricultural employment opportunities had affected females more than males. One major advantage of this village was its proximity to urban centres for which males could get employment in urban centres (such as construction work, driving, vending), while females were left with very little work apart from home-based activities.

Home-based work by women for sub-contractors of formal enterprises is a widespread phenomenon in South and Southeast Asia (Mehrotra and Biggere, 2007) and was quite common in both UP and Gujarat. It was done by the household members on a piece-rate basis where the trader supplied raw materials and design [chikan work (a kind of embroidery) in UP, zari and zardozi work in Gujarat] and it involved almost all the members of the household. In cases where males were also involved in the work, they would do all the financial dealings with the traders, implying that even though females contributed substantially in terms of time and energy, the economic return accruing directly to the women was very low. In many cases however, male members of the households were not involved in the work at all and were working in the urban and peri-urban centres, implying that females had to deal with the traders themselves. Traders on their part took full advantage of women's time constraints and compulsion to earn a source of living in the household itself by deriding the quality of their work and paying them less.

In one village in Lucknow city of UP, an important source of employment for females was chikan work. This is a traditional activity, well-known all over the
country, but has survived without any formal training. It is characterized by an intergenerational transfer of skills in an informal way. At the survey sites, chikan work was carried out on a piece-rate basis where suppliers/traders supplied raw material and designs to the households. The work was extremely strenuous and caused strain on the eyesight. This was one of the reasons why it was carried out by young women. But, the piece-rate wage was so low that in a day ( $6-8$ hours of work), a woman would earn only $₹ 20$ to 25 (stitching a design on one square foot of cloth), which is less than US\$0.4. According to the respondents, the wage rate for this work had not changed in the last 10 years. In recent years, the problems of chikan workers were aggravated due to the threat of import of blocks from China, which has the potential to render the traditional skills in this obsolete profession. Subsequently, machine-made chikan work has been replacing the hand-stitched traditional items. Therefore, the possibility of an increase in wages for chikan work was rather unlikely. Due to low wages, men were not involved in this activity; they would move into better-paying jobs.

In Gujarat, zardozi and zari work was taken up as a home-based activity. However, compared to the women in UP, home-based female workers in Gujarat were relatively less exploited in terms of pay and work hours per day. In Bhavnagar and Surat, small diamond polishing workshops (employing 5-6 workers) were set up in the houses of relatively well-off traders. These were extremely small household enterprises within the village and provided employment opportunities to the local women.

Therefore, even though education has been cited in literature to be an important factor for declining female employment, lack of employment opportunities in the vicinity also emerged as a prominent factor in the study locations. Additional household responsibilities prompted females to look for work opportunities in the vicinity, for which they had to compromise on wages and conditions of work. Thus, household responsibilities restricted women's access to suitable employment.

## 5. What Problems do Women Face?

No matter whether they were employed or not, women in the study locations, like in most parts of India, were responsible for running the household. Second, women encounter several problems in their workplaces as well. Such problems are of three different categories: (a) difficulties faced by working women at home, (b) challenges at workplace and (c) challenges non-working women encounter when entering the labour market.

### 5.1. Difficulties Faced by Working Women at Home

As found clearly in field work, working women bear a double burden of work at home as well as outside. This is what the other members of the household expect them to do, and 'there was nothing unusual about it'. They have to wake up earlier than rest of the members of the household to prepare meals, care for the children, clean the house and of course, get ready for work. Back from work, they are
expected to carry out domestic responsibilities as soon as they enter. The prospect of additional household income deterred other household members from discouraging women to participate in economic activities, even though they preferred them to work in the vicinity. However, one-fourth of working females reported that fulfilling domestic responsibilities was a major challenge while being a part of the work force (Table 5.7).

### 5.2. Challenges at the Workplace

Challenges at the workplace were of a different nature. Female harassment took different forms, harassment on sexual lines being the most extreme one. Often, females do not report such incidents and in the survey, very few of them did. But almost every female surveyed in rural UP was of the opinion that the incidents of male harassment at workplace (particularly in agriculture and construction labour) were quite common, though they themselves declined to divulge any such incident which happened with them. Other forms of harassment that women had to face included constant criticism about the quality of their work to demean their economic contribution. Long working hours and lower wages were common problems in both states.

Women in Gujarat reported lack of transport facilities (despite good roads) as a major challenge in accessing suitable jobs. In the study locations of Gujarat, women's safety was not very much of an issue (as it was in UP), and their work participation could increase even further if appropriate transport facilities (rural transport in particular) were made available. Apart from harassment, women complained of absence of female toilets as being common. Also, there were some occupations such as agarbatti (incense stick) making and diamond polishing which involved considerable health hazards, thereby reducing the working lifespan of females.

As mentioned above, since women in the study locations in UP were working in the vicinity of their residences, distance to workplace or transport facilities were not an issue, while transport facilities was an important issue in rural Gujarat.

### 5.3. What Constraints Do Women Face Outside the Labour Force?

Based on the field work carried out in Gujarat and UP, the non-availability of jobs in the vicinity and lack of skill training came out as the two most important constraints that deterred females from the labour market. These two constraints were much more prominent in the study regions of UP as compared to Gujarat. Female participation in skill training programmes in UP was particularly low and that too was of no use at all (Table 5.9). On the other hand, participation was reasonably high in Gujarat and almost half of the females participating in such programmes got some employment opportunities (even as piece-rate/home-based worker). The skill training programmes in Gujarat were mostly organized by NGOs in areas related to stitching/embroidery, computer-related courses and beautician courses.

Table 5.9:
Proportion of Households Where at Least One Female Member Participated in Skill Training Programme in the Last Five Years

| States | Rural | Urban |
| :--- | :---: | :---: |
| UP | 1.4 | 3.1 |
| Gujarat | 22.2 | 23.9 |

Source: Primary Survey, 2012.

Table 5.10:
Proportion of Females (15 years and above) Usually Engaged in Domestic Duties (by UPA) Willing to Work within Household Premises by Type of Acceptable Work

| State/Sector/ | \% of female willing <br> to accept work <br> within premises | Type of work: <br> Dairy (\%) | Type of work: <br> Tailoring (\%) | Type of work: <br> Others (\%) |
| :--- | :---: | :---: | :---: | :---: |
| Rural |  |  |  |  |
| Gujarat | 24 | 7 | 7 | 10 |
| UP | 35 | 9 | 12 | 14 |
| All India | 33 | 7 | 10 | 16 |
| Urban |  |  |  |  |
| Gujarat | 30 | 1.5 | 10 | 19.3 |
| UP | 32 | 1.3 | 15 | 15.5 |
| All India | 27 |  |  | 14.3 |

Source: NSSO, Report No. 550.

The scarcity or poor quality of skill training programmes in UP came out quite clearly during a focus group discussion in UP. At the time of this study, a training programme was going on in the village organized by the State government. In this programme, participants were taught 16 different types of stitching, but they were not taught any chikan work (which was an important home-based work in the region). Also, the quality and intensity of training was much below the expectation. There were only two sewing machines for the entire village and therefore, not everyone got a chance to learn while using the machine. Those who participated in the training considered themselves to be partially trained and being aware of their limitation, were happy to earn ₹ 1000 to ₹ 2000 per month (US\$15-30). But, opportunities for earning even this meagre amount did not exist in this village or in the vicinity where they really wanted to work. The training they acquired was thus mostly utilized for stitching clothes for their own household members.

The NSSO EUS (2009-2010) collected information regarding the willingness of females ( 15 years and above) primarily involved in domestic duties to accept work opportunities at the household premises. For the country as a whole, onethird of females in rural areas and more than one-fourth in urban areas who were engaged in domestic duties (by usual principal activity or UPA) were willing to accept work opportunities at the household premises (Table 5.10). In both rural
and urban India, there was a strong willingness among females primarily involved in household chores to take up tailoring work within their premises. This underlines the need for providing skill training to such females in tailoring, followed by institutional support for marketing their product so that the training thus provided reaches its logical conclusion. Therefore, the declining trend in female work participation rate in a way points towards the lack of skill training and employment opportunities for females in the vicinity. But, it also suggests that there may be potential for employing in the garment-making industry in an organized manner (as in Bangladesh).

## 6. Conclusion and Policy Recommendations

In the light of recent NSS trends, there have been growing concerns among policymakers regarding the declining trend in female employment, particularly during the second half of the last decade. This decline was much sharper in rural India as compared to urban India, with a fall in both principal and subsidiary status employment in latter half of the decade but a rise only in subsidiary work for women post 2009-2010. There is evidence across countries that female LFPR is high at low levels of per capita income, but with increasing per capita income, participation first declines, bottoms out to a trough and then move upwards in the U shape. The Indian scenario possibly resembles the same pattern with female labour force participation reaching its minimum. The government can take action to promote an increase in the female LFPR, which will then have a significant impact upon economic growth. More women in the labour market implies better distribution of the benefits of economic growth and again contribution to the same. Rising family income, increasing educational participation, mechanization in agriculture, decline in child labour, falling employment in agriculture and dairy farming have been identified as important factors behind the declining trend in female employment (Mehrotra et al., 2014).

The following policy implications emerge.

### 6.1. Universalising Upper Primary Completion for Girls

The national trends suggest that despite universal programmes on literacy and elementary education (Literacy Mission of the 1990s, Sarva Shiksha Abhiyan since 2002, Right to Education 2009), the problem of illiteracy still looms large, particularly among rural females. The female work participation rate also exhibits a $U$ shape across education levels with the highest rates for the illiterates and those with low education, falling to the lowest level with middle and higher secondary schooling and rising again with graduation and above, albeit marginally.

In urban Gujarat, the shift away from manual labour happened (at least in some cases) with the attainment of secondary education, while in UP and also in rural Gujarat, this threshold level was at higher secondary level. Therefore, the
benefits of education vary across regions and to a large extent are dependent on the local economy. A continuous improvement in the quality of education and attainment of certain levels should be a policy priority. It is important to extend financial support (scholarship) to female students at least up to the higher secondary level.

Given that the correlation between female illiteracy and incidence of poverty is quite strong both in an economic sense and a broader sense of deprivation, and mother's education is an important determinant of a child's overall development, there is no option other than encouraging female education beyond upper primary level. Moreover, the study revealed that there was a sharp decline in the proportion of females from secondary to higher secondary levels. State governments' offer of bicycles to all girls who continue to secondary schooling is increasing secondary and higher secondary levels at national level.

### 6.2. Introducing Vocational Education in Class 9

In the primary survey, skill training came out as one of the important constraints that deterred females from the labour market participation. This constraint was much more prominent in the study regions of UP as compared to Gujarat. Female participation in skill training programmes in UP was particularly low, and that too of no use at all. In this context, it might be a good idea to introduce vocational education in secondary and higher secondary standards for upcoming trades. Currently, less than 5 per cent of all senior secondary students join a vocational stream at higher secondary level. Until 2013, hardly any secondary schools offered vocational education (Mehrotra et al., 2012). ${ }^{5}$ Presently, technical education in the country is heavily dependent on grossly inadequate number of ITIs (Industrial Training Institutes) with very few courses in services or upcoming trades, stereotyped courses (which practically do not have any demand in the economy) and lack of girl's hostels. Moreover, there are very few female teachers and they are mainly urban-located, which discourage women to pursue technical education. Apprenticeship is very limited among women. Promoting skills for employability can increase the transition towards non-agricultural employment much faster.

### 6.3. Growing Non-agricultural Jobs

Decent and productive employment in the non-agricultural sector needs to be generated as a large number of females will join the labour force at the completion of their schooling (in the coming 5-10 years). They are not likely to join the agricultural workforce or the low-productivity, low-paid jobs their mothers used to do. In fact, more than the pull factors such as participation in education, it was the

[^32]push factor (in the form of lack of employment opportunities) which was driving down female employment in the study locations. A comprehensive manufacturing policy with a focus on labour-intensive manufacturing, along with addressing the 'missing middle' (Mehrotra et al., 2014) and more cluster development can increase employment opportunities.

Education also raises the reservation wage. Therefore, remunerative nonagricultural employment needs to be provided to these women, particularly in proximity to rural areas. Infrastructure investment in tier II and tier III cities will create jobs close to where rural women live, which can encourage them to participate more in the labour market.

### 6.4. Building Women's Empowerment

Household responsibilities, social obligations and security concerns often forced females to accept rather unfavourable terms of work conditions in terms of low wage and long work hours. More often than not, women are trapped in low-productivity jobs with low remuneration involving physical hardship and strain. In response, women's associations, SHGs (self-help groups) and cooperative societies should be promoted.

However, there is also a need to transform the image of cooperative societies by raising member participation and continuous campaign regarding various provisions of social security programmes of the government. One such initiative was undertaken by Lucknow Mahila SEWA Trust (LMST) to spread awareness regarding the Construction Welfare Board (CWB) and the benefits of registration under it. To achieve project goals, LMST organized a series of fairs to create awareness in construction workers at their workplace, and this was supplemented by door-to-door meeting and discussion with employers/builders/brick kiln owners to make them understand the importance of registration and their benefits. In addition to spreading awareness message, volunteers in each locality completed documents, opened bank accounts and helped in the submission of registration forms and timely issuance of identity cards from labour department. As a result of this continuous effort by LMST, around 5,200 construction workers were registered in Lucknow who were aware about the benefits provided by CWB. About 40 per cent of these 5,200 workers were women. In most of these cases, LMST had to open bank accounts of these workers as well (Self Employed Women's Union, 2013).

### 6.5. Child Care, Working Women's Housing and Other Services

Improvement in social service delivery can actually enhance female employment. The provision of universal child care facilities, single women's housing in smaller towns and cities (not just metropolis), more public transport with safety assured for women and increased public spending on basic services can facilitate women's entry and retention in the labour market.

Raising women's LFPR calls for an integrated and coherent policy response, which goes beyond the realm of employment and skills initiatives.

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## 6

# Women's Employment in Bangladesh 

## Beyond Garments

Rushidan Islam Rahman and Rizwanul Islam

## 1. Introduction ${ }^{1}$

Economic growth is necessary for poverty reduction, but not sufficient. Productive employment plays a key role in transmitting the benefits of economic growth into poverty reduction. ${ }^{2}$ In that regard, women's employment, by reducing the dependency ratio and harnessing the potential labour force, can play an important role. While labour is an important factor of production, it is not homogeneous; gender and skill differences constitute important aspects of the heterogeneity of labour. Factors influencing demand for and supply of female labour can be different from those relevant for males, and hence it is important to devote specific attention to gender differences in this respect. Employment of women is important in developed economies, particularly for those facing a labour supply constraint. In developing economies, women play an important role by contributing to household income, adding to the supply of labour for economic activities and above all by empowering women.

As discussed throughout this volume, the received literature on the trend in women's employment hypothesizes a U-shaped relationship between economic growth and women's employment-the rate of participation declining in the early stage of development and rising later (e.g., Boserup, 1970, 1990; Psacharopoulos and Tzannatos, 1989, 1991; Schultz, 1990). However, the experience of developing countries, especially of those that attained high rate of growth in the early stage of economic growth (e.g., countries of East and Southeast Asia) shows that female labour can contribute significantly towards fuelling such growth and female participation can increase even during the early stages of growth.

[^33]In countries that pursued labour intensive export-oriented industrialization, demand for female labour was created by a rapid growth of labour intensive export-oriented industries such as garments (Lee, 1981). On the supply side, there was little stigma associated with employment in such industries. On the contrary, such employment was seen in a positive light contributing to household income as well as empowering women. Another important factor was education-a large proportion of women having basic education that was needed to make them amenable to training on the job. Apart from manufacturing industries, growth of nonfarm activities in rural areas created opportunities for women to work outside their homestead without having to migrate (Choe and Lo, 1986; Islam, 1987; Shand, 1986). An important supply side factor (especially in low income countries) was poverty and low incomes pushing women to work in sectors (such as construction) that are not usually considered to be suitable for women.

Within Asia, female labour force participation rates (LFPR) are generally lower in South Asia compared to those in Southeast and East Asia. The performance of the former has been generally less impressive in terms of economic growth as well. However, since the 1990s, some countries of South Asia (especially India and Bangladesh) have been able to attain fairly high rates of economic growth. Nevertheless, the outcomes for women have been very different in these economies.

The economy of Bangladesh has witnessed an acceleration of economic growth since the early 1990s, and the average annual GDP growth has been over 6 per cent since 2004. ${ }^{3}$ The incidence of absolute poverty (based on the national poverty line) declined from 59 per cent in 1991-1992 to 31.5 per cent in 2010. However, despite the impressive performance in the areas of growth and poverty reduction, concerns remain about the quality of growth. First, the degree of inequality in the distribution has worsened over time as is indicated by a rise in the Gini coefficient from 0.39 in 1991-1992 to 0.46 in 2010.

Second, the performance on the employment front has been less impressive as large proportions of the employed labour force remain in the category of 'vulnerable employment', and are still found in sectors and activities characterized by low productivity and returns. ${ }^{4}$ One bright spot on this otherwise lacklustre employment performance has been a high growth of female employment. That in turn has been due mainly to a rapid growth of one export-oriented labour intensive industry, namely, readymade garments. Women's participation has also increased in poultry and livestock and a variety of rural non-farm activities, thanks mainly to the spread of microcredit. However, despite such growth, the rate of female labour force participation (LFP) in Bangladesh (36\% in 2010) has remained much lower than in countries of East Asia ( $67 \%$ in 2010). Moreover, data from the labour force survey (LFS) of 2013 reveals that the participation rate of women in Bangladesh has fallen to 33 per cent.

[^34]While promotion of productive employment should be amongst the major goals of policy in its own right, it assumes particular significance in the context of the persistence of poverty and the observed increasing income inequality. Female employment, by adding to the incomes of low income households, could play a particularly important role in that respect. It is, therefore, not surprising that raising female participation in the labour force is a declared policy goal in Bangladesh. ${ }^{5}$

The remainder of the chapter is structured as follows. Section 2 reviews the existing studies on female LFP in Bangladesh, while Section 3 presents the macroeconomic background and demand side factors influencing female employment and female LFPR. Section 4 provides data on the LFPR in Bangladesh and its changes during the last two decades (for which comparable data are available). Section 5 presents a discussion of the factors driving participation, which is followed by an empirical analysis of the data in Section 6. To supplement the findings, Section 7 presents qualitative data based on discussions with the stakeholders. Section 8 provides an analysis of the policy environment for women's employment and makes some suggestions for improvement in that regard.

## 2. Literature Review

Factors influencing female LFP have been usually conceptualized as supply side determinants. In the context of Bangladesh where the underemployment rate is high and social and attitudinal factors play important roles, female employment is expected to be linked to both push and pull factors. ${ }^{6}$ Kabeer (2012) highlights the role of social factors in the female labour market. Although the paper does not directly deal with the factors affecting female employment, it states that women's participation in the labour market is often not her own decision. As a result of strong patriarchy in Bangladesh society, male members of the family usually dictate or guide such a decision. Society's attitude and established norms also set constraints to such decision.

[^35]Bridges et al. (2011) examine the factors influencing female LFPR, highlighting the positive link between severity of poverty and the probability of women's LFP. The main conclusions of the study are:

1. Women from extremely poor households have a significantly higher probability of participation compared to the non-poor. The difference between moderate poor and non-poor are insignificant.
2. Poorer women are more likely to participate in low-paid wage employment whereas the non-poor participate in self-employment.
3. Presence of young children has a positive effect on self-employment and a negative effect on wage employment.
4. Being married has a negative effect. This result may have been influenced by the fact that paid employment dominated by the readymade garment (RMG) sector requires long hours of work. The study finds that there is a growing acceptance of outside employment among young unmarried workers.

The above findings are in line with those of this volume (Chapters 3 and 4) and Klasen and Pieters (2012) who found that in India urban women with lower education are usually engaged in low-paid wage employment. The conclusions of Bridges et al. (2011), however, should be used cautiously because of some shortcomings of the household income and expenditure survey (HIES) data and also because of the analytical problems related to the methods of analysis and interpretation of data.

Amin (2005) has argued that increasing female LFP in Bangladesh has been due to the better enumeration of women's home-based economic activities. The study finds that women who are the heads of households, have a smaller family and less education, live in urban areas and have less wealth are more likely to engage in paid work. The number of children aged below 5 has an insignificant impact while microcredit borrowing has a positive impact; these are both in conformity with a priori hypotheses. The only problem is related to the interpretation of the impact of education, which actually is similar to the wealth impact. Both may be due to the fact that paid work is actually a combination of regular salaried employment and casual/daily employment. The first one is likely to be positively related to education and the reverse for the second. Thus, the equation fails to distinguish the two effects. Moreover, the data set does not have information on self/family employment, which is a larger component of female employment and the study cannot provide insights into its determinants.

Mahmud et al. (2011) examine why official statistics in Bangladesh fail to properly enumerate women's economic activities, drawing on a survey in eight districts to estimate female LFPR, which is based on the same definition as used by the Bangladesh Bureau of Statistics (BBS) and on the basis of alternative definitions. Use of the same definition yields LFPR of 67 per cent, whereas in the Bangladesh LFS of 2010 it was only 36 per cent. The authors argue that the prevailing social attitude does not recognize women's home-based economic activity as work, which leads to the under-enumeration of economic activity. The paper shows that the time provided for conducting the interviews in the BBS survey is inadequate and, therefore, the interviewers avoid including women's LFP data.

Khandker (1987) observes that higher the education of a woman, higher is the opportunity cost of not producing cash income and the higher is the probability that she participates in market work. Husband's education has a negative effect. Similarly, increase in female wage reduces the probability of women's home production. The study suggests that policy interventions to raise women's wages will have a large positive effect on women's LFP. The study, however, interprets all variables from the demand side. Khandker (1988) reports results for women's home production labour input. Women's education, land holding and husband's assets have negative effects. Predicted female wage has a positive effect, which is difficult to explain.

Rahman's (2006) papers have discussed the gender dimensions of labour market characteristics. These studies highlight the large differences in the male and female LFPR. These papers also discuss the large differentials between the male and female wage rate. Rahman (2006) examined the changes of female LFPR during 1991-2003. Based on the 2003 data, the study found that there is a negative impact of primary and secondary education, the head's education and being married on female LFP. ${ }^{7}$

The factors influencing women's employment and gender composition of employment in the formal manufacturing sector has been analysed by Rahman (1996). Based on the data from 100 manufacturing enterprises in Dhaka city, the study concludes that the characteristics of enterprises and the attitude of employers towards women's employment are the significant determinants of female employment in these units. Among the characteristics of enterprises, the export orientation of industries has the largest positive impact on the number of women employed in a unit. Experience of the entrepreneurs with female employees did not provide an evidence of higher non-wage and/or non-financial costs of having female employees. They did not show a greater absenteeism or higher turnover rate compared to the male employees. The non-wage costs may sometimes be counterbalanced through adjustment of cash remunerations.

A number of studies focussed on women's employment in the RMG sector. Majumder and Begum (2006) draw on a combination of survey data and published studies on the RMG sector employment. The studies report that the average age of women in the latest survey was 20.4 years compared to 25 years for male workers in the sample. Female employees' average age was higher in other export industries. A larger share of workers in the RMG sector is unmarried compared to the women employed in other manufacturing sub-sectors. Employers of RMG units prefer younger and unmarried women because they are more docile and averse to joining trade unions. The average schooling of these workers in 1993 was 4.1 years, which has risen to 6.3 years in 1997. Monthly pay has risen in garment work. During 1990-1997, the nominal rate of increase in female workers' pay was estimated at only 5 per cent. During the same period, an average male worker's pay rise was higher (about 8\%). It has been reported that most of the garment factory buildings were overcrowded, congested and poorly ventilated with insufficient staff amenities and thus the work environment was not satisfactory.

[^36]Another study on RMG employment by Kabeer (2001) has been based on indepth case studies and interviews of 12 entrepreneurs of garments factories of Dhaka, 60 women workers in Dhaka and 53 in London. Employers' preference for women employees were rooted in their docility, which is considered an advantage. The lack of alternative opportunities of women implied that they do not bargain for higher wages, which male workers usually do. Women's decision to join RMG employment includes both indirect and direct forces. In the case of the loss of a husband or other male earning members, women accept such employment in distress (i.e., the added-worker effect). Women in RMG employment accept this as an improvement in their opportunities and it involves a better option to some extent.

A paper by Kapsos (2008) uses the Bangladesh occupational wage dataset to investigate determinants of wage differential and provides estimates of the gender related differential. The study finds that women's earnings are 21 per cent lower than men's of which the pure gender wage gap was 15.9 per cent. The study observes that education reduces the wage gap. An obvious policy implication is, therefore, to improve women's education and encourage educated women's participation in the labour force. Ahmed and Pushkar (2008) also report the presence of gender related wage discrimination. Such discrimination is considerably higher in urban areas compared to rural. However, the urban wage is usually much higher than the rural wage and, therefore, women can benefit from the expansion of urban employment despite higher discrimination.

Table 6.1 presents the findings of the main studies on factors influencing female LFPR in Bangladesh.

Table 6.1:
Summary of Findings on Determinants of Female Labour Force Participation in Bangladesh

| Source | Major findings |
| :--- | :--- |
| Bridges et al. | Participation in paid employment: Extreme poor, those with smaller <br> number of young children, unmarried are more likely to participate. <br> Participation in self-employment (agriculture): Non-poor and young <br> child has a positive impact. Education has no impact. |
| Amin (2005) | Participation in paid employment: Female-headed households, smaller <br> family size, lower educational attainment, living in urban areas, lower <br> levels of household wealth and microcredit have a positive impact on <br> participation. |
| Rahman (2006) | Participation in labour force (all types of employment): Women as <br> head, education SSC+, urban, unmarried have a positive impact. Land <br> ownership, education lower than SSC, young children, and education of <br> household head have a negative impact. |
| Khandker (1988) | Women's home production labour input: Women's education, <br> husband's assets and landholding have negative effects; female wage has <br> a positive effect. |
| Khandker (1987) | Participation in cash income earning: Education and female wage have <br> a positive impact; husband's education has a negative impact |

## 3. Macroeconomic Factors Influencing Employment of Women

### 3.1. Economic Growth and Female Employment

The most important factor that can influence the participation and employment of women (or for that matter, men) is economic growth. Growth of output should generally lead to an increase in the demand for labour, and the pattern of growth can be important from the point of view of employment of women. The development literature suggests, for example, that economic growth is associated with a decline in the proportion of women in agriculture and an increase in nonagricultural activities (World Bank, 2012). Likewise, growth should be associated with a decline in the proportion of women in self-employment and an increase in wage employment. Development experience also shows that trade liberalization and the pursuit of an export-oriented industrialization strategy, by promoting the growth of labour-intensive industries, should result in the employment of women in larger numbers in such industries.

Economic growth witnessed some acceleration since the mid-1990s and GDP growth crossed the 6 per cent mark in 2003-2004 (Figure 6.1). At the same time, there was a sharp rise in female labour force growth during the second half of the 1990s. The subsequent decline during 2000-2003 seems to reflect well the fall in GDP growth rate during the same period. However, the recovery in GDP growth

Figure 6.1:
Annual GDP Growth Rate in Bangladesh: 1990-1991 and 2010-2011


Source: Constructed by the author on the basis of data available in Bangladesh Economic Review, Ministry of Finance, Government of Bangladesh, various years.

Table 6.2:
Elasticity of Employment with Respect to Economic Growth: 1999-2000 to 2010

|  | 1999-2000 to 2005-2006 |  |  | 2005-2006 to 2010 |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Male | Female |  | Total | Male | Female |
| GDP | 0.59 | 0.45 | 1.09 |  | 0.55 | 0.20 | 1.54 |
| Agriculture | 0.82 | Neg. | 4.56 |  | 0.71 | 0.42 | 1.96 |
| Manufacturing | 0.78 | 1.22 | Neg. |  | 0.87 | 0.68 | 1.28 |
| Construction | 0.63 | 0.72 | 0.16 |  | 2.42 | 2.13 | 3.20 |
| Services | 0.69 | 0.92 | Neg. |  | 0.27 | 0.30 | 1.98 |

Source: Author's estimates based on output data from the Bangladesh Economic Review, Ministry of Finance (various years) and employment data from labour force surveys.
Note: Neg. = negligible.
after 2003 was not associated with a commensurate increase in female labour force growth. But the positive relationship can be seen again for the period after 2006. On the whole, there seems to be a positive relationship between economic growth and the growth of female labour force. In this context, Table 6.2 provides estimates of the elasticity of employment with respect to economic growth for men and women together as well as separately. These figures bring out a few interesting points about employment intensity of economic growth in the country.

First, there has been a slight decline in the overall elasticity of employment between the two sub-periods mentioned in the table. Although the observed decline is small in magnitude, it indicates that the employment generating capacity of the economy as a whole has declined during the second half of the 2000s compared to the first half. But this decline is not alarming and can be taken to be an indication of the rise in labour productivity, which is also important. Second, elasticity of employment for males has declined sharply between the two subperiods, thus indicating that output growth has not been very conducive to the growth of male employment. Third, the elasticity of employment for women, which was already high during the first half of the 2000s, increased sharply during the second half of the decade. While this may be good news for employment in quantitative terms, the news is not so good when labour productivity is taken into account. The elasticity of women's employment was already above 1 during the first sub-period, indicating a decline in labour productivity associated with the increase in employment that took place. A further and sharp rise in employment elasticity during the second sub-period indicates that productivity of women's employment not only declined but the rate of decline increased during the latter period.

The elasticity of employment for broad sectors shows that there has been an increase in women's employment with respect to output growth in manufacturing, construction and services. This implies that women have been able to access jobs during the process of economic diversification.

### 3.2. Employment of Women in Rural Areas

Beyond the impact of overall economic growth on overall female participation rate, the predicted decline in the proportion of women in agriculture to be associated with economic growth is not borne out by the sector composition and changes therein of female participation. The proportion of women engaged in agriculture actually increased over time. One possible factor may be the rise in the growth of output in agriculture (Figure 6.2). There was acceleration in the growth of agriculture during the second half of the 1990s-the period of sharp increase in female labour force growth. Moreover, the decline in the growth of agriculture in the early 2000s was associated with a lower growth of the female labour force. Thus, the early rise in the female labour force growth in Bangladesh appears to have been triggered by a rise in the growth of agriculture and increasing participation of women in that sector.

How could women's participation in agricultural activities increase? Agriculture consists of crop production, forestry, fishery and livestock; one has to see in which sub-sectors employment of women might have grown. Participation in crop production depends on access to land; and there has not been any major change in women's access to land or participation as wage workers. Fishery and forestry are also those activities that are dominated by men. It is only livestock (including poultry) where women have a possibility of getting in, and that is facilitated by their access to an important input, namely, credit.

During the past three decades, there has been a rapid expansion in the coverage of microcredit programmes run by various NGOs as well as government agencies. The total number of borrowers currently (in 2012) being covered by various

Figure 6.2:
Annual Growth Rate of Sectoral Output: 1990-1991 to 2010-2011


Source: Constructed by the author on the basis of data available in Bangladesh Economic Review, Ministry of Finance, Government of Bangladesh (various years).
programmes is 35 million compared to 11.14 million in $2004 .^{8}$ The providers of microcredit include NGOs, state-owned and commercial banks and specialized programmes of various government ministries. Over 90 per cent of the borrowers are women. Apart from borrowers, the organizations providing microcredit are an important source of employment for women ( $20 \%$ of their employees being women). Much of the microcredit is used for economic activities in poultry and livestock and in rudimentary non-farm activities. Hence, it is not surprising to see a sharp rise in women's participation in the labour force as well as an increase in their share in agriculture.

### 3.3. Growth of Women's Employment in Urban Areas: The Readymade Garment Industry

As already mentioned earlier, export-oriented industrialization in developing countries that promote the growth of labour intensive industries typically create employment suitable for women. That has happened in the more successful countries of East and Southeast Asia. To some extent at least, this has happened in Bangladesh where one labour intensive industry, namely, RMG, grew rapidly since the mid-1980s. The RMG industry is relatively new (as opposed to traditional industries such as jute textiles, cement, fertilizers, paper and paper products, etc.) in Bangladesh, which started in the second half of the 1980s and grew rapidly since then-of course, with variation in growth rate in different periods (Figure 6.3 and Table 6.3).

As presented in Table 6.3 and Figure 6.3, in the course of a couple of decades, total employment in the industry expanded from less than half a million to about 3.5 million. ${ }^{9}$ While growth was robust during the first half of the 1990s, it slowed down during the subsequent decade (i.e., during 1995-2005). However, the growth rate picked up again in 2005-2010 and was more than double compared to that attained during the previous 10 years. While the decline after the initial period of

Table 6.3:
Growth of Employment in the Readymade Garment Industry: 1990-2010

| Periods | Annual rate of growth of employment $(\%)$ |
| :--- | :---: |
| $1990-1995$ | 29.07 |
| $1995-2000$ | 5.92 |
| $2000-2005$ | 4.56 |
| $2005-2010$ | 11.50 |

Source: Calculated from data available in Statistical Pocketbook of Bangladesh, BBS (various years).

[^37]Figure 6.3:
Employment in the Readymade Garment Industry of Bangladesh: 1990-2013


Sources: Constructed by using data from BBS: Statistical Pocketbook, various years, and from the website of the Bangladesh Garment Manufacturers' and Exporters' Association. It may be noted that the latter source shows total employment unchanged at 4 million for the years 2011 to 2013. On the other hand, an article published in The Daily Star by the president of the BGMEA mentions the number at 4.3 million in 2014. See Islam (2014).
high growth is understandable-perhaps the industry was going through a period of stabilization and consolidation - the pickup and high growth after 2005 is quite remarkable. The latter is particularly notable in the context of predictions made by many studies of an adverse effect of the withdrawal of the quota system in the post-MFA regime. It is quite clear that the RMG industry in Bangladesh has not only survived but has grown in health.

In order to put the growth of the RMG industry in a perspective, it may be useful to look at its growth alongside the growth of the major manufacturing industries of Bangladesh. First, some of the traditional industries, for example, jute textiles, paper, sugar, fertilizers, leather and leather products, have performed very poorly as shown by the decline in their production indices. Second, the traditional industries that have performed well include food products, tobacco products, cotton textile (after a decline in the 1980s and 1990s), cement, pharmaceuticals and metal products. Third, only one new industry that has emerged during the entire period is garments. As for the employment of women, amongst the traditional industries that have performed well, it is only the tobacco industry (the segment that produces beedi, which is an indigenous form of cigarette) that is known to be a significant employer of women. Thus, the garment industry is the only major employer of women in the manufacturing sector.

The more pertinent question relevant for the present study is the share of women in the total employment in the RMG industry. The conventional perception in this respect is that the industry is run almost entirely by the female labour.

Table 6.4:
Index of Production of Selected Manufacturing Industries: 1999-2000 and 2009-2010 (Base: 1988-1989=100)

| Industry | $1999-2000$ | $2009-2010$ |
| :--- | :---: | :---: |
| Manufacture of food, beverages and tobacco (22.14) | 180.60 | 314.40 |
| Sugar | 112.50 | 56.69 |
| Tobacco manufacturing | 304.78 | 642.57 |
| Cotton textiles (7.83) | 98.07 | 308.33 |
| Jute textile (14.07) | 66.42 | 59.61 |
| Garments (9.13) | 766.32 | 1643.19 |
| Leather and leather products (2.49) | 154.41 | 88.14 |
| Paper and paper products (2.26) | 64.16 | 21.80 |
| Chemicals and rubber (24.04) | 148.81 | 400.91 |
| Pharmaceuticals | 318.00 | 1075.30 |
| Fertilizer | 199.11 | 72.89 |
| Ceramic (0.55) | 67.35 | 227.70 |
| Cement (1.17) | 399.39 | 836.42 |
| Metal products (5.94) | 97.96 | 190.23 |
| Source: Stital |  |  |

Source: Statistical Yearbook of Bangladesh, BBS (various years).

This was nearly the case in the early period of the industry when women constituted 90 per cent of the total employment. That situation continued till the end of the 1990s (Kabeer and Mahmud, 2004). ${ }^{10}$ But there has been a significant change since then, and the share in 2009 stood at 62 per cent (Lopez-Acevedo and Robertson, 2012). This decline reflects a significant change that has taken place in the composition of the industry. While in the early years, the industry consisted almost entirely of woven garments, the composition has changed substantially, with production of knit items growing rapidly, and now the industry is evenly balanced between the two components. This has an important implication for the share of women in total employment in the industry because factories producing knit items employ mostly men. One study, Lopez-Acevedo and Robertson (2012), mentions that women account for 46 per cent of the total employment in knitting factories, and as low as 42 per cent in sweater factories. Hence, even if there is uncertainty about the precise share of women in the total employment in the RMG industry at present, it is clear that the share of women in the total employment in the industry is going to depend on the composition of the industry (i.e., the relative weight of the woven and knit components).

[^38]By creating jobs for women, the RMG industry is playing an important role in reducing poverty in rural areas because many of the women are migrants from poor rural households. One study (Kabeer and Mahmud, 2004) finds that they are mostly from poor rural households in areas suffering from food shortage. During the early years of the growth of the industry, women usually migrated along with male family members, but increasingly they are migrating on their own. It thus seems that the industry is contributing to the creation of a class of female labour force. Employment in the industry is contributing to their empowerment because earnings from the job raise their value within the family and strengthen their capacity to negotiate with members of their families.

However, these numbers do not tell the entire story. The first issue on the qualitative side of employment is the wage rate and earnings of workers in the industry. It is quite well-known that the major factor on which the competitive edge of Bangladesh in the RMG industry is based is low wages. ${ }^{11}$ This has remained one of the most contentious issues (although not the only one) in the labour-management conflict that has persisted in the industry in Bangladesh for some time. Although there were wage revisions in 2006 and 2010, the issue was not satisfactorily resolved, and the industry has been plagued by periodic unrest and violence over the wage issue. While the overall levels of wages and earnings are low (especially in relation to the cost of living in the country), what is more relevant in the context of the present study is the gender differential in wages and earnings. There are a number of studies on the topic pointing out the continuation of gender discrimination.

Although it may be argued that gender differential in wages in the RMG industry (or for that matter, in any sector) reflects differences in occupation and education between men and women in the industry, there is evidence of differentials even when comparisons are made for the same occupation and similar levels of education. Rahman (undated), for example, reports that earnings of female 'operators' and 'helpers' are respectively 71.3 and 52.7 per cent of those of male operators in weaving. The income gap in sweater factories is mentioned to be higher. ${ }^{12}$ The above study quotes surveys by BIDS (Bangladesh Institute of Development Studies) and CPD (Centre for Policy Dialogue) to show that gender discrimination in wages exists even when education levels are the same. For example, females with education up to 10 years earn only 87.1 per cent of what male workers with similar education earn. Moreover, there has been no move towards convergence because the rate of increase in earnings during 1991-2005 has been higher for males ( 8.8 per cent) than females ( 7.2 per cent). ${ }^{13}$

[^39]Apart from low wages and gender-based wage differences, there are other issues relating to compliance with labour standards in the RMG industry of Bangladesh that apply to both male and female workers. They include working hours, overtime payment, safety and health in places of work, timeliness of the payment of wages and bonuses and freedom of association and collective bargaining. While the level of compliance has improved gradually (McKinsey \& Company, 2011), unresolved issues remain to be addressed. For example, in 2011, some 30 per cent of the factories were regarded by the government as non-compliant and 90 per cent of those identified as compliant had at least one unresolved issue (LopezAcevedo and Robertson, 2012). The issues relating to safety in workplaces came to limelight again in the wake of the fire accident in one factory and the collapse of a building (known as Rana Plaza) in 2013 that housed several garment factories led to the death of over 1,000 workers. These disasters have led to interventions involving both the international community and the factories and the Government of Bangladesh. But the results that such interventions may produce are yet to be seen.

## 4. Female Labour Force Participation in Bangladesh and Structure of Female Employment

This section presents an analysis of the changes in the female LFPR in Bangladesh over the last one and half decades. The LFS of Bangladesh from 1999-2000 to 2010 uses the following definition of a labour force member: economically active population or labour force is defined as persons aged 15 years and above, who are either employed or unemployed during the reference period of the survey (preceding week of the day of enumeration). It excludes disabled and retired persons, income recipients, full-time housewives and students, beggars and other persons who did not work for pay or profit at least one hour during the reference week (BBS, 2010). The inclusion of a person in labour force, therefore, depends on what is 'work for pay or profit'.

The problem arising from the definition of economic activity can be more easily captured through comparison of the concept of male and female selfemployment, which contributes to the production of items for family consumption. Employment in the family farm for producing paddy is considered as an economic activity. This is usually performed by men. In contrast, processing of paddy into rice or puffed rice at home for family consumption, which is usually performed by women, is not an economic activity. In recent rounds of the survey (2006 and 2010), livestock and poultry rearing has, in fact, been included as economic activity. In 1996 survey, the usual definition excluded 'household economic activities such as, care of poultry and livestock, threshing, boiling, drying (paddy), etc.' Therefore, it is no wonder that the value of LFPR has been low in this round and shows a large increase during 1996-2006.

The current definition has a bias in favour of inclusion of hired employment in comparison to self/family employment. Women engaged in hired work in the
same activity will be included in the labour force (e.g., those working in rice mills) but those who undertake similar work for family are not in the labour force. However, remedy of problems related to definition may be difficult. For example, if paddy processing at home is included as an economic activity, then there may be arguments for inclusion of 'cooking at home' as economic activity and the line, even if somewhat artificial, has to be drawn.

In the recent LFS rounds, the motivation for better enumeration of women's productive activity may have resulted in labelling of more women engaged in live-stock/poultry-raising as being part of the labour force. However, some studies (Mahmud, 2011) have pointed out that the female participation rate may still have been under-enumerated because the prevailing social attitude is against recognition of women's role in economic activities, and also because of problems related to women's own recognition of their role in economic activities. Whether a better enumeration has contributed to the recent rise of female LFPR can be judged from the changes in sector and status of employment. This discussion has been presented in the next section.

### 4.1. Changes in Female Labour Force Participation Rates (LFPR)

This section examines male and female LFPR in aggregative terms as well as for rural-urban and age group disaggregation. ${ }^{14}$ Female LFPR went through a continuous rise during 1991 to 2010, while male LFPR has decreased from 87.4 per cent to 82.5 per cent (Table 6.5). During the latest sub-period, that is, 2006 to 2010, female LFPR increased by 10 percentage points, from 26.1 to 36.0 per cent. The recent rise in the female LFPR (2006 to 2010) stands in contrast to the Indian

Table 6.5:
Trends in Female and Male LFPR in Bangladesh: 1991 to 2010

|  | LFPR (\%) for age 15 and above population |  |  |
| :--- | :---: | :---: | :---: |
| Year | Female | Male | All |
| $1990-1991$ | 14.0 | 86.2 | 51.2 |
| $1995-1996$ | 15.8 | 87.0 | 52.0 |
| $1999-2000$ | 23.9 | 84.0 | 54.9 |
| $2002-2003$ | 26.1 | 87.4 | 57.3 |
| 2006 | 29.2 | 86.8 | 58.5 |
| 2010 | 36.0 | 82.5 | 59.3 |

Source: BBS, LFS (various years).

[^40]Table 6.6:
Age-specific Labour Force Participation Rates by Sex

| Age group | 2010 |  | 2006 |  | 2000 |  | 1995-1996 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female | Male | Female | Male | Female |
| 15-19 | 48.44 | 29.40 | 62.88 | 13.76 | 55.85 | 23.35 | 61.3 | 18.0 |
| 20-24 | 75.93 | 40.98 | 80.41 | 29.00 | 74.01 | 26.30 | 78.8 | 15.8 |
| 25-29 | 92.10 | 44.71 | 95.28 | 33.67 | 91.30 | 27.08 | 93.5 | 16.0 |
| 30-34 | 97.29 | 46.62 | 98.68 | 34.88 | 95.65 | 26.51 | 98.3 | 15.8 |
| 35-39 | 98.34 | 47.67 | 98.81 | 34.82 | 98.23 | 25.66 | 98.4 | 18.2 |
| 40-44 | 98.05 | 46.24 | 97.72 | 35.15 | 97.78 | 26.57 | 99.0 | 17.0 |
| 45-49 | 97.37 | 47.58 | 97.75 | 32.63 | 97.63 | 23.42 | 98.8 | 14.3 |
| 50-54 | 94.11 | 10.25 | 95.35 | 31.12 | 95.76 | 18.28 | 98.0 | 14.3 |
| 55-59 | 88.52 | 11.18 | 92.36 | 27.72 | 93.50 | 18.85 | 96.1 | 14.4 |
| 60-64 | 77.20 | 6.63 | 82.70 | 22.62 | 81.39 | 11.11 | 88.6 | 11.4 |
| 65+ | 57.93 | 8.32 | 59.25 | 14.83 | 56.56 | 8.99 | 70.2 | 8.4 |

Source: BBS, LFS, various years.
labour market scenario as discussed in Chapters 4 and 5 of this volume. The rise in female LFPR to some extent has been due to the initial low value of FLFPR (Female Labour Force Participation Rate). It was 16 per cent in 1996 when many of the developing countries of Asia had FLFPR above 40 per cent.

The disaggregated picture of rural and urban LFPR can help understand linkages between LFPR and growth of urbanization. Female LFPR in both rural and urban areas have risen during 1996 to 2010 (Table 6.6). Female LFPR in urban areas were 20.5 and 34.5 per cent in 1996 and 2010 respectively. In these years, female LFPR in rural areas has risen from 17.4 to 36.4 per cent. Urban and rural FLFPR are, thus, quite close and both have risen over the last 15 years. Therefore, the pace of urbanization or growth of either the rural or the urban economy cannot be singled out as the reason behind changes of LFPR of women. During the recent years female LFPR is higher in rural areas than in urban areas, while during the earlier years, the pattern was the reverse.

Women's LFPR has increased in all age groups, and the rise has been higher among younger age groups ( 20 to 34 years) (Table 6.7). In contrast, during the recent period, LFPR declined among young men of age 15 to 30 years. The changes of LFPR, especially among the younger age groups are likely to be influenced by school enrolment rates. Information on school enrolment, however, shows that it has increased both among boys and girls and by similar magnitude (BBS, 2000, 2010). Therefore, school enrolment alone cannot explain the differences in youth LFPR of male and female LFPR and the implications of such change.

Since labour force participants include both employed and unemployed persons, LFPR and its changes over time will depend on both components. Female LFPR has increased through increase of employment rate despite a decline of

Table 6.7:
LFPR of Men and Women in Urban and Rural Locations

| Year | Location | Male | Female |
| :--- | :--- | :---: | :---: |
| $1995-1996$ | Urban | 71.1 | 20.5 |
|  | Rural | 78.8 | 17.4 |
| $1999-2000$ | Urban | 83.7 | 26.5 |
|  | Rural | 84.0 | 23.1 |
|  | Urban | 85.1 | 27.4 |
| $2005-2006$ | Rural | 88.1 | 25.6 |
|  | Urban | 83.2 | 27.4 |
| 2010 | Rural | 88.0 | 29.8 |
|  | Urban | 80.2 | 34.5 |
|  | Rural | 83.3 | 36.4 |

Source: BBS, LFS (various years).

Table 6.8:
Male and Female Employment and Unemployment Rates

| Year | Sex | Employment- <br> population <br> ratio (15+) | Unemployment <br> rate (\%) | Share of women <br> in total <br> employment | Employment <br> rate |
| :--- | :--- | :---: | :---: | :---: | :---: |
|  | Female | 36.1 | 5.8 | 29.9 | 94.3 |
|  | Male | 79.1 | 4.1 | 70.1 | 95.9 |
|  | Female | 27.2 | 7.0 | 23.8 | 92.9 |
|  | Male | 86.7 | 3.4 | 76.2 | 96.6 |

Source: BBS, LFS, various years.
unemployment rate (Table 6.8). As a result, the share of women in total employment has risen from 23.8 per cent to 29.9 per cent.

### 4.2 Sector of Employment

An important manifestation of economic development is structural change in the labour market. Changes in industry composition in a broad sense involve a movement of the labour force from agriculture to non-agriculture. Changes in the sectoral pattern of employment of the female labour force of Bangladesh and a comparison with the structure of employment of the male labour force is pertinent for an understanding of the dynamism of the female labour market.

Changes in the sectoral distribution of the male and female labour forces over the last one and half decades show contrasting patterns (Table 6.9). The share of the male labour force in agriculture went through a slight decline. It was 52.3 per
Table 6.9:
Distribution of Male and Female Labour Force by Broad Economic Sectors: 1996-2010

| Period | Male (\%) |  |  | Female (\%) |  |  | Male and Female (\%) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Agriculture | Non-agriculture | Total | Agriculture | Non-agriculture | Total | Agriculture | Non-agriculture | Total |
| 1995-1996 | 52.3 | 47.7 | 100.0 | 27.8 | 72.2 | 100.0 | 48.9 | 51.1 | 100.0 |
| 1999-2000 | 51.8 | 48.2 | 100.0 | 46.9 | 53.1 | 100.0 | 50.8 | 49.2 | 100.0 |
| 2002-2003 | 49.8 | 51.2 | 100.0 | 58.7 | 42.3 | 100.0 | 51.7 | 48.3 | 100.0 |
| 2003-2006 | 41.8 | 58.2 | 100.0 | 68.3 | 31.7 | 100.0 | 48.1 | 51.9 | 100.0 |
| 2006-2010 | 40.2 | 59.8 | 100.0 | 64.8 | 35.2 | 100.0 | 47.6 | 53.1 | 100.0 |

Source: BBS, LFS (various years).

Table 6.10:
Number and Share of Male and Female Labour Force in Livestock and Poultry-raising

| Year | Description | Female | Male |
| :--- | :--- | :---: | :---: |
| 2000 | Number ('000s) | 1000 | 340 |
|  | Share of total employment (\%) | 12.6 | 1.1 |
| 2006 | Number ('000s) | 3975 | 221 |
|  | Share of total employment (\%) | 35.2 | 0.6 |
| $2000-2006$ | Changes (\%) in employment | +297.5 | -35.0 |
|  | in livestock \& poultry |  |  |

Source: BBS, LFS (various years).
cent in 1990-1991, 51.8 per cent in 1999-2000 and 49.8 per cent in 2002-2003. In 2006 and 2010, the shares were 41.8 and 40.2 per cent. Thus, during 1996-2003, the change was somewhat slow. The decline of the share of male labour force in agriculture was much larger during 2003 to 2010. The trend, therefore, conforms to the conventionally expected structural change.

The share of the female labour force in agriculture went through a sharp increase during the 15 -year period. The share was 27.8 per cent in 1996 before increasing to 46.9 per cent in 2000 and 64.8 per cent in 2010. The rising share of employment in agriculture stands somewhat contrary to expectation, especially in view of the declining share of agriculture's contribution to GDP. The sharp increase of female labour force in agriculture has, to some extent, been due to the change in definition and better enumeration and, therefore, calls for further investigation. This has been done through probing into more disaggregated data on the female employment. ${ }^{15}$ Such disaggregation reveals that a predominantly large share of women is engaged in livestock sub-sector (Table 6.10). Less than 1 per cent male and 35 per cent female labour force have been engaged in this sub-sector.

The conventional social attitude does not recognize women who tend the family's animals as agricultural labour force. Changes in social attitude during the recent years and growing awareness about the need for recognition of women's economic activity resulted in enumeration of women doing livestock and poultryraising as agricultural labour force (the figure was 1 million in 2000 and 3.975 million in 2006). This has obviously raised female LFPR. It may be concluded that the recent increase of the female LFPR has resulted from counting unpaid women workers in the family who are engaged in livestock-raising as employed labour force. Thus, the reverse structural change of total employment has taken place through a rise of total LFPR of women and their rising involvement in livestock sub-sector, especially in the rural areas.

[^41]Table 6.11:
Female Participation Rate in Paid Employment

|  | \% of women (15+ years aged) participating in |  |  |
| :--- | :---: | :---: | :---: |
| Asset group | Salaried employment | Daily casual employment | All paid employment |
| No asset, no land | 4.0 | 14.8 | 18.8 |
| Non-land asset, but no | 9.0 | 5.9 | 14.9 |
| land |  |  |  |
| Land 0.01 to 0.49 acres | 2.7 | 3.8 | 6.5 |
| Land 0.50 to 0.99 acres | 1.6 | 1.6 | 3.2 |
| Land 1.00 to 2.49 acres | 1.6 | 1.2 | 2.8 |
| Land 2.50 to 4.99 acres | 1.8 | 0.6 | 2.4 |
| Land $5.00+$ acres | 2.5 | 1.1 | 3.6 |

Source: Estimated from LFS 2010 data.

Table 6.12:
Female Participation Rate in Self or Family Employment

|  | Per cent of women participating in |  |  |
| :--- | :---: | :---: | :---: |
| Asset group | Self-employment | Unpaid family <br> employment | Self+ unpaid family <br> employment |
| No asset, no land | 6.9 | 9.2 | 15.1 |
| Non-land asset, but no land | 5.3 | 13.4 | 18.7 |
| Land 0.01 to 0.49 acres | 6.3 | 14.7 | 21.1 |
| Land 0.50 to 0.99 acres | 10.3 | 23.8 | 34.1 |
| Land 1.00 to 2.49 acres | 12.6 | 28.0 | 40.6 |
| Land 2.50 to 4.99 acres | 12.7 | 26.8 | 39.5 |
| Land $5.00+$ acres | 10.5 | 25.1 | 35.6 |

Source: Estimated from LFS 2010 data.

## 5. Drivers of and Barriers to Female Employment

### 5.1. Female Labour Force Participation (LFP) and Poverty

As noted above, poverty is expected to act as a push factor in the female labour market and a positive relationship between poverty and female LFPR is likely to be observed. Social attitude is an important impediment to female LFP in Bangladesh. Nonetheless, the poorer women may be in a desperate situation and would be willing to break the social barrier if it enables them to earn a livelihood. Conservatism is more prevalent among richer households.

Data shows a clear positive relationship between the extent of women's participation in self/family employment and asset ownership. In contrast, the relationship is negative in the case of casual and daily employment, which is a reflection of the social
norm that casual or daily employment is not acceptable to educated women. Therefore, when all types of employment are combined, one observes a positive relationship.

### 5.2. Education and Female LFP

Participation of educated women in the labour force is expected to depend on both supply and demand side factors. The prevailing hypotheses related to variation of female LFP in developing countries emphasize the positive role of education, which will result in a change of an individual's attitude. In addition, an educated society is more likely to have a more liberal view about women's employment. Female education raises their employability in enterprises using modern technology and this will lead to a rise in wages. Higher potential earnings, in turn, will result in greater acceptability of women's work. However, a variety of structural and social factors may interact on the demand side and the impact of education on female LFPR may not be observed directly.

Creation of paid employment for school-educated women will depend on the demand side and for that matter on the pace of growth of the modern sectors as discussed in Section 3. The quality of education can also be important when the demand side is being considered. Employers will be enthusiastic about employing educated women only if they are certain about higher productivity of such workers. When the share of educated labour force rises, enterprises are likely to be able to make use of such labour if they make an investment in capital-intensive sectors that use more advanced technology and require educated workers. The uncertain quality of education may discourage such investment and reduce the possibility of employment of girls with secondary education.

The share of female labour force without any education has declined in recent years balanced by increases in groups with education above grade six (Table 6.13). In this regard, the LFPR of women rises with education almost continuously (Table 6.14). Does it really mean that education has been effective in removing social stigmas against women's employment?

Table 6.13:
Educational Attainment of Female Labour Force: 1996 to 2010 (\%)

| Level of education | 2010 |  | 2006 |  | 1999-2000 |  | 1995-1996 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Male | Female | Male | Female | Male | Female |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| No education | 39.9 | 40.6 | 37.1 | 50.9 | 42.1 | 58.7 | 44.3 | 58.8 |
| Class I-V | 22.9 | 22.7 | 24.1 | 22.9 | 25.4 | 20.4 | 26.4 | 19.2 |
| Class VI-X | 22.1 | 25.8 | 21.5 | 16.2 | 18.9 | 12.3 | 16.5 | 11.9 |
| SSC and above | 15.1 | 10.9 | 17.3 | 10.0 | 13.6 | 8.5 | 11.8 | 10.2 |

Source: BBS, LFS, various rounds.

Table 6.14:
Female Participation in Paid Employment by Education Level (\%)

| Education | Salaried | Daily/casual/servant, etc. | All types of paid employment |
| :--- | :---: | :---: | :---: |
| No education | 1.3 | 4.7 | 6.0 |
| Class I-V | 2.4 | 2.7 | 5.1 |
| Class VI-IX | 4.2 | 1.7 | 5.9 |
| Class IX-X | 1.8 | 1.3 | 3.1 |
| SSC/equivalent | 3.8 | 1.0 | 4.8 |
| HSC/Degree | 10.9 | 0.7 | 11.6 |
| Masters/Medical/Engineer | 26.2 | 0.0 | 26.2 |
| Technical/others | 15.4 | 0.0 | 15.4 |
| Total | 2.7 | 3.1 | 5.8 |

Source: Estimated from LFS 2010 data.

Table 6.15:
Female Participation in Family Employment by Education (\%)

| Education | Self-employed | Unpaid family <br> worker | Self and unpaid <br> family worker |
| :--- | :---: | :---: | :---: |
| No education | 9.9 | 14.9 | 24.8 |
| Class I-V | 9.0 | 22.3 | 31.3 |
| Class VI-IX | 7.7 | 24.8 | 32.5 |
| Class IX-X | 5.3 | 24.8 | 30.1 |
| SSC/equivalent | 5.1 | 21.4 | 26.5 |
| HSC/Degree | 3.4 | 14.1 | 17.5 |
| Masters/Medical/Engineer | 15.0 | 0.0 | 15.0 |
| Technical/others | 12.8 | 38.5 | 51.3 |
| Total | 8.4 | 19.1 | 27.5 |

Source: Estimated from LFS 2010 data.

In the previous discussion, it has been argued that the positive relationship between assets and female LFPR conceals the fact that women's participation in paid casual employment is inversely related with asset ownership, while self/family employment is positively related. Female LFPR calculated on the basis of all types of work shows a positive relationship with assets. Years of schooling have a positive correlation with asset ownership. Access to schooling and its quality is positively associated with economic strength of households. Therefore, the effect of education may also be similar to that of assets. In addition, household's asset base raises the scope of self-employment of women. Thus, education's positive association with LFPR may actually reflect an indirect outcome of inequality in access to education.

The multivariate analysis in Section 6 will enable us to ascertain the direction of relationship between education and LFPR after controlling for household assets.

For a better understanding of the determinants of female LFP, logistic regressions have been estimated on the basis of data from LFS 2010. All individuals aged 15 and above and not currently studying in any educational institutions have been included in the sample. A total of 58,297 females and 57,525 males constitute the sample. The dependent variables in dichotomous forms are as follows: LFP: $1=$ participant, $0=$ non-participant.

As discussed above, poverty can be an important determinant of LFPR. Studies have used expenditure-based poverty lines to capture this impact. The LFS of Bangladesh, however, does not ask questions on household income or expenditure. Therefore, a proxy indicator has been used in the present study. It consists of various levels of asset ownership. Five cut-offs have been chosen: those who do not own any land or non-land asset (base), those who do not own land but possess some non-land asset, small and medium land ownership and larger land ownership. In fact, land and, for that matter, the non-land assets are expected to be exogenous to the system whereas poverty status may be endogenous because female employment in low-paid jobs will result in lower expenditure and poverty. The use of asset-based dummy is, therefore, preferred to poverty line based dummy.

Most of the results of the logit regression analysis presented in Table 6.16 are in conformity with a priori expectations. Among personal characteristics, indicators of family responsibility have significant negative coefficients. These variables include: dummy for currently married, number of children aged 5 years or less and number of male dependents above age 5. 'Whether a woman is the head of household' is significantly positive.

Among human capital variables, age has a non-linear effect-first positive and then negative. Education has a positive impact. Four levels of education, with 'no education' as base case, have gradually rising positive coefficients. Education raises productivity and, thereby, raises wage/salary and through its substitution effect, raises female LFPR.

Among the family characteristics, number of male earners has a significant negative coefficient. Family asset has positive influence. Compared to the base case of households 'with no land or non-land asset', women in households with own land assets have a significantly higher probability of LFP. However, ownership of some land raises the probability of female LFP, but in the highest land ownership group, it is insignificant, which may be due to use of more hired labour and prestige considerations. This is also reflected in the fact that, in households with male-head occupation of 'agricultural self-employment', women have a higher probability of LFP. Other earning statuses have significant negative coefficients.

The length of education of the male head of household has a significant and negative influence on participation, possibly reflecting social status impact. Employment status of the male head (agricultural self-employment as base) has significant negative coefficients. The coefficient on the dummy for the head being a non-earner is particularly large. This is because of two factors: first, such heads

Table 6.16:
Determinants of the Probability of Female Labour Force Participation (FP) and Male Labour Force Participation (MLP) in Bangladesh: Results of a Logit Regression

|  | $D e p: \log \frac{F P}{I-F P}$ | $\text { Dep: } \log ^{1} \frac{M L P}{I-M L P}$ |
| :---: | :---: | :---: |
| Independent variables | Marginal effect | Marginal effect |
| Age | $0.0193{ }^{(* * *)}$ | $0.0053{ }^{(* * *)}$ |
| Square of age | $-0.0004{ }^{(* * *)}$ | $\left.-0.0001{ }^{(* * *}\right)$ |
| Married dummy | -0.1388 (***) | $0.0295{ }^{(* * *)}$ |
| No. of children $<5$ years in household | $\left.-0.0264{ }^{* * *}\right)$ | $0.0019{ }^{(* *)}$ |
| No. of male earners in household | -0.0524 (***) | - |
| No. of non-earning males in household | $0.0296{ }^{(* * *)}$ | - |
| Barisal dummy | $-0.0513^{(* * *)}$ | $-0.0125{ }^{(* * *)}$ |
| Chittagong dummy | $-0.0464{ }^{* * * *}$ | -0.0031 |
| Khulna dummy | $\left.-0.0355{ }^{* * *}\right)$ | $\left.-0.0067{ }^{(* *}\right)$ |
| Rajshahi dummy | -0.0083 | $\left.-0.0077{ }^{(* * *}\right)$ |
| Sylhet dummy | $\left.-0.0280{ }^{* * *}\right)$ | 0.0011 |
| No land, other asset | 0.0055 | -0.0026 |
| Small land owned | $0.0285{ }^{(* * *)}$ | -0.0022 |
| Larger land | -0.0511 | -0.0255 (*) |
| Urban dummy | 0.0740 (***) | 0.0007 |
| Whether head of household | $0.3945{ }^{(* * *)}$ | $0.0581{ }^{(* * *)}$ |
| Education dummy 2 (primary) | $0.0231{ }^{* * * *)}$ | $0.0141{ }^{(* * *)}$ |
| Education dummy 3 (secondary) | $0.0755{ }^{(* * *)}$ | $0.0215{ }^{(* * *)}$ |
| Education dummy 4 (above secondary) | 0.0954 (***) | $0.0171{ }^{(* * *)}$ |
| Education dummy 5 (technical) | $0.2491{ }^{(* * *)}$ | $0.0264{ }^{(* * *)}$ |
| Household head education attainment (number of years) | $-0.0043{ }^{(* * *)}$ | $-0.0031{ }^{* * *)}$ |
| Household head status dummy 2 (agricultural-wage employment) | $-0.0714{ }^{(* * *)}$ | $\left.-0.0074{ }^{(* * *}\right)$ |
| Household head status dummy 3 (non-agriculture self-employment) | $-0.3427{ }^{(* * *)}$ | -0.0031 |
| Household head status dummy 4 (non-agriculture, wage employment) | $-0.3751{ }^{(* * *)}$ | $-0.0231(* * *)$ |
| Household head status dummy 5 (no earning) | $-0.4282(* * *)$ | $-0.2780{ }^{(* * *)}$ |
| Pseudo R Square | 0.30 | 0.36 |
| -2 Log likelihood | 53895.80 | 23246.28 |
| N | 58,297 | 57,525 |

Source: Estimated from LFS 2010 data.
Notes: $\left({ }^{(* * *}\right),\left({ }^{* *}\right),\left(^{*}\right)$ : The coefficients are significant at $0.00,0.05$ and 0.10 probability level. Base for dummies: Not currently married; Division 3 (Dhaka); no land or non-land asset; rural; no education; agriculture self-employed; not head of household.
${ }^{1}$ Except in 2001 when urban poverty rate stood at 8.6 per cent.
of households are from older cohorts (both men and women inactive) and second, head remaining a non-earner implies that they receive asset income and, therefore, women do not work. Region dummies show that all divisions have significant negative coefficients, where Dhaka division is the base case. Women in Dhaka have a higher probability of participation because of a demand factor associated with faster pace of growth of female labour intensive sub-sectors.

A comparison of the 'male LFPR' equation with that of the female equation shows a few differences, which can help with better understanding of the determinants of female LFPR. The major difference is that the dummy for currently married and the number of children under age 5 have significant positive coefficients in the male equation. This is very much in contrast with the female LFPR equation. This simply reflects the fact that, in this patriarchal society, men are the breadearners and women take up the care responsibilities. The urban dummy has an insignificant coefficient in the male equation, in contrast to the female LFPR equation.

The female LFP equation has given negative coefficients of 'the number of male earners in the household'. Does it imply a negative income effect of male earnings? It is not possible to be certain because this variable may work through another route: more male earners implies more household chores, cooking and care activities, which discourage female LFP. There is an inclination to accept this interpretation, especially in view of the absence of an income effect as discussed above. The negative association of female LFP with being married and having more children in the family have important policy implications that will be discussed in the concluding section.

## 6. Factors behind Female Labour Force Participation: Qualitative Findings

The empirical analysis of the previous sections has been based mostly on LFS data. To supplement these findings, discussions have been conducted with key stakeholders. Data analysis and discussions have demonstrated the role of demand and supply side constraints and barriers to the acceleration of women's employment, especially paid employment. This section presents some qualitative observations, which can supplement the results based on quantitative data of the earlier chapters. These observations are based on a focused group discussion (FGD) session with a group of female workers of the RMG sector and meetings with an RMG unit owner and trade union leaders.

The RMG women workers interviewed were employed in the lowest paid category known as helpers. None of them has any school education. They are in the age range of 18-22 years. One woman lives with her husband and a child aged 6 years. Others are either unmarried or not living with their husband. The response to a direct question on why they have taken up this job was that they were in desperate need to do some earning. The woman living with her husband was the only
exception who thought that they can live a slightly more comfortable life if both of them can earn. Recently her husband met with an accident and now she is again the only earner in the family. The unmarried RMG workers migrated from rural areas either with their mothers or other members of their extended family.

The inputs from these women workers reveal some of the push factors behind their decision to take up such employment. In particular, many of these women did not have a father or other male-earning members in the family; thus, they had no other option. Some probing was done about the possibility of taking up employment in their home village. All of them thought that there was no suitable employment within the village or in the district town. Even if there is some work like that of crop processing, wages are low, often half of RMG workers' minimum wages or even less. Some of the workers have small children and they emphasized that arranging childcare is difficult. Two women reported that they have made arrangements with neighbours on monthly payment basis. However, the quality of such care is rather poor. They also viewed the high cost of housing, which takes a large share of their monthly earning, as a serious problem. Moreover, low-cost housing facilities are disappearing as land is being developed by real estate agents.

Discussion with trade union leaders helped to throw light on a number of issues related to constraints and drivers of female employment. Supply-side constraints of the workers were considered as the most important factors, in particular problems arising from women's domestic responsibilities, and the lack of amenities and services required to facilitate women's participation in paid employment. The constraint arising from the burden of domestic chores and childcare responsibility holds in general for all societies. In the context of Bangladesh, it becomes a binding constraint due to lack of formal childcare facilities. The fact that many women still take up low-paid employment has been attributed to some extent to their lack of other means of survival. The negative impact of childcare responsibility on women's probability of LFP has also been borne out by the logit regressions reported in the previous section. Workers from the RMG sector also highlighted this point in the FGD session.

In addition, discussion took place on wide ranging issues related to the creation of more job demands, both in the private sector and in the government. In terms of the government's role, a point came up that often goes unnoticed. There is a provision of a quota for women in government jobs. Often, demand is made to raise this quota while the existing provision is not usually implemented in practice. In the discussion, the point emerged that poor working conditions, harassment and assault at the workplace discourage women to take up paid employment. Overall insecurity, especially on the way to or return from work, adds to the negative forces. Government's role in ensuring security can, therefore, be critical for encouraging women to work away from home. In this context, it was mentioned that a variety of sub-contracting arrangements, through which women can make a living, can be useful. Such systems, though not widespread, have been found to be rising in importance. Moreover, women's employment may expand if industrial units are established in district towns and not concentrated only in the large cities. In this regard, the discussion centred on the problems of industrial growth in district towns. Inadequate or frequently
disrupted power supply was pinpointed as a major constraint. Such constraint was also viewed as an impediment to women's self-employment.

In the discussion, the entrepreneur, talking about his factory and also in general, expressed the opinion that RMG-producing units do not require educated workers. Education up to primary level is sufficient for such employment. Workers require on-the-job training for a few days rather than more schooling. Moreover, it was stated that a longer period of schooling raises the expected salary level and makes them more alert to labour rights. Discussions with employers from other formal sectors (e.g., banking) highlighted that there is ample scope of employment of educated women in these sectors and those already employed perform well in their jobs. In these sectors, it is believed that young women educated above SSC can be trained in computer skills and can seek employment in IT service sector, which, in turn, increases women's employment.

The above view has been corroborated through conversations with two other RMG sector employers. When asked about how the situation compares with other RMG exporting countries, the fact emerged that, in countries like Vietnam, the RMG employees' wage and education levels are higher. They can afford this because they are compliant factories and, therefore, receive higher product prices from buyers. The discussion moved to the issues of wages and working conditions. This entrepreneur aims to become compliant within a few years. Within Bangladesh, the compliant factories can pay higher wage compared to non-compliant factories (because the former get higher prices for their products). The major constraints to becoming a 'compliant' factory are temporary financial problems and lack of adequate space. Rent is high and additional renting of premises at the same location may not be possible. The employer also talked about the pressure of pay rises in the RMG sector. Instances have been quoted (from other employer's experiences) where workers pressed their demands for timely wage payment in innovative and peaceful ways. Therefore, RMG employers must be prepared to pay higher wages in the near future. In fact, the pressure for wage increase may not continue beyond some level because higher wages will attract more women to this sector. This may further raise female LFPR in the coming years.

## 7. The Policy Perspective and Conclusions

Although the received literature on the trend in women's employment hypothesizes a U-shaped relationship between economic growth and women's employment implying a decline in female LFPR during the early stage of growth, the evidence from Bangladesh does not support this hypothesis. In fact, there has been an increase in FLFPR alongside the acceleration in economic growth since the 1990s. Also, there has been no decline in female LFP in agriculture. In line with the experience of countries achieving export-oriented industrialization through trade
liberalization, Bangladesh has witnessed a substantial increase in female employment in labour intensive export-oriented industries.

An analysis of the relationship between economic growth and employment indicates that, while the elasticity of overall employment growth with respect to output growth has declined somewhat during the second half of the 2000s (compared to the first half of the decade), it rose substantially for women. Thus, economic growth appears to have been more conducive to the growth of female employment. In contrast, output elasticity of male employment declined substantially.

As for the relationship between female employment and the sectoral pattern of growth, the growth of agriculture (especially of poultry and livestock) appears to have been associated with an increase in the former. This is not surprising in view of the rapid expansion of micro finance in rural areas and the support to poultry and livestock provided by such programmes.

In the urban areas, growth of the readymade garment industry has provided a major impetus to the growth of female employment. Although the share of women in total employment in the industry has declined over time, nearly two-thirds of the employment in the industry is still accounted for by women. However, the economy of Bangladesh as a whole and women's employment in urban areas seem to be too dependent on a single industry as other sectors that are growing are either too small or not employing women in large numbers. Moreover, issues relating to the level of and gender differential in wages, and other aspects of compliance with labour standards, for example, working hours, safety and health in the work place, freedom of association and collective bargaining remain.

The findings common to a number of earlier studies on determinants of female LFPR in Bangladesh have shown that poverty and lack of asset raises their participation in paid employment. Being in the role of head of household also raises female LFPR. Having a small child, more assets and husband's education reduces the probability of female employment and specifically paid employment. Education and family asset are expected to raise women's participation in family or salaried employment. These hypotheses have been borne out by multivariate analysis of the present study. The major findings are that women's participation in self-employment is positively influenced by education and asset, while it is negatively influenced by having a small child and the number of male earners. Women's participation in casual jobs is positively associated with the lack of assets and negatively associated with the presence of a small child, being married, the number of male earners and education. Women's participation in salaried employment shows similar impact of all variables except education which becomes positive.

Policies that helped the acceleration of overall economic growth since the 1990s and growth of specific sectors, such as agriculture and the RGM industry were not adopted with the specific goal of increasing women's employment. However, the overall policy environment defined by the constitutional guarantee of equal rights for women and various policies enumerated in important policy instruments like development plans in Bangladesh is conducive to women's
employment. In addition, there are policies aimed specifically at promoting an increase in the participation of women in mainstream economic activities. They include an increase in the share of expenditure on women development in total public expenditure, greater access to credit and khas (i.e., government-owned) land, measures to promote SMEs and implementation of women's quota in jobs in various sectors.

One element in the policy environment that has made a very significant contribution to promoting women's employment is access to microcredit. While this has been pioneered by NGOs, the government has also played a positive role in this regard by creating an enabling environment for its expansion as well as by running microcredit programmes through a number of its ministries. As women constitute an overwhelming majority of the borrowers, these programmes have made a significant contribution towards promoting women's employment. The government has also adopted and implemented a number of programmes aimed at enhancing women's capacity through education and skill development. The girl students' stipend programme up to higher secondary level has played a major role in attaining better gender balance in enrolment at various levels. Setting up of polytechnics for girl students is an important step towards enhancing women's skills. Training programmes run by various government ministries and NGOs, programmes of providing access to credit, programmes aimed at food security and skill development of poor women are some other examples of the government's efforts at improving the capacity of women.

The policy environment outlined above has, no doubt, played an important role in raising women's participation in economic activities. And yet, the overall rate of female participation in the labour force remains well below those attained by several countries of Southeast and East Asia. The present study has identified a number of barriers to women's participation in mainstream economic activities. They are grouped into: (a) access to productive inputs/assets; (b) demands on women's time arising from their role in household work and childcare; (c) failures of markets and institutions in ensuring equality of treatment; and (d) social norms and environment that stand in the way of women's participation in economic activities. Empirical analysis carried out in the present study indicates that further progress is needed in the areas of women's access to education and skill training, productive assets such as land and credit beyond microcredit and services of various government institutions. Improvement is also needed in the social norms and environment that often act as barriers to women's employment.

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## 7

# Factors Holding Women Back from Market Work in Sri Lanka 

 To Work or Not to Work?Ramani Gunatilaka

## 1. Introduction

Alarge body of empirical research in many countries has shown that women's access to employment and resources in women's hands increase human capital and capabilities within households and promote economic growth (Kabeer, 2012). Meanwhile, the rights-based approach to gender equality, as defined by the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), commits signatory countries, of which Sri Lanka is one, to undertake to eliminate all forms of discrimination against women and ensure equality in access to opportunities and benefits (United Nations, 1979). Of these rights, the right to equal opportunities for employment is a critical one. There are also practical reasons why Sri Lanka's policymakers need to turn their attention towards this issue: more women need to engage in market work and productivity levels must rise, across the board, if the economy is to maintain current economic growth rates, raise living standards and generate savings to fund social protection for the present generation of Sri Lankans (Institute of Policy Studies, 2012; Ministry of Labour Relations and Manpower et al., 2009).

While demographic changes and overseas migration have tightened the labour market, male participation in Sri Lanka is already relatively high at 75 per cent of the 'more than 15 -years-old' male population of the working age in 2012 (Department of Census and Statistics, 2013). Labour force participation rates (LFPR) of women, in contrast, stand at 33 per cent (Department of Census and Statistics, 2013), one of the lowest in the world, negating the achievements in health and education on the country's gender inequality index (UNDP Sri Lanka, 2012).

Low rates of female entry to the labour market in Sri Lanka are surprising, given the reasonable rates of economic growth ( $4.9 \%$ annually since liberalization
in 1977) that have been achieved, despite a decades-long conflict, which ended in 2009. Besides, Sri Lankan women are generally well-placed in terms of both the family and the education system. For example, female inheritance rights and access to educational opportunities for Sri Lankan women make their lot better than that of many other South Asian women (Malhotra and DeGraff, 1997). In addition, the early introduction of universal franchise and equal rights to contest elections in 1931, constitutional protection of equal rights for men and women adopted in 1978, and the ratification of the CEDAW in 1981 have contributed greatly towards improving the status of women in Sri Lanka. Nevertheless, as Jayaweera (2011, p. 80) notes, 'Rising educational levels have not facilitated the access for the majority of women to remunerative employment and to upward occupational mobility.'

Historical data shows that participation rates for both sexes (age 10 years and over) have been remarkably stable over the last two decades, despite considerable structural changes in the economy during this period (Figure 7.1). Male participation rates have been consistently twice as high as female participation rates, even while unemployment rates have declined for both sexes. The female unemployment rate is twice as high as the rate for males.

This chapter seeks to inform policymaking aimed at encouraging women to join the work force by investigating the factors associated with the probability of

Figure 7.1:
Labour Force Participation and Unemployment Rates: 1993-2012


[^43]their participation and then decomposing the likelihood of participation into contributing factors. It is motivated primarily by the recognition that labour-force-led economic growth in the future will be heavily dependent on greater number of women engaging in market work. Besides, since Sri Lankan women are outliving men in a population that is rapidly ageing (life expectancy at birth for men and women in 2002 was 69 and 77 years, respectively [UNDP Sri Lanka, 2012]), whether women have access to social protection in old age will be largely conditional on their access to employment and earnings opportunities. This provides further justification for this research.

There have been periodic surveys of the employment situation faced by Sri Lankan women in the past, for example, Rodrigo and Deraniyagala (1990) and Jayaweera (2011). There is, however, little published analytical work devoted to the issue of women's labour force participation (LFP) in Sri Lanka, with the exceptions of Malhotra and $\operatorname{DeGraff}(1997,2000)$ and Madurawala (2009).

The sparseness of research in this area may be due to labour market research in Sri Lanka being long preoccupied with high rates of youth unemployment, rather than with LFP (see Gunatilaka et al., 2010). The issue of women's LFP has received relatively less attention and has only recently emerged to claim the attention of policymakers, after it came to be realized that the growth of Sri Lanka's prime age cohort was stabilizing, even while the population rapidly aged, with serious implications for future economic growth (Arunatilake and Vodopivec, 2008; Ministry of Labour Relations and Manpower et al., 2009).

While female LFP rates in Sri Lanka are low, women who do decide to participate, face a different set of disadvantages. In fact, a low participation rate is only the tip of the iceberg in terms of how women are faring in the labour market. First, finding employment is difficult even for those women who want to work, despite the fact that, thanks to free education policies, women are as well-educated as men (Ministry of Labour Relations and Manpower et al., 2009). The unemployment rate for women is twice that of males, and women with at least Advanced Level qualifications make up slightly more than a fifth of all unemployed people while equivalent males account for only less than a 10th (Ministry of Labour Relations and Manpower et al., 2009). This may be because job opportunities for women are limited to only a few sectors, whereas males have a wider range to choose from. Rapidly growing sectors, such as construction, trade and transport are largely male-dominated, and social attitudes about what sorts of jobs are appropriate for women and issues of personal safety, transport and housing may be constraining women from taking up certain types of jobs, especially those away from home.

Secondly, on an average, women are paid less than men, even when they share the same productive characteristics. For example, in 2006, male employees in the private formal sector enjoyed wage rates roughly 20 per cent higher than wages earned by women, when all other productive characteristics were accounted for, while the wage rates of male informal employees were 40 per cent more than those of female informal employees, when all other characteristics were controlled for (Gunatilaka, 2008). Gunewardena's (2010) decompositions of the gender wage gap in the period 1996-2004 reveals that women are underpaid in all sectors and
for all ethnic groups, even when unconditional wage gaps favour women. Thus, the disadvantages and discrimination that women face in the labour market, should they decide to participate, may discourage others from following suit.

The remainder of the chapter is structured as follows. Section 2 sets out the background by reviewing the theoretical reasons underlying women's participation in the labour force that have emerged in the literature before presenting a descriptive overview of trends in LFP and employment in Sri Lanka between 1996 and 2012, in order to further motivate the discussion. Section 3 presents the results, while Section 4 concludes and draws the implications for policy and future research.

## 2. What Does the Literature Tell Us?

### 2.1. Literature Review

The standard, neoclassical static labour supply model suggests that an increase in the wage rate will increase the supply of labour (Blundell and MaCurdy, 1999). This is because higher wages make leisure, the opportunity cost of work, more expensive and, hence, reduces the demand for it (substitution effect). On the other hand, an increase in the individual's or household's income will increase the demand for leisure and, hence, reduce labour supply (income effect). So the labour supply of an individual who is already working will depend on the relative strengths of the income and substitution effects. In contrast, for a person who is not already engaged in work, an increase in the wage rate increases the incentive to work, and an increase in the non-labour income or the incomes of other household members is a disincentive to enter the workforce.

In developed countries, however, the responsiveness of women's labour force supply to own wage changes appears to have declined markedly, perhaps partly due to fewer married women remaining on the margin between participating and not participating. Increasing divorce rates and greater career orientation are also making women's labour supply less sensitive to their and to their husbands' wages (Blau and Kahn, 2007). Hence, the standard neo-classical theory about the relationship between wages and labour supply may be more relevant to the issue of women's LFP in the more traditional societies of developing countries.

Nevertheless, there are many factors besides a choice between paid work and leisure that underlie a woman's decision to go out to work. Deciding to participate in the labour market usually involves a choice between paid market work and unpaid housework or care-related work which feminist economists prefer to call caring labour as it describes an intrinsic motive based on emotional caring or attachment for individuals for performing that work (Folbre, 1995). Moreover, while a woman's reproductive role may require that she withdraws from the labour market for the birth of her child, whether she chooses to supply care labour, rather
than engage in market work thereafter may also depend on the cost and quality of alternative childcare available, as well as on gender norms linked to culturally constructed concepts of familial altruism and individual self-interest (Badgett and Folbre, 1999). Gender theorists argue that division of housework between men and women are the outcome of housework conflict influenced by socialized gender roles, with women being made to assume the lion's share of household chores to demonstrate their gender identities in heterosexual interaction (Braun et al., 2008; Ruppanner, 2010; West and Zimmerman, 1987). Demands made on women's time by caregiving and housework, in turn influenced by gender norms in the particular cultural context, are critical in the participation decision.

For example, Cunningham (2001) shows that unmarried women without children in Mexico are as likely to work as men, while the participation decision of married women depends on the presence of young children and the level and stability of household income. In Sri Lanka, nearly a third of the women employees of child-bearing ages that Madurawala (2009) surveyed had considered quitting their jobs because of difficulties in balancing the costs of childcare with market work, and a fourth had encountered pressure from husbands and other family members to quit work in order to look after their children. Tellingly, one of the women whom Madurawala (2009) interviewed stated that, although she has no intention of being reemployed, she feels that she has lost her financial freedom after relinquishing her previous job.

It stands to reason that the availability and cost of childcare must be an important determinant of women's market work. Lokshin et al. (1999) found that high costs of childcare in Kenya discourages households from using formal childcare facilities and have a negative effect on mother's participation in market work. In the US, one in five pre-school children of working women is looked after by grandparents, and Posadas and Fernandez (2012) show that the availability of grandparents' childcare is a significant determinant of maternal LFP, particularly for disadvantaged women. In Sri Lanka it has long been culturally acceptable to delegate maternal responsibilities to substitutes, including grandmothers, aunts and child-minders (Dias, 1990). The demand for day care in and around Colombo also appears to be growing as working mothers from wealthier urban households look to institutional providers of childcare. Nevertheless, Madurawala (2009) found that the principal coping strategy that working mothers resorted to in the absence of affordable formal childcare facilities was to get the help of their parents, par-ents-in-law or extended family in looking after their children while they were away at work. All the interviewees who quit their jobs did so mainly because of their inability to get their mothers' support in child caring (due to employment, illness or death). They were reluctant to keep their children with domestic aides in their absence.

In many developing countries, women from wealthier families or from specific ethnic groups are constrained in their activities because of concerns about sexual purity or are discouraged from venturing out of the domestic and social spheres. This is especially the case in Asian societies where women's life options are fundamentally defined by gender and familial relations or class and ethnic norms (Desai
and Jain, 1994). For example, Malhotra and DeGraff (2000) looked at whether differences in women's roles as unmarried daughters versus wives are relevant in shaping women's labour force activity in Sri Lanka and the extent to which this is mediated by social class and poverty status. They found that while poverty promotes women's market work, regardless of marital status, unmarried daughters in upper class families are more often viewed as receiving care and are not impelled by family obligations and responsibilities to work, unless it is for personal fulfilment. In contrast, young, married women of the upper classes are more likely to seek market work as they seem to aspire to and/or be expected to contribute to maintain or improve the socio-economic status of the household. Malhotra and DeGraff's (1997) study about single young women's LFP and employment in Sri Lanka also found cultural differences across ethnic groups in the acceptability of young women working, the necessity for them to work across social classes, and class-based advantages in access to information and channels that facilitate job acquisition.

In Turkey too, declining rates of female participation appear to be correlated with rising religious conservatism, in turn, fuelled by increased urbanization because men's attitudes towards conservatism differ between rural and urban areas (Goksel, 2012). In contrast, Amin and Alam (2008) found that Muslim women in rural Malaysia, whether single or married, were significantly less likely to work for pay than Buddhists or Hindus. But there was no significant difference in the probability of urban married women of different religions working for pay, even though single Muslim women in urban areas were still less likely to participate in the labour market than urban women of other religions. Similarly, Contreras and Plaza (2010) found that the more women had internalized machista and conservative cultural values in Chile, the less they were likely to participate in the labour market.

Badgett and Folbre (1999) also argue that these gender norms are reinforced by occupational segregation when women enter paid employment, with women crowding into certain occupations and sectors that are considered socially 'appropriate' and losing out on jobs with better wages and conditions of work that are available to men.

Klasen and Pieters (2012) and others (see Chapters 1 and 4) argue that a U-shaped curve exists within countries between economic or educational status and women's LFP at a given point in time. Among the poorly educated, women are forced to work to survive and combine farm work with housework and care work. But, as educational levels and economic status increase, women may face barriers to market work because of the absence of the need for female earnings and the prevalence of social stigmas associated with female employment. In fact, at this level of economic development, 'sending one's wife out to work' may be seen to lower social status. However, among the very highly educated, high wages as well as the high social status associated with professional work may enable women to work. The authors provide empirical evidence to show that push and pull factors related to education and income do explain the U-shaped curve between education and female LFP in urban India. Thus, they conclude that India's impressive economic performance has succeeded only in creating attractive labour market
opportunities for highly educated women, whereas LFP among the poor appears to be distress-driven.

Overall, the feminization U-curve hypothesis seeks to explain the relationship between female LFP and economic development. Empirical evidence in support of this hypothesis however, is mixed. Klasen and Pieters (2012) point out that the evidence in support of it is derived mainly on cross-country analysis, whereas panel analysis have produced mixed results (Cagatay and Ozler, 1995; Gaddis and Klasen, 2011; Tam, 2010).

In any case, the growth of the manufacturing sector in many developing countries has been associated with higher levels of low-wage female, rather than male employment. Standing (1989) argues that economic liberalization and the advancement of modern technologies associated with changing skills and job structures have seen the erosion of labour rights of 'insiders', notably unionised male wage workers and minimum wage legislation. The labour of these workers has been substituted with the low-waged labour of young women, who have low aspiration wages, as well as low efficiency wages, and who are, therefore, prepared to work for low wages for long work weeks (Standing, 1989, 1999). There is some empirical evidence in support of this. Berik et al. (2004) found that increasing trade openness was associated with higher residual wage gaps between men and women in two East Asian economies, while Menon and Rodgers (2009) found the same result holding in the more concentrated (less competitive) of India's manufacturing industries. In Brazil, tariff reductions were associated with an increase in female LFP and employment. An acceleration in the movement of workers from agriculture and manufacturing to trade and other services, greater labour market insecurity and male unemployment appear to underlie the observed increase in female economic activity (Gaddis and Pieters, 2012).

However, a cross-country survey of developing countries by Cooray et al. (2012) found FDI and trade to have a generally negative, though negligible impact on female LFP. The authors suggest that this may be due to the globalization process increasing the skill premium which encourages younger cohorts to delay entry into the labour market and invest in acquiring skills instead. The direction of the change was also found to be dependent on the structure of the economy. Nevertheless, Madurawala's (2009) interviews of employers revealed that there is positive discrimination in favour of women in Sri Lanka's export-oriented garment industry because management perceives them as being more 'manageable', 'flexible' and as having 'patience', conducive to the smooth running of labourintensive production processes without disputes and strikes. All of these factors were seen to translate into higher company profits.

Another strand in the theoretical literature explains women's labour supply in terms of an insurance mechanism for households or an added-worker effect, with women's LFP rates moving counter-cyclically by moving from non-employment into paid and self-employment during recessions (Attanasio et al., 2005; Fallon and Lucas, 2002). Bhalotra and Umana-Aponte (2010) provide empirical evidence from Asia and Latin America, pointing out that counter-cyclicality is strongest in households with limited alternative means to cope with income shocks.

### 2.2. Overview of Trends: 1996-2012

In this section, we present trends related to LFP and employment outcomes of women and men who are at least 15 years of age, using four years of annual labour force survey (LFS) data over the period 1996-2012. The Northern and Eastern Provinces are not included in this analysis because of non-availability of data over a longer time period.

### 2.2.1. Labour Force Participation

While female LFP rates are lower than male participation rates in every age category (see Figure 7.2), they have been declining over the years for the 15-24 years age group, but have risen for the 40+ age group. In contrast, male participation rates have declined for young people between 15 and 19 years of age, but remained steady in all other age categories. The decline in youth participation rates are likely because they may be staying longer in education, in order to better their chances of getting a good job when they eventually enter the labour market.

As Malhotra and DeGraff (2000) note, given the centrality of marriage in Sri Lanka, the dynamics of women's employment and economic contributions to the family cannot be fully understood without considering the role of marital status. Figure 7.3 sets out participation rates by marital status, and while widowhood is associated with the lowest rates of women's LFP ( $21 \%$ in 2012), married women have the next lowest participation rates ( $37 \%$ in the same year). Among males, only 37 per cent of widowed males are either employed or looking for work, compared to general rates of over 70 per cent in all other marital status categories. However, it is significant that single women's participation rates of over 50 per cent

Figure 7.2:
Labour Force Participation by Age Category (\%): 1996-2012


Source: Estimated using LFS 1996, 2000, 2004, 2008 and 2012. Data excludes Northern and Eastern Provinces. Sample weights used.

Figure 7.3:
Labour Force Participation by Marital Status (\%): 1996-2012


Source: Estimated using LFS 1996, 2000, 2004, 2008 and 2012. Data excludes Northern and Eastern Provinces. Sample weights used.
appear to drop to less than 40 per cent on marriage. But over the years, single women's participation rates have declined slightly, and married women's participation rates have increased slightly.

While the participation rates of males of all ethnic groups have been high and fairly consistent over the 1996-2012 period, there are distinct differences in female participation rates among ethnic groups. Figure 7.4 shows that participation rates are highest among Up-Country Tamils, who account for roughly 4 per cent of the female working-age population and lowest among Moors, who account for about 9 per cent of the female population of working age.

In terms of religious category too, men's participation rates have been high and around the same level, whereas there are distinct differences by religion in female participation rates (Figure 7.5). Hindu women's participation rates are among the highest and followers of Islam have the lowest rates. These figures can be explained by the fact that most Up-Country Tamil women are Hindus, who have traditionally played an important role in the labour force as tea pluckers and rubber tappers, almost from the very beginning of the plantation economy in the nineteenth century (Jayawardena, 1976). An inverted U-shape is apparent in the participation rates of Moor women, which may suggest increasing conservatism working against participation in recent years or else greater numbers staying on in education.

There is a faint suspicion of a U-shaped relationship between educational status and women's LFP in Figure 7.6. Thus, what Klasen and Pieters (2012) find in India may be prevailing in Sri Lanka, too, with participation rates among the primary-educated actually rising in recent years. Nevertheless, the U-shaped relationship in Sri Lanka is not at all as pronounced at the lower end of the educational attainment scale as in India. This is probably due to their having two

Figure 7.4:
Labour Force Participation by Ethnicity (\%): 1996-2012


Source: Estimated using LFS 1996, 2000, 2004, 2008 and 2012. Data excludes Northern and Eastern Provinces. Sample weights used.

Figure 7.5:
Labour Force Participation by Religion (\%): 1996-2012


Source: Estimated using LFS 1996, 2000, 2004, 2008 and 2012. Data excludes Northern and Eastern Provinces. Sample weights used.
additional educational categories, literate and literate below primary. In contrast, the proportion of Sri Lankan workers in these two categories is relatively small. For example, only 7 per cent of women between 15 and 60 years of age were illiterate in 2012, according to LFS data. This number halves if the sample is truncated at 40 years of age. Participation rates are above 70 per cent for those with tertiary education, and above 40 per cent for those with Advanced Level qualifications. But participation rates among the latter have been declining over the years, probably because they are delaying entry into the labour market in favour of obtaining more training to improve their job prospects when they enter it eventually.

Combining education levels and marital status shows that, while for single women better education is associated with greater participation, the $U$-shaped

Figure 7.6:
Labour Force Participation by Education Level (\%): 1996-2012


Source: Estimated using LFS 1996, 2000, 2004, 2008 and 2012. Data excludes Northern and Eastern Provinces. Sample weights used.
relationship between participation rates and educational attainment is slightly more pronounced for married women. Malhotra and DeGraff (2000) found a similar relationship for young married women in Kalutara district in Sri Lanka in the early 1990s. Only university-educated married women match their single counterparts in participation rates. Participation rates of married women in all other education categories are lower than the rates of similarly educated single women.

While participation rates of plantation women are much higher than the rates of urban or rural women, due to the reasons discussed above in relation to Up-Country Tamil women, the urban sector posts the lowest participation rates. There is little significant difference in participation rates across provinces, other than for Central Province and Uva, where female LFP rates tend to be higher, driven, no doubt, by the concentration of plantations in these two districts and higher rates of poverty in Uva.

Finally, we look at the reasons advanced for not entering the labour force in Figure 7.7. We are able to plot the graph with only the data for 1996, 2000 and 2004 because the structure of the questionnaire was changed in 2006 from whence onwards the response rate for this question became too low for analysis. There are interesting differences in the reasons that men and women have advanced for not working. Housework is the predominant reason why women do not participate, but pursuing education and retirement are the main two reasons why men do not participate. Disability and disinclination appears to account for greater proportions of men who are not in the labour force than for women non-participants.

### 2.2.2. Employment and Unemployment

Having entered the labour market, how have women fared compared to men, in terms of the kinds of jobs they have managed to get?

Figure 7.8 shows that while the majority of employed men and women are educated up to secondary level, the proportion is much higher for men, whereas

Figure 7.7:
Reasons for Non-participation (\%): 1996-2004


Source: Estimated using LFS 1996, 2000 and 2004. Data excludes Northern and Eastern Provinces. Sample weights used.

Figure 7.8:
Share in Employment by Education Level (\%): 1996-2012

the proportions of better-educated women workers in employment are somewhat higher than for males. This stands to reason. The discussion of trends in participation suggested that participation levels are lowest among secondary educated women, whereas higher levels of education appear to be associated with greater participation. This is not the case with men. Consequently, the share of women educated up to and beyond the General Certificate of Education (GCE) Advanced Levels in employment exceeds the share of similarly educated men who have jobs.

However, there appears to be some degree of segregation in terms of major industrial sector of employment between the two sexes. Figure 7.9 shows that women are concentrated in 4 out of 10 industrial sectors. The proportion of women in agriculture exceeds that of men. In fact, it is possible that men are moving out of agriculture and women are taking up the jobs that men give up. On the other hand, the proportion of women in manufacturing too exceeds that of

Figure 7.9:
Share in Employment by Major Industrial Sector (\%): 1996-2012


Source: Estimated using LFS 1996, 2000, 2004, 2008 and 2012. Data excludes Northern and Eastern Provinces. Sample weights used.
men. This is likely because of the feminization of export manufacturing, due to reasons discussed above. The proportion of women in services is also higher than that of men. However, while trade, restaurants and hotels are the fourth highest sector of concentration of employed women, men's concentration levels in this sector are higher. There are proportionately few women in the growing construction and transport and communication sectors.

Figure 7.10:
Share of Employment by Major Occupation Category (\%): 1996-2012


Source: Estimated using LFS 1996, 2000, 2004, 2008 and 2012. Data excludes Northern and Eastern Provinces. Sample weights used.

Figure 7.11:
Share of Employment by Status (\%): 1996-2012


Source: Estimated using LFS 1996, 2000, 2004, 2008 and 2012. Data excludes Northern and Eastern Provinces. Sample weights used.

Occupational segregation between the sexes appears far less pronounced (Figure 7.10). In fact, the proportion of women employed in a professional category exceeds the proportion of males employed in the same category. But this is likely driven by the health and education sectors, which are dominated by public service provision, where better-educated women are well-represented.

For example, Figure 7.11 shows employment by job status, and it can be seen that the proportion of employed women, who are public employees, is slightly more than of men. In fact, the proportion of female public employees educated beyond GCE Advanced level is twice the proportion of men (Gunatilaka, 2011). The proportion of women employers appears miniscule, but the proportion of

Figure 7.12:
Unemployment Rates by Educational Attainment (\%): 1996-2012


Source: Estimated using LFS 1996, 2000, 2004, 2008 and 2012. Data excludes Northern and Eastern Provinces. Sample weights used.
female family workers substantial, exceeding 20 per cent in 2012. Note that the proportion of women and men employed in the private sector has declined over the years, whereas the proportion of self-employed men and women appears to have risen somewhat, to about 24 per cent of the total employed female workforce in 2012, and 40 per cent of the employed male workforce.

What of the unemployed? While unemployment rates among both men and women have been declining over the years and have been broadly similar for both men and women educated up to GCE Ordinary Levels, Figure 7.12 shows that unemployment rates among women educated beyond that level have been greater than among males with the same levels of educational attainment. Nevertheless, unemployment rates among GCE Ordinary Level and Advanced Level qualified women have declined markedly over the years. For example, the unemployment rate among Advanced Level qualified women has declined from a high of 21 per cent in 1996 to 6 per cent in 2012. Graduate unemployment too, while increasing from 1996 to 2004, has declined thereafter.

## 3. What Drives Women's Participation in Sri Lanka?

The review of literature in Section 2.1 suggests that differences in individual characteristics, socio-economic class, familial responsibilities and labour market conditions are important factors associated with whether women work for pay or not. In this section, we attempt to answer two questions. First, what are the factors associated with the probability of women's LFP in Sri Lanka? Second, which of
these groups of factors appear to have the greatest impact among all these characteristics on the probability of participation?

A better understanding of the factors driving women's LFP in Sri Lanka can be achieved through a more rigorous analysis of the data. For this purpose, econometric models have been estimated using HIES 2009-2010 data taking different sub-samples of women based on their marital status. For a complete description of the data, methodology and findings, refer to Gunatilaka (2013).

Turning to the results (Table 7.1), the first point to note is that the neo-classical theory based on the expected wage, as determining LFP, diminishes in significance as soon as the education-related variables are added on and, in fact, implausibly, but insignificantly, even changes signs. Thus, the expected wage appears not to be a good predictor of LFP in Sri Lanka, as Klasen and Pieters (2012) found in India. The effect of the share of total household expenditure accounted for by the earnings of male members, though negative, turns out not to be significant. But the receipt of remittances from abroad remains consistently negative and significant, reducing the probability of participation by roughly 12 per cent.

The likelihood of participation increases with age, but at a diminishing rate. Marriage and widowhood are significantly associated with a decline in the probability of participation relative to being single, the reference category. When all other available characteristics are controlled, only Islamic Moors are significantly less likely to participate than the reference category of Sinhalese Buddhists. The results suggest that the generally high participation rates of Up-Country Tamil Hindus is a feature peculiar to the plantation-based labour market, rather than to the country at large. In fact, households in the plantations are permitted to stay in accommodation provided by the plantation only during the period when even one member of the household remains an employee of the estate. This would be an added incentive for women in plantations to engage in market work. Many plantation companies also provide crèches where women can leave their children while they are at work. This factor is also likely to encourage participation.

Education is an important determinant of the participation decision for Sri Lankan women, and the U-shaped relationship is discernible. Women educated up to secondary level are significantly less likely to participate in the work force than the primary or less-educated reference category. Women with GCE Ordinary levels are also less likely to participate than primary-educated women, but not as unlikely to participate as women with secondary education. Furthermore, educational attainment is associated with an increase in the probability of participation and this is the case, even when all characteristics for which we have information are controlled for. In fact, having a degree has the single largest effect on participation, suggesting that university education increases the probability of participation by 45 per cent. This positive association needs to be compared with the negative impact of marriage (27\%), widowhood (25\%) and being of the Islamic Moor ethno-religious category (17\%).

We turn next to the association of household-related variables with LFP. Many of these results confirm earlier findings of Malhotra and DeGraff (2000) and Madurawala (2009). Women in wealthier households are more likely to
Table 7.1:
Factors Associated with the Probability of Women's Participation in the Labour Force 2009-2010: Marginal Effects of Logistic Estimation

|  | Mean or proportion | (1) | (2) | (3) | (4) | (5) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variables of the static model of labour supply |  |  |  |  |  |  |
| Log of average hourly wages in district in same education category in the previous year | 3.5361 | 0.0950*** | $0.0674^{* * *}$ | -0.0101 | -0.0101 | -0.0150 |
| Share of total consumption expenditure accounted for by the earnings of males in household | 0.6746 | $-0.0067$ | -0.0038 | -0.0035 | -0.0024 | -0.0032 |
| Household receives remittances from abroad (d) | 0.0513 | $-0.1353^{* * *}$ | $-0.1167^{* * *}$ | $-0.1114^{* * *}$ | $-0.1290 * * *$ | $-0.1166^{* * *}$ |
| Demographic characteristics |  |  |  |  |  |  |
| Age | 37.5520 |  | $0.0260^{* * *}$ | $0.0231^{* * *}$ | $0.0240^{* * *}$ | $0.0260^{* * *}$ |
| Age squared | 1536.4380 |  | $-0.0003^{* * *}$ | $-0.0003^{* * *}$ | $-0.0003^{* * *}$ | $-0.0003^{* * *}$ |
| Married (d) | 0.7954 |  | $-0.3083^{* * *}$ | $-0.3032^{* * *}$ | $-0.2592 * * *$ | $-0.2725 * * *$ |
| Divorced (d) | 0.0024 |  | -0.0691 | -0.0514 | -0.0597 | -0.0626 |
| Widowed (d) | 0.0175 |  | $-0.2492^{* * *}$ | $-0.2557 * * *$ | $-0.2409 * * *$ | $-0.2492^{* * *}$ |
| Sinhalese Christian (d) | 0.0498 |  | $-0.0721^{* * *}$ | $-0.0611^{* * *}$ | $-0.0579 * * *$ | -0.0122 |
| Up Country Tamil Hindu (d) | 0.0338 |  | $0.2378^{* * *}$ | 0.2105*** | $0.1967^{* * *}$ | 0.0255 |
| Up Country Tamil Christian (d) | 0.0042 |  | 0.0608 | 0.0485 | 0.0441 | -0.0750 |
| Sri Lankan Tamil Hindu (d) | 0.0510 |  | $0.0403^{* *}$ | 0.0207 | 0.0184 | 0.0203 |
| Sri Lankan Tamil Christian (d) | 0.0113 |  | $-0.0710^{* *}$ | $-0.0845^{* *}$ | $-0.0847 * *$ | $-0.0470$ |
| Islamic Moors (d) | 0.0937 |  | $-0.1900^{* * *}$ | $-0.2017^{* * *}$ | $-0.2008^{* * *}$ | $-0.1712^{* * *}$ |
| Disabled (d) | 0.1403 |  | $-0.0836 * * *$ | $-0.0844^{* * *}$ | $-0.0857^{* * *}$ | $-0.0880^{* * *}$ |

(Table 7.1 Continued)

|  | Mean or proportion | (1) | (2) | (3) | (4) | (5) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Education characteristics |  |  |  |  |  |  |
| Secondary education (d) | 0.4227 |  |  | $-0.0829^{* * *}$ | $-0.0658^{* * *}$ | $-0.0387^{* *}$ |
| GCE O' Levels (d) | 0.1840 |  |  | $-0.0450^{* *}$ | -0.0174 | 0.0190 |
| GCE A' Levels (d) | 0.1740 |  |  | 0.0314 | $0.0654^{* * *}$ | $0.0912^{* * *}$ |
| Degree (d) | 0.0276 |  |  | $0.4531^{* * *}$ | $0.4692^{* * *}$ | $0.4623^{* * *}$ |
| Household characteristics |  |  |  |  |  |  |
| Log of real per capita consumption expenditure | 8.7649 |  |  |  | 0.0153 | 0.0152 |
| Mother of children < 5 years (d) | 0.1415 |  |  |  | $-0.1084^{* * *}$ | $-0.1098^{* * *}$ |
| Mother of children between 5 and 15 years (d) | 0.2980 |  |  |  | $0.0225^{*}$ | $0.0218^{*}$ |
| Proportion of household members who are elderly parents | 0.0088 |  |  |  | 0.0416 | 0.0471 |
| Household has domestic help (d) | 0.0047 |  |  |  | $0.1653^{* *}$ | $0.1767^{* *}$ |
| Number of other adult women in household | 0.7986 |  |  |  | $0.0211^{* * *}$ | $0.0229^{* * *}$ |
| Number of employed males in household | 1.1383 |  |  |  | $-0.0279^{* * *}$ | $-0.0290^{* * *}$ |
| Number of employed males doing white collar jobs in household | 0.2787 |  |  |  | $-0.0277^{* *}$ | $-0.0235^{* *}$ |
| Male household head educated up to secondary level (d) | 0.4235 |  |  |  | $-0.0612^{* * *}$ | $-0.0552^{* * *}$ |
| Male household head educated up to O' Levels (d) | 0.1418 |  |  |  | $-0.0729^{* * *}$ | $-0.0568^{* * *}$ |
| Male household head educated up to A' Levels (d) | 0.0793 |  |  |  | $-0.0786^{* * *}$ | $-0.0624^{* * *}$ |
| Male household head is a graduate or postgraduate (d) | 0.0222 |  |  |  | -0.0551 | -0.0424 |
| Labour market variables |  |  |  |  |  |  |
| Gender-based unemployment rate in district in previous year | 0.0508 |  |  |  |  | $-0.1677$ |
| Share of informal workers in district in previous year | 0.6909 |  |  |  |  | -0.0984 |

$-0.2425$

$0.0296^{* * *}$
$0.2745^{* *}$
0.0178
 8 8Z $20^{-} 0^{-}$
$* * * L 8 \angle 0^{\circ} 0^{-}$
 0.0483
0.0591
0.0392
18,790
Notes: 1. Probability of labour force participation 0.426 .
2. The sample includes all women who are between 20 and 59 years of age who are not heads of their households.
3. (d) denotes dummy variables. The omitted categories are: single; Sinhalese Buddhist; primary education or less; mother of children 16 years or more; male household
head has primary education or less; share of employed in agricultural sector in district in previous year; urban sector; Western Province.
4. ${ }^{* * *}$, ** $^{\text {, and }}$ * denote statistical significance at the one per cent, five per cent and ten per cent levels respectively.
5. Estimated using data from HIES 2009-2010 and LFS 2008 and 2009. Northern Province and Trincomalee district excluded. Sample weights used.
participate, but the results are not significant and the marginal effects are in any case small. We also tested for a U-shaped relationship between economic status and female LFP as suggested by the literature and included a quadratic term for the household consumption variable in an earlier version of the model. But the quadratic term turned out not to be significant either so we just retained only the household consumption variable in the final version of the model.

If the woman is a mother of children less than 5 years of age, the likelihood of her engaging in market work declines significantly by 11 per cent, but having older children is associated with a greater likelihood of joining the labour force by 2 per cent. The share of elderly parents in the household is not significantly correlated with LFP, but having domestic help appears to significantly enable a woman to participate, while the presence of other women of working age in the household also helps, though to a lesser degree. As the number of employed males in the household increases, the likelihood of women also going out to work declines significantly. The number of employed males in the household in white collar jobs also appears to marginally reduce the probability of women's participation. Household status, represented by the educational attainment of the male household head, also seems to work monotonically and significantly against participation.

We turn next to the relationships between the variables representing the demand side of the labour market with the probability of women entering the workforce. While the unemployment rate for similarly educated women in the district in the previous year, the share of informal employment and the share of employment in large firms is not significantly correlated with the likelihood of LFP, the other variables appear to matter more. As the shares of total workers in the district employed in the manufacturing sector increase, relative to the share of workers in agriculture, women are significantly less likely to enter market work. It is the same with the share of the services sector, but its impact is half of that in manufacturing. Although Gaddis and Klasen (2011) point out that structural change is traced out very differently across countries and that these sectoral patterns do not amount to a systematic U-shaped trend at the aggregate level, we can speculate that the Sri Lankan results suggest that the country may be somewhere around the bottom of the feminization U-curve, if such a curve holds for Sri Lanka. As the share of employed women in a particular educational category in the district increases in relation to the share of employed men in the same educational category, women appear to become more encouraged to look for work and the chances of female LFP increase. The index of gender segregation by industrial sector has a positive and significant effect ( $27 \%$ ), suggesting that women look on high levels of segregation positively, as enabling them to get jobs relatively easily in sectors, such as the garments industry, where the demand for women workers is high and consequently, there is a high concentration of women there.

Finally, we look at the association of spatial variables with female LFP. Women on the estates are 20 per cent more likely to participate than women in urban areas for reasons discussed before. And women in Southern Province, North Central Province, Uva and Sabaragamuwa are more likely to enter the labour force than women in Western Province. The last three provinces are largely agricultural, and

Figure 7.13:
Density Estimation of the Labour Force Participation of Single and Married Women, and of Female Household Heads: 2010


Source: Estimated using HIES 2009-2010. Data excludes Northern Province and Trincomalee District.
this may be a factor associated with women's participation. The reason why women in Southern Province are more likely to participate than women in Western Province, when other characteristics are controlled for, is not immediately clear. However, note that women in the conflict-affected Eastern Province are significantly less likely ( $11 \%$ ) to participate in the labour market than women in Western Province, suggesting that conditions may be particularly unfavourable for women to enter the labour market there, due to a variety of factors.

Thus, the main findings of the estimations in Table 7.1 suggest that both push and pull factors are driving participation. While the expected wage is not a good predictor of female LFP, a university education is the single most powerful factor encouraging women to participate in the labour force. This is followed by higher levels of gender-based industrial segregation in the district, availability of domestic help and the spatial variables of living in the estates sector, and in the agricultural North Central, Uva and Sabaragamuwa Provinces. Among the constraining factors are the following, in order of importance: a high share of total employment in manufacturing in the district relative to the share in agriculture, marriage, widowhood, a high share of total employment in the service sector in the district relative to the share in agriculture; being an Islamic Moor; and, having children less than 5 years of age. Receiving remittances from abroad also appears to obviate some of the financial need to work.

The results highlight the importance of marriage as a variable associated with LFP deriving, no doubt, from the different roles that married and single women
are expected to play in the household (Malhotra and DeGraff, 2000). Figure 7.13 plots the density of LFP by age for three subsamples of women: married and single women who are not heads of households, and women who are household heads. The majority of married women who are not heads of households who participate in the labour force are less than 30 years old. There are relatively few who participate in the labour market beyond that age. On the other hand, the majority of women who head their households and engage in market work are in their middle years peaking at around 50 , suggesting that family circumstances, probably the death or incapacity of a spouse or marriage breakdown, push them into the labour force later on in life. In contrast, age appears to make little difference to the participation of single women other than at the two ends of the age spectrum. ${ }^{1}$

In further analysis, ${ }^{2}$ it is apparent that remittances from abroad are associated with reduced likelihood of participation for everybody, most so for female heads of households (by $24 \%$ ), but not significantly so for single women. The share of earnings of male members of the household on female LFP has a significant and negative effect only on the participation of female heads of households (17\%). These results provide some empirical support for the income or disincentive effect of the neo-classical labour supply model.

Among the ethno-religious characteristics, Islamic Moor women, whether married, single or heads of households are, on an average, 18 per cent less likely to participate in the work force than Sinhalese Buddhists. Up-Country Tamil Christian women are significantly less likely to participate even when residential sector is controlled for, but this may be because the number of observations is extremely low-less than 1 per cent of the entire sample. Disability is strongly associated with non-participation of single women and men, more so for men. For example, being disabled is associated with 42 per cent reduction in the probability of single men's participation and with a 20 per cent reduction in participation by single women.

The U-shaped relationship between educational attainment and LFP found earlier appears to be driven by the sample of married women, whereas the relationship appears more monotonic for single women, with the exception of GCE Ordinary Level qualified women whose likelihood of participation is somewhat lower than even GCE Advanced Level qualified women. It is possible that at the margin, GCE Ordinary Level qualified females opt out of the labour market to continue in education up to Advanced Level. Married women graduates are nearly twice as likely to participate as single women graduates and 50 per cent more likely to participate than married primary-educated women. A similar U-shaped relationship appears to hold between education and the LFP of female heads of households, even though only the result for the variable denoting tertiary education is

[^44]significant. The education variables are also significantly associated with the participation of single men, though the size of impact is much smaller than in the case of single women. But by and large, education appears to have little impact on married men's decision to work.

In economically better off households, single women, and to a lesser extent, single men, appear to be significantly under less pressure to work. In contrast, married women in economically better off households are more likely to work, confirming earlier findings by Malhotra and DeGraff (2000). These results also contrast with the findings reported in Table 1 where per capita household expenditure was not significantly associated with LFP. Having children less than 5 years of age significantly constrains married women's participation and the participation of female heads of households, but compels men to work. Many of the other household variables have an impact on the participation decision of married females, whereas only the presence of other females of working age in the household acts as an inducement for single women to participate. Note in particular the importance and significance of domestic help in enabling married women to participate, even though it is positively, but not significantly, associated with the LFP of all other subsamples apart from single men.

Among the district-level labour market outcome variables, the educationspecific unemployment rate appears to have a large and significantly constraining effect on the participation of single women: a 1 per cent increase in the unemployment rate in the district reduces the likelihood of participation by 55 per cent. The presence of a large informal sector is associated with greater likelihood female heads of households participating in the labour market. This could be because such women lack the social capital and networks needed to get better jobs. Besides, hours of work in the informal sector may be more flexible, unlike in formal employment, where the opportunities for part-time work are virtually non-existent. The presence of large firms in the district has a negative and significant impact only on the participation of married men. This may be due to the preponderance of this population sub-group in self-employment. Higher shares of those employed in manufacturing and services relative to the share of total employment in the agricultural sector have a significantly negative association with the participation of married women, women household heads and single men, all other characteristics being controlled for. It is possible that women working in agriculture are likely to be poorer, have more children and hence need to work. It is also possible that larger manufacturing and service sectors encourage more single males to remain in education, in order to increase their chances of getting jobs with better terms and conditions. This may, in turn, be encouraged by the relative scarcity of 'good' (formal) jobs in the non-farm sector (Gunatilaka and Vodopivec, 2010). A high ratio between the share of employed women in a particular educational category in the district and the share of employed men in the same educational category appears to encourage all three groups of women to participate. The marginal effect associated with the Duncan index of segregation is more difficult to explain, as it denotes that as there is greater segregation, single women are more encouraged to participate. Significant
at the 5 per cent level, the effect is large at 58 per cent. This may be because segregation implies easier access to jobs that are considered 'women's work', such as in the garments industry, where the demand for women workers is high and, consequently, there are high concentrations of them there.

Living on the estates is significantly associated with the participation of all three groups of women, most so for female heads of households. Again, issues of housing and crèches highlighted earlier may be critical. The provincial spatial dummies are all negative, large and significant for women, who are heads of households. Married women in Central, Eastern and North Western Provinces are also far less likely to engage in market work than married women in Western Province.

Further exploration of the data shows that key drivers of married women's participation decision appear to be: age, educational attainment from GCE Advanced Level and beyond; higher per capita household consumption; availability of domestic help; a higher share of employed females relative to males in education category and whether they are living on estates. Having children later, rather than earlier, is also likely to be important. The drivers of single women's participation are: age; all levels of education above primary; the presence of other adult women in the household; a higher share of employed females, relative to males, in education category and whether they are living on estates. Factors encouraging the participation of female heads of household in market work are: age, university education, a large informal sector and whether they are living on estates.

Constraints to the LFP of these three groups of women are as follows: remittances from abroad (in the case of married women) and female heads of households and the earnings of male members of household for female heads; Islamic Moor ethno-religious identity and disability; education up to Ordinary Level for married women, and a relatively higher status of household consumption for single women; if they have children under the age of 5 years for married women and female heads of households, and the employment and education characteristics of male household members and male head of household for married women; more people employed in manufacturing and services, relative to agriculture, in the district for married women and female heads of households, and a greater rate of unemployment for single women; residence in Central, Eastern and North Western Province for married women and those residing in all provinces outside Western Province, for female heads of households.

Since most Sri Lankan women end up being married (in the sample, $79 \%$ of women in the reference age group, who are not household heads, are married while roughly $20 \%$ are single), the challenge for policymakers wanting to increase women's engagement in the market economy is to address the factors that keep women from the workforce after they get married.

What is the relative impact on women's LFP of the groups of socio-economic factors, identified above, as being strongly associated with the probability of participation? We answer this question known in the literature as the 'levels' effect, by deploying the Shapley value decomposition technique. The methodology derives
from Shapley's (1953) solution to the problem of calculating the real power of any given voter in a coalition voting game with transferable utility, when all orders of coalition formation are equally probable. In the economics literature, it has been used primarily to decompose income inequality (Chantreuil and Trannoy, 1997; Devicienti, 2010; Gunatilaka and Chotikapanich, 2009; Sastre and Trannoy 2001a, 2001b). However, Kolenikov and Shorrocks (2005) and D'Ambrosio et al. (2009) have used the procedure to decompose poverty, and Shorrocks (1999) has shown that the Shapley value decomposition can be applied to any function. Nevertheless, as far as we are aware, the technique has yet to be applied to decompose the probability of LFP. For further details, see Gunatilaka (2014).

The decomposition exercise reveals that the most important contributors to the probability of married women's participation are spatial variables, demographic characteristics and education characteristics which, together, account for 68 per cent of the LR (Likelihood Ratio). The discouragement variables account for 15 per cent and household characteristics 10 per cent. In contrast, demographic characteristics account for half the LRI of the sample of single women. These results appear to be driven mainly by the variables Islamic Moor and disabled, as Table 7.1 suggests. Education accounts for 24 per cent and household characteristics another 11 per cent of the LRI of this group. Among female heads of households, the most important contributor to the LRI is the static labour supply model variables and demographic variables. Spatial variables (16\%) and household characteristics (11\%) are somewhat less important.

## 4. Conclusions and Policy Implications

### 4.1. Overview of Findings

Analysing trends and determinants of female LFP in Sri Lanka reveal important differences in the factors that enable and constrain married and single women, and female heads of households, from participating in the labour market. As Malhotra and DeGraff (2000) suggest, these are most likely to be derived from the different roles that they are expected to play in the household. Contrary to the predictions of the static labour supply model, the expected wage is not a good predictor of female LFP, but receiving remittances from abroad appears to obviate some of the financial need to work.

Of the variables we have been able to look at, given the information available in the survey data, the drivers of married women's participation decision appear to be: age, educational attainment from GCE Advanced Level and beyond; higher per capita household consumption; availability of domestic help; a higher share of employed females, relative to males with the same educational attainment as the individual in the district and whether they are living on estates. Having children later rather than earlier is also likely to be an important factor. The drivers of single women's participation are: age; all levels of education above
primary level; the presence of other adult women in the household; a higher share of employed females in the district, relative to males in the same education category as the individual; and whether they are living on estates. Factors associated with the participation of female heads of household in market work are: age, a university education, a large informal sector in the district and whether they are living on estates.

Constraints to the LFP of these three groups of women are as follows: remittances from abroad in the case of married women and female heads of households and the earnings of male members of household for female heads; Islamic Moor ethno-religious identity and disability; education up to Ordinary Level for married women and a relatively higher status of household consumption for single women; whether they have children below 5 years of age for married women and female heads of households, and the employment and education characteristics of male household members and male head of household for married women; more people employed in manufacturing and services, relative to agriculture in the district, for married women and female heads of households, and a greater rate of unemployment for single women; residence in Central, Eastern and North Western Province for married women, and for female heads of households, whether they are residing in all provinces outside Western Province.

The analysis also indicates that the most important contributors to the probability of married women's participation are spatial variables, demographic characteristics and education characteristics. In contrast, demographic characteristics play a bigger role for single women. These results appear to be driven mainly by the variables Islamic Moor and the disabled. Among female heads of households, the most important contributors are income effect of variables in the static labour supply model and demographic variables. Spatial variables and household characteristics are somewhat less important for this group.

The participation decision of married women is particularly complex, depending on a variety of factors, and since most Sri Lankan women end up being married (in the sample, $79 \%$ of women in the reference age group, who are not household heads are married, while roughly $20 \%$ are single), the challenge for policymakers, who intend to increase women's engagement in the market economy, is to address the factors that keep women from the workforce after they get married.

These constraints include cultural and status-related perceptions and attitudes about what sort of role married women should play within the household and the gender division of household and care labour within the family unit. However, even while better education and higher socio-economic status encourage married women to seek market work, the legal framework governing work in the private sector imposes constraints that prevent women taking up night work or part-time work in rapidly growing and socially acceptable service sectors. At the same time, many observers point out that the Sri Lankan law governing maternity benefits makes employers bear its entire cost, encouraging them to discriminate against the hiring of women (Ranaraja, 2013). Meanwhile, the lack of family-friendly policies in private institutions and perceived difficulties in finding employment, encourage women to seek work in the public sector, which appears more family-friendly
by default, rather than by policy, because work norms are less rigidly enforced there than in the private sector.

We need to emphasize here that equalizing women's access to paid employment will surely increase their total workload and, commensurately, the stress associated with it, if the current division of paid and unpaid work between husbands and wives remains unchanged. An analysis of the time use of husbands and wives in Sri Lanka, based on a survey of about 300 individuals working in Colombo district, conducted more than 13 years ago, found that entering the workforce increases the time that women spend working by 3 hours per day to 16 hours a day, compared with the time that unemployed wives of married men spend (Satharasinghe, 1999). In contrast, husbands' total work time remained close to 14 hours, regardless of whether their wives were employed or not. Thus, any policy strategy that seeks to enhance women's participation in market work also needs to address the issue of the unequal division of unpaid work between men and women.

### 4.2. Policy Implications and Directions for Future Research

The findings highlight the importance of better education for female LFP. The critical stage in the education cycle for participation appears to be secondary education, beyond which the likelihood of participation rises, certainly more so for single women than for female heads of households and for married women. In terms of policy, however, this finding suggests that investment in skills training beyond secondary education is critical to encourage women to engage in market work. Thus, it is at this point that single women, who do not continue in general education, should be given the opportunity to acquire job-oriented technical and vocational skills through the vocational education system. The next point at which alternative employment skills need to be provided is after the GCE Ordinary Levels, for those who do not continue to study for the Advanced Levels. Acquiring some marketable skills at this stage in the education cycle is vital to enable women to engage in paid work, even after they are married. This training can equip women for higher skilled occupations in IT, the hospitality industry and the health, daycare/nursery and geriatric-care industry. On the other hand, the economy also needs to generate enough job opportunities for graduates outside the public sector. Currently, the public sector remains the employment sector of choice for many educated women.

Implementing measures to enhance skills is also likely to delay marriage and encourage women to postpone having children, enabling them to acquire some job experience which will increase their chances of finding employment once they return to the labour market after raising children. As de Silva et al. (2010) have pointed out, the recent rise in fertility foretells a difficult situation, where the ageing of the population will continue along with an increase in child dependency, thus increasing the dependency burden for the working population at both ends of the population pyramid. Hence, policies that enable women to remain or return to the workforce will help the country to bear the increasing dependency burden
that has been projected. At the same time, considering the particular disadvantages faced by female heads of households, who are often single parents, training opportunities and opportunities for flexible working arrangements should also be targeted towards this group of women.

There are significant cultural and household-based constraints, particularly to married women's participation. A key factor is the household work and care burden on women, deriving, on the one hand, from the lack of institutional support for the care of young children and elderly people and, on the other hand, social norms that impose on women the larger burden and responsibility for the care of children and household work. The policy implications of these findings are, first, the encouragement and implementation of family-friendly policies that encourage a more equitable sharing of the burden of care and household chores between males and females. Second, policies that enable more flexible work arrangements, such as part-time work, and work that can be done online need to be implemented. Amending the legislation allowing night work in better-paying service industries is also important. Other measures facilitating night-work and more flexible work arrangements should also be implemented, for example, developing the telecommunications and other infrastructure necessary to support online working arrangements and safe and efficient transport to and from work. A secure environment for women to travel to and from work at different hours of the day would require the efficient and impartial maintenance of law and order. A vigilant and well-trained police force and an effective justice system are essential. Policy-makers may also need to explore options for socializing the cost of providing maternal benefits so that employers are not compelled to bear its entire cost, which creates incentives against hiring women. Third, policymakers can provide incentives for the setting up of well-monitored crèches for young children and day care centres for the elderly, which can, in turn, provide more job opportunities for women. Some schools in Colombo, for example, already provide day boarding facilities for children after school, who are looked after by trained personnel, until their parents pick them up after work. Similarly, existing class-room infrastructure in other schools can be utilized after hours to provide reliable childcare in a familiar environment.

Inequalities in opportunities and outcomes in the labour market also discourage women from entering the workforce. Policies are needed that discourage sexism and gender stereotyping in the workplace are likely to have a positive impact on female LFP, and that, if the state's legal and institutional infrastructure to handle issues of discrimination and sexual harassment is strengthened, this too will serve to encourage women in engaging in market work.

The National Human Resources and Employment Policy of Sri Lanka (Secretariat for Senior Ministers, 2012) already refers to many of these policies. Nevertheless, Ranaraja's (2013) consultations with stakeholders suggests that, while existing policies are appropriate, their implementation is unsatisfactory. A case in point is that of revising the legal framework to enable women to undertake night work in service occupations, despite the fact that employers' and employees' representatives have agreed on this amendment. Another is the promotion of
social dialogue between the industrial partners to create a working environment that will be more conducive to women's participation.

More research is needed to better understand many of the issues raised in this chapter. First, an up-to-date detailed analysis of men's and women's time use in different cultural and geographical contexts will be extremely informative, not only to find out their relative contribution in paid and non-paid work, but also to find out how processes can be made more efficient. For example, parents may be forced to spend an inordinate amount of time supervising children's homework as a result of the demands made by badly designed school curricula. Similarly, parents may have to spend substantial time accompanying children to and from school, tuition classes and extra-curricular activities because of poor quality education services, on the one hand, and the lack of a safe and efficient transport system, on the other hand. Second, perceptions about gender roles in relation to paid work, care work and social and cultural activities with extended family and friends are likely to be important determinants of women's ability to engage in market work and need further exploration and analysis. Finally, up-to-date information about women's own perceptions about the barriers they face in participating in the labour market and in finding and keeping jobs, and the kind of work arrangements and facilities and support systems that they think will enable them to go out to work are needed to find out whether policies designed to encourage them to go out to work are likely to actually achieve their objectives.

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## 8

# The Life-cycle of Women in the Labour Market in Cambodia <br> Subsistence Versus Wage Employment <br> Kang Chandararot and Liv Dannet* 

## 1. Introduction

In the past two decades, the Cambodian economy has grown at a relatively high rate-7.7 per cent per year between 1993 and 2012. ${ }^{1}$ Amongst the three broad sectors, industry and services grew at a compound annual growth rate (CAGR) of 11.3 per cent and 7.7 per cent respectively during the period, while agriculture grew relatively slowly, at 6.2 per cent. ${ }^{2}$ In March 2015, the Asian Development Bank (ADB) president noted that Cambodia had moved from low income to middle income status. ${ }^{3}$ However, critical challenges to decent work still exist. The vast majority of workers in Cambodia, particularly women, continue to work in low-pay, low-productivity jobs in the rural and informal economy. While the ADB indicates that overall inequality in Cambodia has declined since 2007 (ADB, 2014), and the gaps in labour force participation (LFP) rates between women and men are small, gender equality remains a major concern.

[^45]The female labour force participation rate (LFPR) in Cambodia increased to 84.8 per cent in 2011 from 77.5 per cent in $2004,{ }^{4}$ which is very high by international standards. Women in rural areas had a higher LFPR (89\%) than those in urban areas ( $62.5 \%$ ) in 2011. ${ }^{5}$ The comparative LFPR for men in Cambodia is 90.4 per cent. The gaps in men and women's LFPR therefore, are one of the smallest in Southeast Asia in recent years. But in terms of quality of employment, there are clear gender gaps-women face greater barriers to accessing better jobs-which are reflected in their higher representation in informal jobs, lower pay and worse working conditions.

While most women still work in the agriculture sector, the emergence and growth of the garment sector has been critical to increasing wage employment opportunities for women, as also found in Bangladesh (see Chapter 6). Overall, women's work in Cambodia is still characterized as low skill, though the shift to garments indicates a structural change for women's employment. On the other hand, the recent growth in the agriculture sector in Cambodia, where a vast majority of women work, has mainly been characterized by an expanded use of inputs as against intensive productivity growth.

This chapter is organized as follows: Section 2 reviews trends, while Section 3 undertakes regression analysis on factors driving women's LFP, as well as those driving women's engaged in wage work and self-employment. Section 4 discusses the insights from a primary survey of households. Section 5 provides a summary and conclusion of all the findings and recommendations.

## 2. Trends in Female Labour Force Participation

This section reviews the trends of key labour market indicators covering both quantity and quality of employment over the period 2004-2011 using data from the Cambodia Socio-Economic Survey (CSES) (2004-2011). The CSES is utilized in this chapter to allow for a time series analysis, however, references to a subsequence labour force survey (NIS and ILO, 2013) are made when appropriate.

[^46]
### 2.1. Labour Force Participation

In order to understand the factors that push or pull women into the labour market, the first crucial indicator to look at is the LFPR, which is a measure of the proportion of a country's working-age population that engages actively in the labour market, either by working or looking for work. It provides an indication of the relative size of the supply of labour available to engage in the production of goods and services.

In the CSESs conducted by the National Institute of Statistics (NIS), LFPR is defined as the labour force as a percentage of the working-age population (15-64 years old) in the same group. The labour force is the currently active population comprised of all persons who are employed or unemployed. A person is counted as employed if he/she worked at least one hour during the reference period (the past seven days), or had a job/economic activity from which they were temporarily absent.

In 2011, there were over 14 million people in Cambodia, of which about 64 per cent (over 9 million people) were of working age. The vast majority of the work-ing-age population, 87.3 per cent or about 8 million people, were active in the labour market. Over the period 2004-2011, the labour force grew 2.6 per cent per annum on average. The gender distribution in the labour force is relatively equal (Table 8.1).

As presented in Table 8.1 and displayed in Figure 8.1, the LFPR of women is high and continues to increase over time-from 77.5 per cent in 2004 to 84.8 per cent in 2011. On an average, the supply of women in the labour force grew 2.9 per cent per year, reaching near gender parity. As shown in this volume,

Table 8.1:
Population and Labour Force Participation: 2004-2011

|  |  |  |  |  |  | 2004 | 2007 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Populations (in thousand persons) | 2008 | 2009 | 2010 | 2011 | $C A G R^{*}$ |  |  |
| Total Population | 12,657 | 13,230 | 13,389 | 13,967 | 13,958 | 14,155 | $1.6 \%$ |
| Working Age | 7,589 | 8,232 | 8,379 | 8,865 | 8,853 | 9,038 | $2.5 \%$ |
| Labour Force | 6,577 | 7,314 | 7,309 | 7,469 | 7,675 | 7,891 | $2.6 \%$ |
| Of which: Women | 3,246 | 3,596 | 3,534 | 3,715 | 3,869 | 3,959 | $2.9 \%$ |
| Of which: Men | 3,331 | 3,718 | 3,775 | 3,754 | 3,806 | 3,932 | $2.4 \%$ |
| Labour Force Participation Rate (\% of Working-age Population) |  |  |  |  |  |  |  |
| Both Sexes | 82.2 | 83.7 | 81.8 | 84.4 | 87.0 | 87.5 |  |
| Women | 77.5 | 78.3 | 75.6 | 80.4 | 84.2 | 84.8 |  |
| Men | 87.4 | 89.6 | 88.8 | 88.8 | 90.0 | 90.4 |  |

Source: National Institute of Statistic of Cambodia (NIS), CSES, 2004-2011.
Note: ${ }^{*}$ CAGR refers to compound annual growth rate.

Figure 8.1:
Labour Force Participation Rates by Gender: 2004-2011


Source: National Institute of Statistic of Cambodia (NIS), CSES, 2004-2011.
countries in South Asia have the highest disparities between male and female LFP, apart from Nepal. Compared with other countries in Southeast Asia, Cambodia has one of the narrowest gender gap in terms of LFPR. For instance, in 2011, the LFPR gender disparity in Indonesia was equivalent to 33.2 percentage points ( $84.5 \%$ for men and $51.3 \%$ for women). In Thailand, the gender gap was lower at about 16.5 per cent, but the disparity in Cambodia was even smaller. ${ }^{6}$

Although a high overall rate of LFP by women is positive, the indicator alone is not sufficient for assessing the level of decent work or decent work deficits. One needs to delve deeper to understand possible segregations in the labour market based on employment status, type of job, education and other factors.

LFP of women has increased across all age groups, especially for the age groups of 55-64 years, 25-34 years and 35-44 years old. The growing participation among older workers is an indication of weak social protection measures for the elder and retired. Increasing labour force activity of women in other age groups reflects an increase in job opportunities. In particular, the expansion of the garment sector has driven women increasing engagement in Cambodian labour markets. The garment sector in 2012 employed a total of 614,540 workers, of which more than 80 per cent were women. ${ }^{7}$

A closer look at the youth population, aged 15-24 years, shows similar trends to that of the working-age population as a whole. Youth aged 20-24 years have an overall LFPR of 84.0 per cent. Men are slightly more active, 85.9 per cent LFPR, in

[^47]Table 8.2:
Labour Force Participation Rates by Gender and Age Group (\%): 2004-2011

| Age Group | 2004 | 2007 | 2008 | 2009 | 2010 | 2011 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 71.9 | 70.4 | 67.5 | 69.8 | 73.2 | 75.1 |
| 15-19 | Women |  |  |  |  |  |
| $20-24$ | 79.5 | 80.1 | 74.2 | 79.4 | 83.3 | 82.2 |
| $25-34$ | 80.8 | 81.4 | 78.7 | 84.3 | 87.4 | 90 |
| $35-44$ | 82.5 | 84.5 | 83.4 | 87.1 | 91.2 | 91.4 |
| $45-54$ | 79.5 | 80.9 | 79.2 | 85.1 | 88.7 | 86.7 |
| $55-64$ | 63.4 | 68.1 | 65.3 | 71.3 | 77.2 | 78 |
| Of which 15-24 | 75.5 | 74.8 | 70.6 | 74.4 | 77.8 | 78.4 |
| Total (15-64) | 77.5 | 78.3 | 75.6 | 80.4 | 84.2 | 84.8 |
|  |  | Men |  |  |  |  |
| $15-19$ | 71.7 | 71.2 | 67.7 | 70.4 | 74.2 | 73.2 |
| $20-24$ | 86.4 | 88.8 | 89 | 86.6 | 86.4 | 85.9 |
| $25-34$ | 95 | 96.5 | 96.6 | 96.4 | 97.1 | 98.5 |
| $35-44$ | 96 | 97.1 | 96.7 | 97.7 | 98.2 | 98.3 |
| $45-54$ | 93.5 | 96.3 | 97.1 | 95.9 | 96.7 | 95.2 |
| $55-64$ | 83.2 | 88.1 | 85.4 | 86.1 | 87.4 | 89.9 |
| Of which 15-24 | 78.4 | 79.3 | 77.2 | 77.7 | 79.5 | 78.8 |
| Total (15-64) | 87.4 | 89.6 | 88.8 | 88.8 | 90 | 90.4 |

Source: National Institute of Statistic of Cambodia (NIS). CSES, 2004-2011.
contrast to women, 82.2 per cent. Economic activity is lower at the lower end of the youth demographics, people aged 15-19 years, which may reflect their status as students. Interestingly, however, in this group, women's LFPR surpasses that of men. While 75.1 per cent of women in this age group participate in the labour force, 73.2 per cent of men do so. The overall LFPR of people aged 15-19 years is 74.1 per cent (see Table 8.2).

The LFPRs start to diverge after the age of 24 years, where LFP of men is much higher. This is attributed to life-cycle events, as this is the age when men and women marry and have children. The average age for marriage for women is 23.3 years and for men is 25.6 years (NIS, 2009b). Marriage tends to happen slightly earlier in the rural areas ( 22.5 years for women and 24.8 years for men) compared to the urban areas ( 25.5 years for women and 28 years for men). For men, this is the period in which they are expected to become the breadwinner, thus, driving them into the labour market. For women, this is the period where they tend to leave the labour force to give birth to and raise children. Some women may return to an economically active life, but at a lower rate, until the children are older.

### 2.2. Employment-population Ratio

According to the NIS, employed persons are those who worked at least one hour during the reference period (the past seven days), or had a job/economic activity from which they were temporarily absent. Contributing family workers are included in the employed persons. The employment rate or employment-population ratio (EPR) reported in the CSES is the share of the employed population in relation to the working-age population (NIS, 2012, pp. 112-113).

In Cambodia, the EPR is very high, with practically everyone of working age employed ( $87.3 \%$ in 2011, see Figure 8.2). Indeed, while working poverty has fallen over the past decade or so, from 4.3 million people in 2003 to 2.8 million people in 2013, ${ }^{8}$ large shares of the population continue to battle against poverty ( $32.8 \%$ in 2013). ${ }^{9}$ Their labour is the only means available to them to combat poverty, given weak income security and limited measures of social protection.

EPR values indicate that between 2004 and 2011, employment growth exceeded the pace of labour force growth: 3.6 per cent per annum versus 2.6 per cent (Table 8.3). These figures tell us that the economy has been able to create employment. Though employment has grown quantitatively, one needs to explore deeper to get an understanding on the quality of jobs, specifically on the extent to which

Figure 8.2:
Employment-to-population Ratio by Gender (\%): 2004-2011


Source: National Institute of Statistic of Cambodia (NIS). CSES, 2004-2011.

[^48]Table 8.3:
Employed Persons in Thousand Persons: 2004-2011

|  | 2004 | 2007 | 2008 | 2009 | 2010 | 2011 | $C A G R^{*}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Total population (000') | 12,657 | 13,230 | 13,389 | 13,967 | 13,958 | 14,155 | $1.6 \%$ |
| Working Age (000') | 7,589 | 8,232 | 8,379 | 8,865 | 8,853 | 9,038 | $2.5 \%$ |
| Labour Force (000') | 6,577 | 7,314 | 7,309 | 7,469 | 7,675 | 7,891 | $2.6 \%$ |
| Employed Persons (000') | 6,169 | 6,836 | 6,829 | 7,469 | 7,675 | 7,891 | $3.6 \%$ |
| Women (000') | 3,246 | 3,596 | 3,534 | 3,715 | 3,869 | 3,959 | $2.9 \%$ |
| Men (000') | 2,924 | 3,241 | 3,295 | 3,755 | 3,806 | 3,932 | $4.3 \%$ |
| Employment-to- | 81.3 | 83.0 | 81.5 | 84.3 | 86.7 | 87.3 | $1.0 \%$ |
| population ratio (\%) |  |  |  |  |  |  |  |
| Women | 76.6 | 77.7 | 75.3 | 80.3 | 84.0 | 84.7 | $1.4 \%$ |
| Men | 86.6 | 89.0 | 88.5 | 88.6 | 89.6 | 90.2 | $0.6 \%$ |

Source: National Institute of Statistic of Cambodia (NIS). CSES, 2004-2011.
Note: ${ }^{*}$ CAGR refers to compound annual growth rate.
these are productive and remunerative. This is covered in the next sections. Since 2008, the gender gap continues to decline, albeit the margin is traditionally small in Cambodia (difference of $5.5 \%$, of which $84.7 \%$ for women compared to $90.2 \%$ for men respectively in 2011).

### 2.3. Employment Status

The indicator of employment status is used as a measure of vulnerability of workers. It distinguishes between four categories of workers of the total employed: (a) wage and salaried workers (also known as paid employees); (b) own-account or selfemployed workers with no paid employees; (c) unpaid family workers; and (d) employers, which are self-employed workers with paid employees (see Table 8.4).

The ILO defines vulnerable employment as the sum of contributing family workers and own-account workers. ${ }^{10}$ Vulnerability can have various dimensions: low income, low employability, low access to credit, etc., as well as high insecurity and lack of any systematic social protection or safety net. Workers in these two groups have a lower likelihood of having formal work arrangements, and are therefore more likely to lack elements associated with decent employment, such as adequate social security and a voice at work. That being said, there could also be vulnerability even among the paid employees categories.

In Cambodia, the largest portion of employed persons is self-employed or own-account workers regardless of gender, though slightly higher for women

[^49]Table 8.4:
Employment Status: 2004-2011

|  | Both Sexes |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Employment Status | 2004 | 2007 | 2008 | 2009 | 2010 | 2011 |  |
| Self-employed (\%) | 38.5 | 38.2 | 37.1 | 49.2 | 50.4 | 53.4 |  |
| Paid employee (\%) | 22.9 | 25.8 | 28.4 | 26.9 | 29.8 | 31.4 |  |
| Unpaid family worker (\%) | 36.6 | 35.9 | 34.3 | 23.5 | 19.4 | 15.1 |  |
| Employer (\%) | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.0 |  |
| Employed population, | 6,577 | 7,314 | 7,309 | 7,469 | 7,675 | 7,891 |  |
| number (thousand persons) |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | 2004 | 2007 | 2008 | 2009 | 2010 | 2011 |  |
| Self-employed (\%) | 32.6 | 30.5 | 30.8 | 52.4 | 56.0 | 58.8 |  |
| Paid employee (\%) | 18.6 | 21.8 | 24.0 | 22.8 | 24.3 | 27.1 |  |
| Unpaid family worker (\%) | 46.5 | 47.6 | 45.2 | 24.4 | 19.3 | 13.9 |  |
| Employer (\%) | 0.1 | 0.0 | 0.0 | 0.3 | 0.2 | 0.0 |  |
| Employed population, | 3,246 | 3,596 | 3,534 | 3,715 | 3,869 | 3,959 |  |
| number (thousand persons) |  |  |  |  |  |  |  |


|  | Men |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004 | 2007 | 2008 | 2009 | 2010 | 2011 |
| Self-employed (\%) | 44.1 | 45.6 | 43.0 | 46.0 | 44.7 | 47.9 |
| Paid employee (\%) | 27.1 | 29.6 | 32.6 | 30.9 | 35.4 | 35.8 |
| Unpaid family worker (\%) | 27.0 | 24.7 | 24.1 | 22.6 | 19.5 | 16.2 |
| Employer (\%) | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.0 |
| Employed population, | 3,331 | 3,718 | 3,775 | 3,754 | 3,806 | 3,932 |
| number (thousand persons) |  |  |  |  |  |  |

Source: National Institute of Statistic of Cambodia (NIS). CSES, 2004-2011.
( $58.8 \%$ for women and $47.9 \%$ for men). The high share of own-account workers is reflective of a large agriculture sector and low growth in the formal economy.

Among women, almost a third ( $27.1 \%$ in 2011) are paid employees, predominantly in the garment and shoe industry (which provided around $37 \%$ of the jobs), compared to 35.8 per cent for men. The data shows a dramatic fall in women employed as contributing family workers in 2009. This was due to a change in the classification of the NIS, rather than change in the actual structure of employment. In the CSES 2009 (NIS, 2010b), women who worked in their own farm were regrouped into self-employed from unpaid family worker. In 2011, 13.9 per cent of employed women are contributing family workers, typically helping out on the rice farm. Many men are also unpaid family workers (16.2\%), but to a lesser extent than women.

Despite the high EPR observed earlier, the incidence of vulnerability is still high for both males and females. In 2011, 73 per cent of women were employed in

Figure 8.3:
Vulnerable Employment by Gender (\% of Total Employment): 2004-2011


Source: National Institute of Statistic of Cambodia (NIS). CSES, 2004-2011.
vulnerable jobs compared with 64 per cent for men (Figure 8.3). The percentages have declined since 2004, albeit very slowly.

The high incidence of vulnerability is reflected in the makeup of the country's economy. According to the 2011 Economic Census, the private sector accounts for over 90 per cent of employment (NIS, 2012). These workers are employed in more than 500 thousand establishments, four or five of which engage only one or two persons. These enterprises are by and large informal: only 7.8 per cent were registered with the government. It is, hence, no surprise that the informal sector represents an important part of the economy in Cambodia, especially in terms of the large number of people it engages in both rural and urban areas.

The standard indicator to measure employment in the informal sector is a percentage of total non-agricultural employment. Based on the recent data from the Economic Census 2011, employment in the informal sector represents 66 per cent of total non-agriculture employment (Table 8.5). This highlights the poor working conditions and representation of women workers in general: the informal economy is both a critical and vulnerable source of livelihood for Cambodian women.

### 2.4. Sectoral Shares

From 2004 to 2011, there was a slight shift in employment across sectors but nothing too remarkable. The vast majority of employment is still in the agriculture sector $(55.8 \%)$. This is true regardless of gender- 56.6 per cent for women and 55 per cent for men in 2011. Employment in the services sector, which holds the second position in terms of employment for both women and men,

Table 8.5:
Employment in the Informal Sector by Enterprise Size

| By enterprise size* | Not registered at MOC (Informal) | Registered <br> at MOC <br> (Formal) | Total | Not registered at MOC (Informal) | Registered <br> at MOC <br> (Formal) | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of persons engaged |  |  | \% |  |  |
| 1 to 10 | 929,305 | 46,714 | 976,019 | 95 | 5 | 100 |
| 11 to 50 | 122,763 | 69,584 | 192,347 | 64 | 36 | 100 |
| 51 to 100 | 25,149 | 28,804 | 53,953 | 47 | 53 | 100 |
| 101 and over | 36,300 | 417,644 | 453,944 | 8 | 92 | 100 |
| Total | 1,113,517 | 562,746 | 1,676,263 | 66 | 34 | 100 |

Source: National Institute of Statistic of Cambodia (NIS). CSES, 2004-2011.

Table 8.6:
Employment by Sector (\%): 2004-2011

|  | Both Sexes |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | ---: | :---: |
| Sector | 2004 | 2007 | 2008 | 2009 | 2010 | 2011 | CAGR* |  |
| Agriculture | 57.4 | 57.7 | 55.6 | 57.6 | 54.2 | 55.8 | $-0.4 \%$ |  |
| Industry | 13.3 | 14.9 | 15.8 | 15.9 | 16.2 | 16.9 | $3.5 \%$ |  |
| Services | 29.1 | 27.4 | 28.6 | 26.5 | 29.6 | 27.3 | $-0.9 \%$ |  |
|  |  | Women |  |  |  |  |  |  |
|  | 2004 | 2007 | 2008 | 2009 | 2010 | 2011 |  |  |
| Agriculture | 57.1 | 59.4 | 55.5 | 57.8 | 55.4 | 56.6 | $-0.1 \%$ |  |
| Industry | 14.0 | 14.3 | 15.9 | 16.2 | 15.5 | 17.5 | $3.2 \%$ |  |
| Services | 28.6 | 26.3 | 28.6 | 26.0 | 29.1 | 26.0 | $-1.4 \%$ |  |
|  |  |  |  | Men |  |  |  |  |
|  | 2004 | 2007 | 2008 | 2009 | 2010 | 2011 |  |  |
| Agriculture | 57.8 | 56.1 | 55.7 | 57.4 | 52.9 | 55.0 | $-0.7 \%$ |  |
| Industry | 12.6 | 15.5 | 15.7 | 15.5 | 17.0 | 16.3 | $3.8 \%$ |  |
| Services | 29.5 | 28.4 | 28.6 | 27.0 | 30.1 | 28.7 | $-0.4 \%$ |  |

Source: National Institute of Statistic of Cambodia (NIS), CSES, 2004-2011.
Note: *CAGR refers to compound annual growth rate.
experienced a minor declined of 0.9 per cent per year, much more among women (falling by $1.4 \%$ per year) than men ( -0.4 per cent).

Job opportunities in the industrial sector seem to be growing at a pace of 3.5 per cent per year, which is roughly equal between women and men (Table 8.6). The main sectors driving industrial growth is manufacturing. Particularly, women are predominantly found in the garment sector, which has been one of the main engines of growth of the Cambodian economy. The garment sector contributed to about 43 per cent of

Figure 8.4:
Share of Employment by Education Level and Gender: 2004-2011

| Women | Men |
| :---: | :---: |
| 100 | 90 |
| 90 | 80 |
| $80 \longrightarrow$ | $70 \sim$ |
| 70 | 60 |
| 60 | 50 |
| 50 | 40 |
| 40 | $30$ |
| 30 | $20$ |
| $20 \square$ | $10$ |
| $10 \longrightarrow$ |  |
|  | 200420072008 2009 20102011 <br> - Srimary or less Secondary <br>   Teritary |

Source: National Institute of Statistic of Cambodia (NIS), CSES, 2004-2011.
the industrial value-added in 2010. ${ }^{11}$ A large share of the garment workers are young women who migrated from rural areas with limited education (Dasgupta et al., 2011). Cambodia is one of the world's top ten garment suppliers. The government raised the minimum wage for garment workers to US $\$ 128$ in 2015, but the rate is still one of the lowest in the Asia-Pacific region (Luebker, 2014).

### 2.5. Education

In Cambodia, the vast majority of the labour force has only a primary education or less; the incidence is higher among women (82.5\%) than men (70.9\%). Nevertheless, the education level has gradually increased over time (Figure 8.4). The share of women in higher education groups has increased, especially in secondary education, though there is still a disparity between the education attainment of men and women. Overall, very few men and women have a tertiary (post-secondary) education.

Together with the high rate of youth LFP (aged 15-24, 78.4\%), this indicates that a large share of the younger generation, both girls and boys, continue to forfeit their education in favour of employment, likely due to poverty (See Table 8.2). School is not an option for these youth; survival is the priority. This will have serious implications for human capital resources in the future; it may mean that the economy will remain trapped in a low-skill, low-productivity stage.

[^50]
### 2.6. Occupational Shares

For women, the top occupation in terms of share is in skilled agriculture, forestry and fishery work (44.7\%). However, the data reveals that employed women have continuously shifted out of this job between 2004 and 2011, declining by 4 per cent per annum. The second main occupation of women is in services and sales work (19.9\%), followed by elementary occupations (15.6\%) and craft and related work ( $15.2 \%$ ). Among the various occupations, the fastest growing for women were clerical support ( $36 \%$ per year, albeit from a low base), and craft and related work ( $13 \%$ per year). Occupations which contracted include plant and machine operators and assemblers ( $-34 \%$ per year), managers ( $-12 \%$ per year) and professionals ( $-6 \%$ per year).

Similarly, most men (45.3\%) are employed as skilled agriculture workers, followed by elementary occupations ( $18.3 \%$ ), services and sales ( $11.4 \%$ ) and crafts and related ( $11.1 \%$ ). As with women, the fastest growing occupation is clerical support ( $47 \%$ per year). Men also experienced a drop in managerial and professional occupations between 2004 and 2011 ( $-11 \%$ and $-9 \%$ per year, respectively). See Table 8.7 for a better understanding of the different occupations taken up by men and women.

### 2.7. Rural Versus Urban

Labour markets and the challenges faced by women in rural and urban areas may differ. Therefore, it is important to analyse women's LFP by the geographic area. According to the latest labour force survey, the total population in Cambodia was 14.9 million in 2012, of them 23.6 per cent were in urban areas and 76.4 per cent were in rural areas. The shares of female population were roughly the same in urban and rural areas at the level of about 51 per cent (NIS and ILO, 2013).

A first look at the LFPR of women in rural versus urban reveals significant difference. The LFPR in rural areas is much higher than in urban areas- 89 per cent compared to 62.5 per cent in urban areas, in 2011. The difference is observed across all age groups. Most notably, youth (especially under 20 years) and elders (over 54 years) in urban areas are less likely to be in the labour force compared to those in rural areas. This is associated with the disparity in poverty between the two areas. In 2009, the poverty rate in rural areas is 24.6 per cent compared to 12.8 per cent in Phnom Penh and 19.3 per cent in other urban areas (MOP, 2013). Whereas women in urban areas may have the option to work or not work but women in rural areas must work to survive (Table 8.8).

The bulk of women's employment is located in rural areas. In 2011, the total number of employed women was 3,959 thousand persons, of which 80 per cent were in rural areas and 20 per cent in Phnom Penh and other urban areas (Figure 8.5). This distribution has stayed largely the same since 2004. It is likely that this rural urban employment ratio for women will change slowly, due to a number of reasons.
Table 8.7:
Main Occupations by Gender (\% of Employed)

| Women | ISCO* skill level | 2004 | 2007 | 2008 | 2009 | 2010 | 2011 | CAGR** |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: | ---: | ---: |
| Main Occupation | $3+4$ | 0.5 | 0.5 | 0.3 | 0.2 | 0.2 | 0.2 | $-12 \%$ |
| Manager | 4 | 2.7 | 2.5 | 2.6 | 2 | 2 | 1.8 | $-6 \%$ |
| Professionals | 3 | 0.5 | 1.1 | 1 | 0.5 | 0.5 | 0.5 | $0 \%$ |
| Technicians and associate professionals | 2 | 0.2 | 1.5 | 1.8 | 1.5 | 1.6 | 1.7 | $36 \%$ |
| Clerical support workers | 2 | 18.5 | 17 | 14.5 | 19.6 | 22.4 | 19.9 | $1 \%$ |
| Service and sales workers | 58.1 | 52.7 | 47.9 | 47.8 | 44.7 | 44.7 | $-4 \%$ |  |
| Skilled agricultural, forestry and fishery workers | 2 | 6.6 | 6.8 | 7 | 13.8 | 13.7 | 15.2 | $13 \%$ |
| Craft and related worker | 2 | 5.8 | 7.5 | 8.8 | 0.5 | 0.5 | 0.3 | $-34 \%$ |
| Plant and machine operators and assemblers | 2 | 6.7 | 10.3 | 16 | 13.9 | 14.4 | 15.6 | $0 \%$ |
| Elementary occupations | 1 | 0.1 | 0 | 0.1 | 0.1 | 0.1 | 0.1 | $0 \%$ |
| Armed forces occupations | $1+2+4$ |  |  |  |  |  |  |  |

(Table 8.7 Continued)

| Men |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Main Occupation |  | 2007 | 2007 | 2008 | 2009 | 2010 | 2011 |  |
| Manager | $3+4$ | 1.2 | 1.2 | 1.3 | 0.8 | 0.9 | 0.9 | -11\% |
| Professionals | 4 | 3.5 | 3.5 | 4 | 3.1 | 3.5 | 2.5 | -9\% |
| Technicians and associate professionals | 3 | 2.9 | 2.9 | 3.4 | 1.2 | 1.2 | 1 | 3\% |
| Clerical support workers | 2 | 2.3 | 2.3 | 3.1 | 2.4 | 3.2 | 2.9 | 47\% |
| Service and sales workers | 2 | 7.3 | 7.3 | 4.9 | 9.8 | 10.9 | 11.4 | 4\% |
| Skilled agricultural, forestry and fishery workers | 2 | 50.1 | 50.1 | 48 | 48.1 | 43.5 | 45.3 | -4\% |
| Craft and related worker | 2 | 11.8 | 11.8 | 11.5 | 10 | 11.8 | 11.1 | 11\% |
| Plant and machine operators and assemblers | 2 | 9.4 | 9.4 | 9.3 | 5.4 | 6.2 | 5.1 | -3\% |
| Elementary occupations | 1 | 10.7 | 10.7 | 13.6 | 17.8 | 17.3 | 18.3 | 9\% |
| Armed forces occupations | $1+2+4$ | 0.9 | 0.9 | 0.9 | 1.2 | 1.5 | 1.5 | -1\% |

[^51] generally begins at the age of 5,6 or 7 and lasts about five years.
2. The second ISCO skill level was defined with reference to ISCED categories 2 and 3, comprising first and second stages of secondary education. The first stage begins at the age of 11 or 12 and lasts about three years, while the second stage begins at the age of 14 or 15 and also lasts about three years. A period of on-the-job training and experience may be necessary, sometimes formalized in apprenticeships or traineeships. This period may supplement the formal training or replace it partly or, in some cases, wholly.
3. The third ISCO skill level was defined with reference to ISCED category 5 , comprising education which begins at the age of 17 or 18 , lasts about four years and leads to an award not equivalent to a first university degree.
4. The fourth ISCO skill level was defined with reference to ISCED categories 6 and 7 , comprising education which also begins at the age of 17 or 18 , lasts about three, four or more years and leads to a university or postgraduate university degree, or the equivalent.

Table 8.8:
Labour Force Participation of Women by Age Group and Geographic Domain (\%): 2004-2011

| Age Group | Phnom Penh |  |  |  |  |  | Rural |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2004 | 2007 | 2008 | 2009 | 2010 | 2011 | 2004 | 2007 | 2008 | 2009 | 2010 | 2011 |
| Total $(15-64)$ | 63.0 | 61.8 | 61.5 | 61.5 | 64.8 | 62.5 | 80.0 | 81.5 | 79.1 | 84.3 | 87.6 | 89.0 |
| 15-19 | 41.5 | 36.1 | 36.5 | 40.6 | 42.5 | 37.0 | 77.8 | 76.8 | 74.6 | 75.3 | 78.2 | 82.5 |
| 20-24 | 73.1 | 68.1 | 69.1 | 64.1 | 68.7 | 68.5 | 80.4 | 83.2 | 77.0 | 83.5 | 87.0 | 85.2 |
| 25-34 | 75.3 | 68.7 | 73.2 | 71.0 | 75.7 | 79.8 | 82.0 | 83.4 | 80.7 | 87.3 | 90.1 | 92.2 |
| 35-44 | 72.4 | 69.0 | 72.4 | 71.6 | 72.8 | 72.7 | 83.4 | 86.7 | 86.4 | 90.0 | 94.0 | 94.4 |
| 45-54 | 65.9 | 68.1 | 63.6 | 63.0 | 63.8 | 53.1 | 82.1 | 83.3 | 81.3 | 88.8 | 91.3 | 91.6 |
| 55-64 | 35.2 | 52.6 | 39.8 | 44.7 | 47.5 | 32.6 | 67.7 | 71.2 | 70.0 | 76.8 | 81.8 | 84.9 |
| Youth $(15-24)$ | 58.2 | 53.6 | 52.6 | 53.5 | 57.1 | 53.7 | 79.0 | 79.7 | 75.7 | 79.1 | 82.0 | 83.7 |

Source: National Institute of Statistic of Cambodia (NIS), CSES, 2004-2011.
Note: Phnom Penh used to represent urban area.

Figure 8.5:
Women's Employment by Geographic Domain (Thousand Persons)


Source: National Institute of Statistic of Cambodia (NIS), CSES, 2004-2011.
Note: Phnom Penh used to represent urban area.

First, the urbanization rate in Cambodia is still low. Only 20.5 per cent of the total population lives in urban areas in 2014. While the average annual urban population growth rate is relatively high at 2.65 per cent from 2010 to 2015, compared to global average of 2.05 per cent during the same period, ${ }^{12}$ it will take time for significant demographic transition from rural to urban to take place, which will be linked with the shifts from an agriculture-based economy to an industrialized one.

Second, the vast majority of Cambodians depends on land and agriculture not only for their livelihood, but also as a social safety net to buffer income and economic shocks. Rural households are tied to their land and will not part from it permanently. Subsistence farming represents their safety net and ultimate security. Indeed, interviews with garment workers during the global financial crisis revealed the importance of subsistence farming during times of crisis. Garment workers said that in order to cope with the fall in their wages due to less overtime, they relied heavily on rice from their parents to cut costs and stay afloat. The decision to release working-age family members into the modern sector permanently is dictated by the potential impacts it can have on their subsistence activities. Even when members are released into wage employment, there are always some family members remaining in the village to conduct the subsistence farming. During rice planting and harvesting time, if help is needed, migrant workers are called back to the farm (Chandararot and Liv, 2013).

The distribution of employed women by sector is very different in rural and urban areas. In 2011, about 70 per cent of women employed in rural areas worked in the agriculture sector, whereas around 70 per cent of women in urban areas were in the service sector. While these sectors continue to dominate in terms of employment share for the respective geographic domain, there has been a movement across sectors. In rural areas, the proportion of women employed in the industry sector has slightly increased, from 13.5 per cent in 2004 to 16.2 per cent in 2011. This is due primarily to the expansion of the garment and shoe industry to provincial areas. Labour into the industrial sector in rural areas is coming from the service sector, rather than the agriculture sector-the percentage of women employed in agriculture remains steady, while services are dipping. In urban areas, women's labour supply has markedly shifted from the service sector to the industrial sector. The share of women employed in the industrial sector in urban areas rose to 31.6 per cent in 2011 from 20.9 per cent in 2004, whilst the reverse occurred in the service sector-from 78.3 per cent in 2004 down to 66.3 per cent in 2011 (Table 8.9).

The employment status also differs significantly between rural areas and urban areas. In rural areas, the majority of women in rural areas are self-employed-own account workers or contributing family workers, namely rice farmers ( $70 \%$, see Figure 8.6). Rice is typically cropped only once per year in most parts of Cambodia due to lack of irrigation. The farming season is roughly 6-8 months during the wet season from May to December. During the remaining slack months, women in

[^52]Table 8.9:
Share of Women in Employment by Sector and Geographic Domain (\%): 2004-2011

|  | Phnom Penh |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Sector | 2004 | 2007 | 2008 | 2009 | 2010 | 2011 |
| Agriculture | 0.6 | 0.9 | 0.2 | 2.7 | 1.2 | 2.1 |
| Industry | 20.9 | 15.2 | 14.5 | 21.9 | 28.0 | 31.6 |
| Services | 78.3 | 83.9 | 85.3 | 75.4 | 70.9 | 66.3 |
|  | Rural |  |  |  |  |  |
|  | 2004 | 2007 | 2008 | 2009 | 2010 | 2011 |
| Sector | 66.5 | 68.8 | 64.6 | 69.9 | 65.3 | 66.8 |
| Agriculture | 13.5 | 14.6 | 16.3 | 14.5 | 14.1 | 16.2 |
| Industry | 19.8 | 16.5 | 19.1 | 15.6 | 20.6 | 17.0 |
| Services |  |  |  |  |  |  |

Source: National Institute of Statistic of Cambodia (NIS), CSES, 2004-2011.
Note: Phnom Penh used to represent urban area.

Figure 8.6:
Share of Women in Employment by Status and Geographic Domain (\%): 2004-2011


Source: National Institute of Statistic of Cambodia (NIS), CSES, 2004-2011.
Note: Phnom Penh used to represent urban area.
rural areas carry out other income-generating activities such as vegetable cultivation, chicken raising, mat weaving, pottery, etc. If the household faces a cash shortage, women may sometimes enter into casual paid work on an agriculture plantation in the province or in another province for a few weeks. On the other hand, the majority of women in urban areas are paid employees ( $60 \%$ in 2011).

## 3. What Drives Female Labour Force Participation in Cambodia?

Theory suggests that differences in individual characteristics, socio-economic class, familial responsibilities and labour market conditions are all important factors associated with whether women work for pay or not. In Cambodia, women's LFP is quite high, at 85 per cent. In view of this fact, rather than identifying key factors associated with the probability of women's LFP in the country, we'll attempt to identify factors that drive the way in which women participate. More specifically, we'll try to pinpoint what drives some women to engage in selfemployment and others in wage work.

To this end, data from the CSES 2008 (NIS, 2010a) will serve as the basis for three regression models developed to examine sub-samples of women. While more recent CSES surveys have been conducted, only the 2008 micro-level data is publicly available. Although this could arguably lead to a dated analysis, we believe the results are informative and relevant given limited structural transformation has taken place since past several years (as evidenced in the trend analysis).

The first model looks at the factors associated with the women's labour force supply, for all women aged 15-64. The second model provides estimates for the decision to partake in the labour force supply for those women who are working for pay or profit (self-employed and wage employment), but excludes those who are unpaid family workers. Finally, the third model looks only at women who are in wage employment. Table 8.10. presents the empirical models, variables utilized and the regressions' outputs.

The CSES 2008 (NIS, 2010a) dataset contains observations on 5,884 women between the ages of 15 and 60 years, of which 28 per cent were not in the labour force at the time of the survey while 72 per cent of women were economically active. Of the women participating in the labour force, 30 per cent were selfemployed, 46 per cent were in wage employment and 24 per cent were unpaid family workers (Table 8.10).

The main findings (summarized in Table 8.11, and presented in full in Table A2.) suggest that both push and pull factors are driving participation and type of employment. Overall, women's engagement in labour markets seems to be determined by their age, literacy and by the number of employed male or female members of their household. These drivers are different when considering only women who engage in work for pay or profit, that is, in self-employment or wage work.

Women who are divorced or widowed, with larger household size (and especially with a number of other adult women in the household), have a higher likelihood of engaging in work for pay or profit (self-employment and wage employment), which is also influenced by the wage level in province of residence. Conversely, the presence of employed males and of other employed females in the household, and place of residence (particularly, living in rural areas) seems to constrain women's labour market participation as self- or wage employees.

Table 8.10:
Descriptive Statistics of Women by Model

|  | Not in <br> labour force | Model 1: <br> In labour force | Model 2: <br> Self-employed | Model 3: <br> Wage |
| :--- | :---: | :---: | :---: | :---: |
| Observations | 1643 | 4241 | 1278 | 1934 |
| \% of total women (5,884) | 28 | 72 | 22 | 33 |
| Age | 33 | 34 | 39 | 31 |
| Age group (\%) | 40 |  |  |  |
| $15-24$ | 19 | 30 | 8 | 42 |
| $25-34$ | 13 | 24 | 23 | 27 |
| $35-44$ | 14 | 17 | 29 | 15 |
| $45-54$ | 14 | 9 | 25 | 10 |
| $55-64$ | $52 \%$ married | $53 \%$ married | $65 \%$ married | $45 \%$ single |
| Marital Status | $41 \%$ spouse | $42 \%$ spouse | $53 \%$ spouse | $50 \%$ daughter |
| Relations to Head |  |  |  |  |

Source: National Institute of Statistic of Cambodia (NIS), CSES 2008 (NIS, 2010a).

Table 8.11:
Regression Results on Drivers of Female Labour Force Participation (Positive Impact on Participation)

| Model 1: | Model 2: | Model 3: |
| :--- | :--- | :--- |
| All employment | For pay or profit | For pay (wage) |
| - Age | - Age | - Age |
| - Can write | - Divorced, widowed | - Single, widowed |
| - \# of employed male | - Degree education, | - Degree education, |
| - \# of employed female | - Technical training | - Technical training |
|  | - Education of Head—Degree | - Education of Head—Degree |
|  | - \# of other adult women | - \# of other adult women |
|  | - Household size | - \% of elderly |
|  | - Land ownership | - Land ownership |
|  | - Resident in Plains | - Resident in Plains |

Source: CSES 2004-2011.

Women in wage employment are most likely to be single or widowed, with technical training and in households in which the head holds a degree and encompasses other adult women in the household, with participation also partly determined by the average wage levels in the area. On the other hand, factors that constrain women's wage employment include: head of household has low education, number of employed males in the household, number of other employed adult women in the household and residence in rural areas (see Table 8.12).

Table 8.12:
Regression Results on Constraints to Females' Labour Participation (Negative Impact on Participation)

| Model 1: | Model 2: | Model 3: |
| :--- | :--- | :--- |
| All employment | For pay or profit | For pay (wage) |
| - Health | - Education of Head- | • Health |
| - Household size | Primary, Lower secondary | • Education of Head- |
| - Disabled family | - \# employed males | Primary, Lower secondary |
| member | - \# employed females | • \# employed males |
| - \# of other adult | - Rural | • \# employed females |
| $\quad$ women |  | - Rural |
| - Real GDP per capita |  |  |

Source: CSES 2004-2011.

## 4. Insights from a Primary Household Survey

In addition to the trend analysis and regression analysis presented previously using secondary government data, this study also conducted a household survey of 1,000 households in two provinces (Kampong Chhnang and Kandal) in 2013 to gather primary data for deepening our understanding of the drivers of female LFP. The household survey provided an opportunity to speak directly to the workingage women and to hear their stories and challenges. These two provinces were selected because of the increasing diversity of job opportunities for women, mainly with the increasing expansion of the garment sector to these areas. The findings from this household survey complement those from the first two analysis and aids in informing policy interventions that fit with the real context.

### 4.1. Summary of Sample

In total, 1,000 households were surveyed, of which 800 households were in rural areas and 200 households were in urban areas. Urban areas in this study are defined as the provincial towns of the respective provinces, while all areas outside the town are classified as rural. Almost all of the households own land-98 per cent of rural households and 94 per cent of urban households, which is to be expected in an economy dominated by subsistence agriculture. The average land size owned by rural households is 1.2 hectares, while urban households own just 0.5 hectares. Incomes of rural households are significantly lower than in urban areas-US\$ 1,523 per year compared to US\$ 2,505 . Consequently, the percentage of households living at or below the national poverty line of 3,871 riels (about US\$ 0.94 ) ${ }^{13}$ per day is also significantly higher in rural areas than in urban areas- 64 per cent versus 32 per cent.

[^53]Table 8.13:
Household Profile

| Household Profile | Rural | Urban | Total |
| :--- | :--- | :--- | :--- |
| Number of Respondents | 800 | 200 | 1,000 |
| Own land | $98 \%$ | $94 \%$ | $98 \%$ |
| Average of Total Land Size-HA | 1.2 | 0.5 | 1.1 |
| Average Annual Household Income-USD | 1,998 | 3,350 | 2,268 |
| Average Annual Household Expense-USD | 1,523 | 2,505 | 1,720 |
| At or below National Poverty Line* | $64 \%$ | $32 \%$ | $57 \%$ |
| Average of Household Size | 5 | 5 | 5 |
| Average \# of Persons Working | 3 | 3 | 3 |
| Average \# Women Working | 1 | 2 | 1 |
| Average \# Women In school | 1 | 1 | 1 |
| Average \# Children Under 5yr | 1 | 1 | 1 |
| Head of Household | $80 \%$ | $78 \%$ | $80 \%$ |
| Male | 43 | 45 | 44 |
| Average Age | $81 \%$ | $80 \%$ | $81 \%$ |
| Married | $17 \%$ | $9 \%$ | $15 \%$ |
| No education | $52 \%$ | $33 \%$ | $48 \%$ |
| Primary education or less | $27 \%$ | $48 \%$ | $31 \%$ |
| Secondary education | $1 \%$ | $5 \%$ | $1 \%$ |
| Tertiary education | $71 \%$ | $83 \%$ | $73 \%$ |
| Literate | $92 \%$ | $86 \%$ | $91 \%$ |
| Economically active |  |  |  |
| Source |  |  |  |

Source: CSES 2004-2011.
Note: ${ }^{*}$ The national poverty line as of April 2013 is 3,871 riels (about US\$ 0.94 ) per day per capita based on consumption.

Household size is the same regardless of geographic domain, about 5 persons per family, of which 3 persons are economically active (Table 8.13).

Four in five households have males as heads ( $80 \%$ ), which is the traditional family structure in Cambodia. The head is married (81\%) with an average age of 44 years. In rural areas, the majority of heads of households has only a primary school education or less (52\%), and 17 per cent have no education at all. On the other hand, most heads of the households in urban areas have a secondary education ( $48 \%$ ). Nearly all heads of households are economically active ( $91 \%$ ).

In the 1,000 households interviewed, there are a total of 4,744 people ( $52 \%$ female and $48 \%$ male). Within this population, 67 per cent (or 3,190 people) are of working age, defined as $15-65$ years old. More than half of the working-age people are women ( $53 \%$ or 1,697 women). Consistent with the trend analysis, 84 per cent of working-age persons are currently economically active, echoing
again the point that most people in Cambodia cannot afford to not work. The LFP of women in the sample (i.e., number of employed and unemployed women divided by working-age women) is high, 83 per cent. One out of ten of the work-ing-age person in the survey are in school, and only 6 per cent are inactive due to illness/disabilities or only do house work.

### 4.2. Household Division of Labour

According to theory, the LFP decision of a woman is the result of a joint decision making process of her household. Thus, the time allocated to market work will depend on a number of personal and household characteristics as well as on the labour market characteristics. In the two provinces surveyed (as well as in Cambodia in general), the average household size is five persons. There is usually a male head (father), female spouse of head (mother) and three children. A look at the time allocation of members in the household by gender and position can shed light on how the household divides labour.

During the interviews, respondents were asked to estimate the number of hours each group of adult household member ( 15 years old and above) spent on the following key activities:

- Economic Activity: Includes wage employment, self-employment and contributing family work
- Household Maintenance: Includes cleaning of dwelling and utensils, shopping, paying bills, bookkeeping, washing clothes, cooking, fetching water and repairing home
- Taking Care of Other Members: Includes washing, dressing, feeding of children and caring for elders and/or disabled members.
- Learning and Other Activities: Includes going to school, attending training, reading, etc.
- Personal Care: Includes eating, sleeping, resting and participating in associations and other social groups

The findings presented in Table 8.14 reveal that:

- In general, all working-age adults in the household are economically active regardless of their position in the household or gender. Adult members who are not heads or spouse of the head, typically the daughters and sons, work for more hours on economic activities than their parents-seven hours for women and six hours for men. The longer working hours are due to the participation in wage employment rather than self-employment like their parents.
- Women heads or spouses of heads of household spend most of the time on household maintenance and caring for the family than other household members (4.7 hours per day).
- Other male adult members have the most time allocated for learning, 2.5 hours per day, compared to other household members.

Table 8.14:
Time Allocation by Gender and Position in Households (Average Hours Engaged in a 24-hour Day)

|  | Head or Spouse of <br> Head | Other adult members |
| :--- | :---: | :---: |
| Activities |  |  |
| Women | 5.7 | 7.0 |
| Economic Activities | 2.8 | 1.9 |
| Household Maintenance | 1.9 | 0.9 |
| Taking Care of Other Members | 0.2 | 1.3 |
| Learning and Other Activities | 13.1 | 13.0 |
| Personal Care and Rest |  |  |
| Men | 5.9 | 6.1 |
| Economic Activities | 1.4 | 1.3 |
| Household Maintenance | 0.7 | 0.6 |
| Taking Care of Other Members | 0.2 | 2.5 |
| Learning and Other Activities | 15.4 | 14.6 |
| Personal Care and Rest |  |  |
| Source: |  |  |

Source: Household Survey.

### 4.3. Working Life-cycle of Women

The results in Section 3 revealed that the marital status of the women is one of the key characteristics that define how a woman participates in the labour market. The findings from the household survey are consistent with this point. Segmenting women by marital status can help visualize the working life-cycle of women (Table 8.15):

- Single Women: In the sample, 361 women are single. A large share of single women is in wage employment ( $66 \%$ ). They tend to be the daughter of the head of household ( $88 \%$ ), and are young (average age of 23 years). More than half of them (53\%) have at least some secondary education, and 9 out of 10 can read and write. Few have received technical or skill training besides the basic education.
- Married Women: The sample consists of 868 married women. The majority of them ( $82 \%$ ) are self-employed. Almost all of them are the spouses of the head ( $81 \%$ ). The average age of women in this group is 37 years. Married women tend to have lower education than single women68 per cent have only a primary education or less, and only 69 per cent of them are literate.
- Widowed or Divorced/Separated: With the exception of their relations to the household head (most of the women in this group are daughters of the head of household rather than spouse), the profile is very similar to that of married women.

Table 8.15:
Characteristics of Economically Active Women by Marital Status

|  |  |  | Divorced/ |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Characteristic |  | Single | Married | Widowed | Separated | Total |
| Sample Size |  | 361 | 868 | 139 | 39 | 1,407 |
| Employment | Self-employed | $17 \%$ | $82 \%$ | $85 \%$ | $79 \%$ | $65 \%$ |
| Status | Regular, salaried worker | $66 \%$ | $14 \%$ | $9 \%$ | $15 \%$ | $27 \%$ |
|  | Causal, temp worker | $3 \%$ | $1 \%$ | $2 \%$ | $5 \%$ | $2 \%$ |
|  | Unpaid family worker | $13 \%$ | $3 \%$ | $4 \%$ | $0 \%$ | $6 \%$ |
| Relations to Head | Spouse | $1 \%$ | $81 \%$ | $0 \%$ | $0 \%$ | $50 \%$ |
| of Household | Daughter | $88 \%$ | $13 \%$ | $12 \%$ | $26 \%$ | $33 \%$ |
| Age | Average Age | 23 | 37 | 49 | 41 | 34 |
|  | Minimum Age | 15 | 17 | 20 | 19 | 15 |
| Education | None | $5 \%$ | $16 \%$ | $28 \%$ | $26 \%$ | $15 \%$ |
|  | Primary | $39 \%$ | $52 \%$ | $55 \%$ | $46 \%$ | $49 \%$ |
|  | Secondary | $53 \%$ | $29 \%$ | $14 \%$ | $21 \%$ | $34 \%$ |
|  | Tertiary | $1 \%$ | $1 \%$ | $0 \%$ | $0 \%$ | $1 \%$ |
| Literacy | Can Write/Read | $90 \%$ | $69 \%$ | $48 \%$ | $59 \%$ | $72 \%$ |
| Technical | Yes | $7 \%$ | $6 \%$ | $4 \%$ | $5 \%$ | $6 \%$ |
| Training |  |  |  |  |  |  |

Source: Household Survey.

The legal working age for women (and men) in Cambodia is 15 years. Poverty means that almost all people of working age (both men and women) must work. Thus, the working life of a woman starts when she is 15 years old. Between the ages of 15 and 24 years, she will tend to enter into wage employment, typically as a garment worker. In the past, young women would contribute as unpaid family labour on the farm. However, with the increase in job opportunities, namely due to the expansion of the garment industry, young women are increasingly entering wage employment.

She will tend to get married around the age of 24 years. After marriage, she may continue to work for a short period, until she becomes pregnant. Once she is bearing child, she will exit the labour market. A few may return to wage employment, but the data shows that many will typically continue their work life in the subsistence economy as farmers.

This description is further confirmed with the findings presented in Table 8.16, which tracks the movement of 1,115 married women in the labour force at three points of time: (a) before marriage, (b) after marriage and (c) current situation at the time of the survey.

- Before marriage: The data shows that before marriage, almost all of the married women in the sample were employed, mostly as self-employed

Table 8.16:
Accession and Retirement from Labour Force (For Married Women Only)

| Employed/Employment status | Before marriage |  | After marriage |  | Current situation |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Count | \% | Count | \% | Count | \% | Average age |
| Employed | 1,045 | 94 | 1,069 | 96 | 974 | 87 | 38 |
| Self-employed | 444 | 40 | 839 | 75 | 809 | 73 | 40 |
| Regular, salaried worker | 279 | 25 | 192 | 17 | 123 | 11 | 30 |
| Causal, temporary worker | 16 | 1 | 17 | 2 | 12 | 1 | 42 |
| Unpaid family worker | 306 | 27 | 21 | 2 | 30 | 3 | 28 |
| Not Employed | 70 | 6 | 46 | 4 | 141 | 13 | 45 |
| Total | 1,115 | 100 | 1,115 | 100 | 1,115 | 100 | 39 |

Source: Household Survey.
(40\%) and unpaid family workers ( $27 \%$ ) on the family farm, but also as paid employees (25\%).

- After marriage: After marriage, most women transition into self-employment, specifically managing own farm. The number of unpaid family workers falls dramatically after marriage. Some women in wage employment also exit the paid labour market at this time.
- Current situation: The time interval between after marriage and current situation varies because of the different age groups in the sample. On average, the time difference is about 15 years. At this stage, the data shows that most women remain outside the paid labour, while some exit the labour entirely because of two reasons: (a) they are too old to work (retired) or (b) they have small children.


### 4.3.1. Married Women with Small Children versus Without Small Children

Does the presence of a small child (children) in the household, specifically for married women, change women's labour market behaviour? The survey findings show that a small child does not change the presence of married women in the labour market. Again, this reiterates the point that most people in Cambodia cannot afford to not work, confirming findings from the trend analysis. Over 80 per cent of married women in the sample, whether they have or do not have a small child, are self-employed, namely farmers (Table 8.17). However, few married women, in general, are engaged in wage employment. The striking factor that appears to influence the participation of married women in wage employment is age. Married women who are currently in wage employment, regardless of having a small child or not, tend to be much younger-28-29 years on an average compared to 33-44 years for self-employed (Table 8.18).

Table 8.17:
Main Activity of Married Women by Presence of Small Children (\%)

| Main activity/Employment status | Have small children | Without small children | Total |
| :--- | :---: | :---: | :---: |
| Working for pay/profit/household gain | $\mathbf{8 8}$ | $\mathbf{9 2}$ | $\mathbf{9 0}$ |
| Self-employed | 70 | 77 | 73 |
| Regular, salaried worker | 14 | 11 | 12 |
| Causal, temporary worker | 1 | 1 | 1 |
| Unpaid family worker | 4 | 2 | 3 |
| Inactive, only do household work | $\mathbf{1 1}$ | $\mathbf{8}$ | $\mathbf{1 0}$ |
| Inactive because ill/disabled | $\mathbf{1}$ | $\mathbf{0}$ | $\mathbf{0}$ |
| In school | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{0}$ |
| Total | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ |
| Total (number of women) | $\mathbf{5 0 2}$ | $\mathbf{4 6 4}$ | $\mathbf{9 6 6}$ |

Source: Household Survey.

Table 8.18:
Average Age of Married Women by Employment Status

| Employment status | Have small children | Without small children | Total |
| :--- | :---: | :---: | :---: |
| Self-employed | 33 | 44 | 38 |
| Regular, salaried worker | 29 | 28 | 28 |
| Causal, temporary worker | 38 | 47 | 42 |
| Unpaid family worker | 26 | 29 | 27 |
| Total | $\mathbf{3 2}$ | $\mathbf{4 1}$ | $\mathbf{3 7}$ |

Source: Household Survey.

From the perspective of women, almost all respondents (98\%) said that it is very hard for married women with small children to participate in wage employment. The reason is that there are no childcare services available, and if there are, they cannot trust leaving their children with other people. Only if they have elderly parents or relatives in the household to watch the child/children, can they work outside the home. For married women with no small children, the general viewpoint is that it is easy for this group of women to engage in wage employment because they have less household responsibilities; the only problem that may arise is that her husband may not allow her to work (21\%). On the other end of the spectrum, 91 per cent of the respondents said that it is very easy for single, young women to take on a wage employment because they do not have the same housework commitments as married women (Table 8.19).

The findings highlight the general mentality of women that wage employment is only a temporary solution to overcome financial problems and not a long-term life choice. Women will join the wage employment force when they are young, but will generally exit permanently once they are married. Instead, she will focus her
time on self-employment, specifically rice farming. This mentality could be a factor discouraging women from upgrading their skills. There are two reasons shaping this attitude.

First, it may be related to the lack of paid job opportunities outside the garment industry. Work in garment factories is very demanding-as a sewer, seamstress, etc. After a certain period of time, women working in the garment sector get physically worn out. The limited prospects for upgrading to a higher position and higher wage could also be a factor why few women decide not to return to wage employment. Second, the dependence of households on rice farming as a social security blanket means that workers (both men and women) will return to the farm eventually. This is true not only for rural households, but also for many periurban households outside Phnom Penh capital.

### 4.4. Sector and Occupation

It is not surprising that the majority of women in self-employment, unpaid family work and casual work are concentrated in the agriculture sector, while wage employment is primarily in the garment sector. Roughly 24 per cent of selfemployed women engage in wholesale and retail trade. The lack of diversity in occupation reflects the limited opportunities available in these areas for women.

### 4.4.1. Rural Versus Urban

The sectoral and occupational structure of women's employment differs between rural and urban areas. In the survey, urban areas were defined as provincial towns, while areas outside the towns were labelled as rural. In rural areas, the main type of self-employment is agriculture ( $79 \%$ of rural women); while in urban areas,

Table 8.19:
Do You Think It is Hard for These Groups of Women to Participate in Wage Employment? Why or Why Not?

|  | Hard to <br> participate? |  | Why or why not? |
| :--- | :---: | :---: | :--- | | Group | Yes | $98 \%$ | No one to take care of child(ren). <br> Married with small children <br> Married without small children |
| :--- | :--- | :--- | :--- |
|  | Yes | $21 \%$ | Have parent and relatives to watch <br> child(ren) while I work. |
| Single | No | $79 \%$ | Husband will not allow me to work because <br> of too many household responsibilities. <br> No children to care for so have free time. |
|  | Yes | $9 \%$ | Must help take care of siblings and family. <br> Free to work because no children or <br> husband to take care, and can help <br> financially support parents. |
|  | No | $91 \%$ |  |
|  |  |  |  |

Source: Household Survey.
most self-employed women are engaged in wholesale and retail trade ( $68 \%$ of urban women). For wage employment, 9 out of 10 rural women are engaged in manufacturing (specifically working in garment factories). In urban areas, the majority of employed women ( $68 \%$ ) are also working in the garment sector, but there are also some women working in education (14\%) and government, public administration and service jobs ( $10 \%$ ). Almost all unpaid family workers in rural areas are involved in the agriculture sector; in urban areas, 50 per cent are in agriculture and 25 per cent are in the wholesale and retail trade.

### 4.5. Wages and Work Conditions

### 4.5.1. Wages (Wage Employment Only)

The challenge of comparing wages using the survey dataset is that it does not take account of differences due to seniority, experiences, education or the profile of the employer, for example, the size of business. Among the people in the sample currently in wage employment, the average effective hourly wage is $\$ 0.59$, of which women earn slightly less than men- $\$ 0.53$ compared with $\$ 0.64$. In general, only 8 per cent of women in wage employment felt that wages were too low. For women, the occupation with relatively high wages is teaching ( $\$ 0.90$ ), which is about the same level as men. The effective wage for garment workers, which is the primary source of wage employment for women, is $\$ 0.51$ per hour, way down the list. Women employed as janitors/cleaners earn the least in the sample, $\$ 0.30$ per hour.

Table 8.20:
Effective Hourly Wage by Occupation and Gender in US\$ (For Wage Employment Only)

| Occupation | Female | Male | Total | F/M Ratio |
| :--- | :---: | :---: | :---: | :---: |
| Teacher/lecturer/professor | 0.90 | 0.91 | 0.91 | 0.98 |
| Chef | 0.83 | 1.67 | 1.25 | 0.50 |
| Office staff | 0.76 | 0.67 | 0.68 | 1.14 |
| Agriculture labourer | 0.70 | 0.62 | 0.65 | 1.13 |
| Repairer (car, motor, computer, etc.) | 0.67 | 0.45 | 0.48 | 1.49 |
| Sales clerk | 0.67 | - | 0.67 | - |
| Clerical worker | 0.64 | 0.87 | 0.82 | 0.74 |
| Security guard | 0.63 | 0.45 | 0.51 | 1.38 |
| Garment factory worker | 0.51 | 0.51 | 0.51 | 0.98 |
| Domestic worker | 0.43 | 0.18 | 0.35 | 2.35 |
| Construction labour | 0.42 | 0.65 | 0.64 | 0.64 |
| Janitor/Cleaner | 0.30 | 0.35 | 0.32 | 0.88 |
| Total | $\mathbf{0 . 5 3}$ | $\mathbf{0 . 6 4}$ | $\mathbf{0 . 5 9}$ | $\mathbf{0 . 8 4}$ |

Source: Household Survey.

The occupation in which women earn significantly less than men are: chef ( $50 \%$ less than men), construction labour ( $36 \%$ less than men) and clerical work ( $26 \%$ less than men). Wages for women in some occupations greatly surpassed that of men: domestic work ( $135 \%$ higher than men) and repairer ( $49 \%$ higher than men) (Table 8.20).

### 4.5.2. Contract (Wage Employment Only)

An employment contract is an important legal agreement that specifies the wages, working conditions and arrangement between the employer and the employee. It is one of the aspects of decent work. In the sample, most people in wage employment have written, fixed duration contracts- 60 per cent of women and 44 per cent of males. Most of the remaining people (38\%) do not have any agreement, whether verbal or written with their employer. The majority of those with contract are employed in the garment sector, and the majority of those with no contracts are also in the garment sector. This suggests the need for improved monitoring of the sector to further enhance decent work (Table 8.21).

### 4.6. Household Decision-making Power of Women

According to the responses of women, both the male and female heads of household typically make important household decisions. In particular, decisions related to the economic activities and investments of the household are made by both males and females such as the following: purchase of household appliances ( $69 \%$ ), making investments ( $61 \%$ ), seed management and crops to product ( $51 \%$ ) and selling of agriculture produce (50\%). Both males and females also have a say in the choice of health facilities (66\%). The realm in which most women say they solely decide is savings ( $40 \%$ said females make the decision on how much to save) (Table 8.22).

Table 8.21:
Type of Employment Contract by Gender (\%, Wage Employment only)

| Type of contract (Wage employment only) | Female | Male | Total |
| :--- | :---: | :---: | :---: |
| None | 33 | 43 | 38 |
| Written, fixed duration contract | 60 | 44 | 52 |
| Written, undetermined duration contract | 4 | 11 | 7 |
| Verbal, fixed duration contract | 0 | 1 | 0 |
| Verbal, undetermined duration contract | 1 | 1 | 1 |
| Other (specify) | 0 | 0 | 0 |
| Don't know | 1 | 1 | 1 |
| Total | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 0}$ |

Source: Household Survey.

Table 8.22:
Who Makes Decisions on the Following Issues in the Household? (\%)

| Decisions | Male | Female | Both | N/A |
| :--- | :---: | :---: | :---: | :---: |
| Purchase of household appliances | 2 | 29 | 69 | 0 |
| Choice of taking health facility | 2 | 32 | 66 | 0 |
| Making investments | 1 | 15 | 61 | 23 |
| Seed management and crops to be cultivated | 2 | 23 | 51 | 25 |
| Selling and marketing of agriculture produce | 1 | 19 | 50 | 30 |
| Education related decision | 3 | 21 | 44 | 32 |
| Taking out loans | 2 | 14 | 39 | 45 |
| Livestock breeding and maintenance | 6 | 15 | 38 | 42 |
| Saving | 2 | 40 | 24 | 35 |

Source: Household Survey.

Table 8.23:
Do the Women Income Earner Hold the Money Earned? (\%)

| Employment status | Held by income earner | Held by other household member | Total |
| :--- | :---: | :---: | :---: |
| Self-employed | 92 | 8 | 100 |
| Regular, salaried worker | 31 | 69 | 100 |
| Casual, temporary worker | 74 | 26 | 100 |
| Total | $\mathbf{7 4}$ | $\mathbf{2 6}$ | $\mathbf{1 0 0}$ |

Source: Household Survey.

Table 8.24:
If Women Do Not Hold the Income Earned, Who Holds the Income? (\%)

| Employment status | Male head | Female head/spouse of head | Other | Total |
| :--- | :---: | :---: | :---: | :---: |
| Self-employed | 6 | 87 | 6 | 100 |
| Regular, salaried worker | 3 | 96 | 2 | 100 |
| Causal, temporary worker | 0 | 100 | 0 | 100 |
| Total | $\mathbf{3}$ | $\mathbf{9 4}$ | $\mathbf{3}$ | $\mathbf{1 0 0}$ |

Source: Household Survey.

### 4.6.1. Who Holds Money Earned by Women?

In addition to key household decision-making, it is also interesting to look at who holds the income earned by women. The survey findings show that 92 per cent of self-employed women and 74 per cent of casually employed women hold their income (Table 8.23). On the other hand, 69 per cent of regular, salaried worker do not hold their income but hand it over to another household member. Regardless of the employment status, if someone else in the family holds the income, it is usually the female head of household or spouse of the head (Table 8.24), holding about 78 per cent of the total income (Table 8.25). This is the common practice in

Table 8.25:
Percentage of Income Held by Someone Else

| Employment status | Male head | Female head/spouse of head | Other | Total |
| :--- | :---: | :---: | :---: | :---: |
| Self-employed | 60 | 86 | 40 | 81 |
| Regular, salaried worker | 87 | 74 | 79 | 74 |
| Causal, temporary worker |  | 81 |  | 81 |
| Total | $\mathbf{7 6}$ | $\mathbf{7 8}$ | $\mathbf{6 5}$ | $\mathbf{7 8}$ |

Source: Household Survey.

Table 8.26:
What Are the Constraints That Women in Each of These Groups Face in Getting Higher Education, Vocational Training or Other Technical Training? (\%)

| Constraints to higher education and or skill/vocational training | Percentage out of 1,000 women respondents |  |  |
| :---: | :---: | :---: | :---: |
|  | Married with small children | Married with no small children | Single |
| No money to finance | 16 | 24 | 52 |
| Parents/family does not allow women to get higher education | 3 | 10 | 2 |
| No schools nearby | 1 | 2 | 2 |
| Security concerns | 0 | 0 | 3 |
| Not smart/cannot understand | 2 | 1 | 1 |
| No time due to house work | 85 | 26 | 1 |
| No time because need to earn income for family | 9 | 21 | 3 |
| Lack of transportation | 0 | 1 | 1 |
| Don't want to learn | 1 | 4 | 6 |
| None | 1 | 23 | 40 |

Source: Household Survey.

Cambodia, in which the female head or spouse of head manages the household income and expenditures. Since most self-employed or casually employed women are the head of household or spouse of the head, they tend to hold the income; since most women in wage employment are the daughters of head, they must provide their income to their mother.

### 4.6.2. Education and Skill Development

Interestingly, very few women said 'lack of interest to learn' was a constraint to obtaining higher education and skill training. Rather, lack of money to finance education and training was the commonly mentioned reason across all groups of women, specifically for single women. For married women with small children, their biggest constraint for furthering their education is household responsibilities.

For married women with no small children, household work and obligations to help financially support the family are two other constraints that hinder them from enhancing their education and skill (Table 8.26).

## 5. Conclusions and Policy Implications

Given the relatively small size of the working-age population in Cambodia, policies that enable women to enter, remain and return to the workforce are vital for the country to achieve a sustainable industrial transformation. The purpose of this study was to understand what drives women's LFP and employment in Cambodia and to provide recommendations on the required enabling policy environment to ensure decent employment for women.

It is important to note here that the LFPR of women in Cambodia is among the highest in the world with close to gender parity, indicating little to no gender discrimination in terms of joining the labour force. The rates between men and women starts to diverge at the age of 24 , where men's participation rate outpaces women's as women might leave the labour force to get married or to bear children. Therefore, in spite of its high LFPR relative to other countries in Asia, Cambodia still has the possibility of raising its women's LFPR further if it can successfully bring married women and mothers to the labour market.

On the other hand, there are concerns with employment quality-the majority of employed women are self-employed (58.8\%), 27.1 per cent are paid employees and 13.9 per cent are unpaid family workers. Almost all women engaged in selfemployment, unpaid labour and causal work are in the agriculture sector; almost all female wage employment is in the garment sector and services sector. It is also well known that Cambodia's economic growth, which has been relatively recent, has been based on its garment export-led strategy which has flourished based on the work of many young rural women workers. However, the largest employing sector for women and men in the country is agriculture. There has, therefore, been some structural transformation in terms of women's employment as apparent by the shift from agriculture to garments for many young women, but garments employment is still a small share of total employment in the whole economy.

In this overall context, this chapter looks at the life-cycle of women in Cambodia and tracks the pattern of employment over the life-cycle. The analysis and the household survey reveal that age and marital status influence the type of employment a woman engages in (i.e., unpaid family worker, self-employment or wage employment). Indeed, women have a working life-cycle, of which wage employment only occupies a short time period between the ages of 15 and 26 years. For single, young women less than 26 years, most are in wage employment working in garment factories. For married, young women less than 28-29 years, some may still be in wage employment until they become pregnant. Once they bear a child, they will leave wage employment and return to work on the farm as self-employed or unpaid family worker for their parents. In general, most women will continue to stay out of the wage employment after this stage. LFP of women in rural areas
is much higher than in urban areas, most notably among young women under 20 years and elders over 54 years.

The findings also highlight a prevalent mentality of women that wage employment is only a temporary solution to overcome financial problems, and not a long-term life choice. Women will join wage employment when they are young, but will generally exit permanently once they are married and become the spouse of the head of household. Instead, they will focus their time on self-employment, specifically rice farming. This mentality could be a factor discouraging women from upgrading their skills. There are two reasons shaping this attitude. First, it may be related to the lack of paid job opportunities outside the garment industry. Work in garment factories is very demanding-as a sewer, seamstress, etc. After a certain period of time, women get physically worn out. The limited prospects for upgrading to a higher position and higher wage could also be a factor why few women decide not to return to wage employment. Second, the dependence of households on rice farming as a social security blanket means that workers (both men and women) will return to the farm eventually. This is true not only for rural households, but also for many peri-urban households outside Phnom Penh capital. For policy, one way to reduce the dependence of workers on the subsistence economy (which also means to reduce the risk of entering wage employment) is to ensure that wages are not only sufficient to cover subsistence expenses, but also to allow workers to accumulate some savings for the future and to deal with crises.

In addition, the results underline the importance of better education for decent employment and for potentially prolonging women's engagement in wage employment even after marriage. Interestingly, very few women said 'lack of interest to learn' was a constraint to obtaining higher education and skill training. Rather, lack of money to finance education and training was the commonly mentioned reason across all groups of women, specifically for single women. Most girls cannot afford to stay in school or continue their education. At the same time, the return on education is perceived to be low. Thus, policies need to create innovative, nontraditional skill development that does not create a financial burden on the individual, for instance, setting up skill certifications at the workplace. These trainings should be designed with the vision to help women build a career and equip them for higher skilled occupations in other sectors, thus increasing the returns to education and skills development. These policies could potentially help delay marriage and encourage women to postpone having children, thus keeping them in the labour market for a longer period of time and enabling them to acquire more job experiences, which in turn could increase their chances of finding employment once they return to the labour market after raising children.

This study also illustrated that household work and care burden on women, especially married women, are the key cultural factors constraining participation. Traditional, social norms place a larger burden and responsibility for the care of children and household work on women. This is further exacerbated by the lack of reliable, institutional support for the care of young children and elderly people. Policies that may improve the quality of jobs for women are as follows:

Given the wide range of drivers behind women's economic participation in Cambodia, enhancing women's access to gainful employment would require
concerted policy action on a number of fronts. First, it is important to raise awareness on the relevance of care work and promote more equitable sharing of the burden of household chores between men and women. These could take the form of public policies, such as parental leave schemes, as well as public awareness raising campaigns attempting to change social norm. More flexible work arrangements, such as part-time and home-based work, could allow for better time management for women, which would thus be able to engage in paid employment while not abdicating from household duties. Similarly, policies that provide incentives for businesses to set up well-monitored nurseries for young children and day care centres for the elderly could on one hand free up female labour, and on the other, create employment opportunities for women. Finally, it is important to provide a secure environment for women to travel to and from work at different hours of the day, including security policies, public lighting, transportation, sanitation and hygiene, etc.

## Appendix 1. Empirical Results

Table A1:
Variables in Regression Model

| Group | Variables |
| :--- | :--- |
| Demographics | Age, marital status, health |
| Education | Literacy, education attainment |
| Household | Education of head, debt, land size, disabled family member, number of female <br> wage earners, number of male wage earners, number of employed female, <br> number of employed males, number of other adult women, \% of elderly <br> members, daily consumption, have children under 5 years |
| Labour Market | Real GDP per capita in province |
| Spatial Variable | Rural zones |

Source: Household Survey.

Table A2:
Logistic Regression Outputs: Predicted Probabilities

|  | Model 1 | Model 2 | Model 3 |
| :--- | :---: | :---: | :---: |
|  | All <br> employment | Work for <br> pay or profit | Wage <br> employment only |
| Predicted Probabilities | 30.355 | 33.004 |  |
| Constant |  | 34.925 |  |
| Demographic Characteristics | $0.359^{* * *}$ | $0.11^{* * *}$ | 0.025 |
| Age | $-0.004^{* * *}$ | $-0.001^{* * *}$ | 0.3 |
| Age squared | 0.221 | 0.038 | 0.565 |
| Single | 0.393 | $0.866^{* * *}$ | 0.226 |
| Divorced |  |  |  |


| Widowed | -0.166 | $1.029^{* * *}$ | $0.458^{* * *}$ |
| :---: | :---: | :---: | :---: |
| Person with bad health | $-0.756^{* * *}$ | -0.055 | 0.215* |
| Education Characteristics |  |  |  |
| Can write | 0.382* | -0.013 | 0.194 |
| Education: primary | -0.063 | 0.056 | -0.011 |
| Education: lower second | 0.11 | -0.045 | -0.141 |
| Education: upper second | 0.05 | 0.094 | -0.148 |
| Education: degree | 0.534 | $0.625^{* *}$ | $0.654^{* *}$ |
| Education: technical | 0.945 | $1.026^{*}$ | $1.716^{* * *}$ |
| Household Characteristics |  |  |  |
| Head education: primary | -0.015 | $-0.202^{* *}$ | $-0.361^{* * *}$ |
| Head education: lower second | 0.005 | $-0.223^{* *}$ | $-0.48^{* * *}$ |
| Head education: upper second | -0.038 | 0.046 | -0.098 |
| Head education: degree | -0.243 | $0.513^{* *}$ | $0.866^{* * *}$ |
| Head education: technical | -0.023 | 0.135 | -0.119 |
| Land size m ${ }^{2}$ | 0 | 0 | $0^{*}$ |
| Own land | 0.183 | 0.204* | $0.317^{* *}$ |
| Have disabled family member | $-0.578^{* *}$ | $-0.243$ | -0.271 |
| Household size | $-0.118^{* *}$ | $0.11^{* * *}$ | -0.025 |
| Number of adult women | $-1.527^{* * *}$ | $0.299^{* * *}$ | $0.344^{* * *}$ |
| Number of employment men | $0.101^{*}$ | $-0.303^{* * *}$ | $-0.108^{* * *}$ |
| Number of employed women | $3.077^{* * *}$ | $-0.638^{* * *}$ | $-0.475^{* * *}$ |
| Household has children under 5 years | -16.629 | -21.645 | -22.54 |
| Presence of elders in household | -0.256 | 0.166 | 0.573* |
| Log per capita daily consumption (KHR) | 0.386 | 0.549 | -0.183 |
| Outstanding debts in household (KHR) | 0 | 0 | 0 |
| Labour Market Characteristics |  |  |  |
| Log average wage (KHR) | 0.173 | $1.699^{* * *}$ | $2.214^{* * *}$ |
| Log real GDP per capita | $-1.048^{*}$ | -0.215 | -0.324 |
| Spatial Characteristics |  |  |  |
| Rural | 0.117 | $-0.522^{* * *}$ | $-0.484^{* * *}$ |
| Coastal | -0.049 | -0.177 | -0.33 |
| Tonle Sap | -0.23 | 0.186 | 0.018 |
| Plains | -0.26 | 0.593 ** | $0.537^{* *}$ |
| Plateau Mountain | -0.431 | 0.275 | 0.331 |
| Number of Observations | 5884 | 5884 | 5884 |

Source: Household Survey.
Note: Significant at: ${ }^{*}=0.1,{ }^{* *}=0.05,{ }^{* * *}=0.01$.

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## 9

## Women's Employment in Indonesia

## Gaining More from Structural Transformation

Makiko Matsumoto

## 1. Introduction

Since the onset of the global financial crisis in 2007-2008, 'inclusive growth' has increasingly become the focus of national policy discussions. One important aspect of making growth inclusive is to recognize the fact that some segments of the population had been 'excluded' from the growth process, with little recognition given to the contributions they had made in the economy and the society. In this regard, women's active participation in the labour market and improved access to decent work form an important part of the inclusive growth process. More active participation in the labour market constitutes one of the means by which women gain greater ownership and control over the fruit of their labour. At the household level, if women control a greater share of income, this, in turn, can generate greater benefits to the young household members, as has been argued by the literature on intra-household resource allocation (e.g., Haddad et al., 1997). Increased labour force participation and employment can provide women with greater visibility, voice and bargaining power inside and, eventually, outside the household. Without such active participation, women's contributions toward household survival and the economy go largely unmeasured and very often unrecognized. At the same time, participation and employment per se do not automatically generate a better situation for women. Participation occurs in a context where social differentiations along gender dimension exist. As a result, gender segregation in the labour market tends to remain across occupation and sectors; and albeit being on a downward trend, gender wage gap persists (e.g., Mehra and Gammage, 1999; Chapter 5 in World Bank, 2012).

Indonesia is the third most populous country in the Asia Pacific region, with a total population of 237.6 million in $2010 .{ }^{1}$ It is a large archipelago country, with considerable diversity across provinces and districts in terms of ethnic composition, community practices, governance, urbanization and livelihoods. The diversity across locations in Indonesia may have been reinforced in the last decade or so due to large-scale decentralization of the governance structure since 2001. ${ }^{2}$ At the same time, the population is largely concentrated in Java, even though the share of total population in Java moderately declined in recent years: from 54.2 per cent in 1995 to 50.0 per cent in 2010 (Budan Pusat Statistik [BPS] web).

The political system and the economic structure of Indonesia have experienced a significant change since the Asian financial crisis in 1997-1998, marked by an end to a 32 -year rule by Soeharto in 1998. Prior to the 1997-1998 crisis, Indonesia has experienced decades of strong economic growth and structural change from the 1970s to the 1990s. The structure of GDP and employment shifted out of agriculture toward manufacturing and services. Yet, the process of structural change in the labour market stagnated during the decade following the Asian financial crisis, triggered by a sharp drop in real GDP growth in 1998. Indonesia grew at an average annual rate of 6.6 per cent during the 1986-1997 period. Between 1997 and 2000, GDP contracted by 2.3 per cent on average per annum, before recovering to 5.1 per cent between 2000 and 2007 (Dhanani et al., 2009). Those who lost jobs during the 1997-1998 crisis sought temporary refuge in agricultural employment and, consequently, the share of employment in agriculture rose from 41 per cent in 1997 to 45 per cent 1998 (see, e.g., Islam and Chowdhury, 2009). The share of agricultural employment subsequently stagnated above 40 per cent until 2009, when it started to show a trend decline to reach 34 per cent by August 2014 (BPS web). ${ }^{3}$ From employment perspective, the decade of 2000s has been marked by low output elasticities of employment (Islam and Chowdhury, 2009) and slow growth in formal sector employment (Manning and Roesad, 2007). Indeed, the period following the Asian financial crisis has been described as one of 'jobless growth' (Resosudarmo and Yusuf, 2009).

To understand how Indonesian men and women have sustained their livelihoods over a period that is mixed with turmoil, challenges and opportunities, an examination of labour market indicators is needed for a surmise. Among ASEAN member states for which data is available in recent years, Indonesian people participate in the labour force somewhat less than their neighbours. Between 2010 and 2013, the period average labour force participation rate in Indonesia stood at 68 per cent against 70 per cent for ASEAN as a whole (ILO and ADB, 2014; Table F1-2). What

[^54]is notable in Indonesia compared to other ASEAN member states is the very high participation rate of men against one of the lowest participation rates of women. Indonesian men participated the most in the labour force in ASEAN at an average rate of 84 per cent between 2010 and 2013. On the other hand, the participation rate of Indonesian women was one of the lowest at 51 per cent. ${ }^{4}$ As a corollary, Indonesia had the largest gender gap in the labour force participation rate in ASEAN, at an average of 33 percentage points between 2010 and 2013.

Going back almost a couple of decades in history shows that the gender gap in the labour force participation rate has been persistent in Indonesia, with little discernible trend, whether narrowing or widening. Between 1996 and 2012, at 51 per cent on average, Indonesia's female labour force participation rate remained more than 30 percentage points below men's. During the same period, among women who were employed, more than a third undertook contributing to family work.

Nevertheless, among countries with an important proportion of Muslim population, Indonesia has historically had a relatively high female participation rate in the labour market (Manning, 1998). Figure 9.1 shows that apart from the countries of the Commonwealth of Independent States and Sub-Saharan Africa and Kuwait, Indonesia's average female labour force participation rate of 51 per cent in the 2000s was relatively high. Moreover, it is much higher than found in South Asia, as noted in this volume (Chapters 4, 5, 6, and 7).

Against this backdrop, the chapter describes some of the factors behind women's participation in the labour market and the kind of work they undertake by exploring the diversity of situation that exists across the provinces of Indonesia. Women's decision and ability to participate in the labour market, and the type of work they undertake, are not solely determined by women themselves. Household needs, in terms of incomes and care, influence the decision-making process of women on whether and how they participate in the labour market. As women are much more likely to be contributing family workers than men in Indonesia, the income-generating activities that male household members undertake may influence women's employment opportunities and prospects. For example, if a male household head runs a family-run shop, a female spouse or children is more likely to help out in the shop.

Moreover, when households experience income shocks due to economic downturns or other uncalled-for events, men's situation in the labour market deteriorates because of job loss or fall in earnings, particularly as men are the main breadwinners in Indonesia, as will be described below. In such times, it has been noticed that women take more active part in the labour market. This has been called the 'added worker effect', referring to a temporary increase in labour supply of married women whose husbands have become unemployed (Lundberg, 1985). A similar effect is believed to have been present in Indonesia during the financial crisis in East and Southeast Asia in 1997-1998. Prime-age women became more

[^55]Figure 9.1:
Average Female Labour Force Participation Rates in the 2000s, Selected Countries (\%)


Source: ILO KILM, 7th edition.
Note: Member countries of the Islamic Development Bank for which female labour force participation rate data are available in the 2000 s are presented. Countries with at least two observations are presented. However, given the lack of uniformity in data availability across countries between 2000 and 2009, the above graph only presents a rough illustration of the relative position of Indonesia among the selected group of countries, and cannot be used for a robust cross-country comparison.
active in supporting family businesses (Thomas and Frankenberg, 2007). Since then, the interest in women's labour market responses in times of economic downturns has revived due to the 2007-2008 global financial crisis, subsequent sluggish recovery and continued uncertainty over the onset of deflation in a broad range of developed economies (for a recent review, see Sabarwal et al., 2010).

If Indonesian women are responsive to the situation in the labour market, particularly during downturns, the current literature is not so clear on what happens to them when the economy stabilizes and starts to recover and grow. Furthermore, becoming more active in the labour market when the economy is in a crisis or a downturn, limits the options with regard to available work. This in turn, may propel women to exit fast when men's earnings and job opportunities improve because the kind of work that was available was insecure or with low pay and benefits, which are not worth pursuing when household incomes recover. A good understanding of women's decisions vis-à-vis the labour market during economic crisis and downturns, as well as how the interactions between men and women's participation and employment may have changed over time, would provide a sound knowledge base for supporting more inclusive economic growth and development process. This chapter aims to contribute to a consolidation of the
knowledge base to move the thinking forward in narrowing the large gap that persists between male and female participation in the labour market.

The main objectives of this chapter are to: (1) examine the long-term trend in the pattern of female employment and (2) examine the long-term trend in the relationship between male and female labour market outcomes to understand whether women's patterns of participation and employment are responding to available opportunities. The analysis covers 1996-2012 period, with a breakdown in population groups into young women (15-24), women of prime working age (25-54) and older women (55+).

The chapter finds that there have been notable structural changes in the female employment situations, particularly since the late 2000s, away from agricultural and vulnerable forms of employment, towards wage and salaried employment in non-agricultural sectors. It highlights the existence of diversity in participation and employment of women across provinces, and this diversity is much greater than among men. This suggests that women are responsive to the opportunities available in the labour market and yet, have remained a secondary actor in the labour market compared to men. This finding is descriptively supported by the analysis in Section 3 using evidence from the micro-data of the labour force surveys, where the association between provincial-level male labour market outcomes and outcomes of women in wage employment tends to be positive, on the whole. Thus, as long as non-agricultural employment opportunities are growing, measures to promote women's greater participation in the labour market would help accelerate structural changes of the economy and the labour market.

The chapter is organized as follows. Section 2 discusses key economic trend and trend in the female and male labour market outcomes. Section 3 examines analysis based on the micro-date on women's employment outcomes. Section 4 concludes by discussing areas that need further empirical substantiation, as well as policy debate that needs to emerge from the analysis.

## 2. Women's Employment Trend in Indonesia: 1996-2012

### 2.1. The Economic Context

The Indonesian economy suffered a deep and sudden shock in 1997-1998, followed by a sluggish recovery period, with ups and downs since 2000 (Figure 9.2). Compared to ASEAN total, it can be seen that Indonesia experienced a very sharp contraction in GDP during the East and Southeast Asian financial crisis of 1997-1998, while the impact of the global financial crisis in the late 2000s was more moderate, compared to other ASEAN economies and compared to China or India. However, relative stagnation of growth in the 2000s implied that Indonesian people who used to have more than twice the income of people in China in 1996 dropped markedly to become approximately 80 per cent of GDP per capita in China by 2013.

Figure 9.2:
Indonesia's Growth Experience in Comparative Perspective (\%)


Source: IMF World Economic Outlook Database, October 2014.
Note: For the ASEAN estimate, Timor-Leste is excluded between 1996 and 2001, and Myanmar is excluded between 1996 and 2000.

Part of the reason why Indonesian economy remained relatively unscathed by the global financial crisis, compared to some of its neighbours, may be found in its trade structure (for a summary, see Matsumoto and Verick, 2011). Unlike many other countries in Southeast Asia, Indonesia's dependence on external demand is relatively limited. At less than a third since 2002, the shares of exports and imports of goods and services in GDP resemble those of big economies like China and India, rather than many other ASEAN member states (Figure 9.3). Relatively low dependence on external markets implies insulation of the economy from external shocks, on the one hand, and a scope for further taking advantage of the international markets, on the other.

In terms of composition of merchandise exports and imports, there are at least two noteworthy features. One is that manufacturing exports and imports constitute an important part of merchandise trade for Indonesia (Figure 9.4). However, its relative importance has declined over a decade and a half, particularly in manufactures exports. The share of manufactures exports in total merchandise exports declined from 51.4 per cent in 1996 to 37.8 per cent in 2013. Second, this decline in the proportion of manufactures trade is mainly due to rise in trade of fuels. The share of fuel imports in total merchandise imports almost tripled between 1996 and 2013, from 8.7 to 24.4 per cent. In merchandise exports, food has also become an increasingly important export commodity. ${ }^{5}$

[^56]Figure 9.3:
Share of Exports and Imports of Goods and Services in GDP (\%): 1996-2013


Source: World Bank, World Development Indicators.

### 2.1.1. Structural Shifts in the Economy Since 2000

In the domestic economy, between 2000 and 2012, the pace of economic structural change away from agriculture to other sectors continued, and it involved a relative decline in the manufacturing sector towards other industries and services. This, to some extent, reflects the changing composition of trade away from manufacturing. Notable structural shifts occurred through the growth of transport and communications sector. Its share in GDP more than doubled between 2000 and 2012 (Table 9.1). Other growing sectors include 'finance, real estate and business services', 'trade, hotel and restaurants' and 'construction'. The sectors that have declined in relative terms are agriculture, followed by manufacturing and services.

The implications of the emerging sectors and the relative, albeit moderate, decline in manufacturing for employment opportunities for women and men in Indonesia will be examined in greater details.

Figure 9.4:
Composition of Merchandise Exports and Imports (\%)


Source: World Bank, World Development Indicators.

Table 9.1:
Distribution of Non-oil/gas GDP Across Sectors (\%, in 2000 Constant Prices)

|  | 2000 | 2006 | 2012 | Difference <br> $(2012-2000)$ |
| :--- | ---: | ---: | ---: | :---: |
| Sectors increasing in GDP share |  |  |  |  |
| Transport \& communications | 5.3 | 7.3 | 10.7 | 5.4 |
| Finance, real estate \& business services | 9.5 | 10.0 | 10.2 | 0.7 |
| Trade, hotel \& restaurants | 18.4 | 18.3 | 19.1 | 0.6 |
| Construction | 6.3 | 6.6 | 6.9 | 0.6 |
| Electricity, gas \& water supply | 0.7 | 0.7 | 0.8 | 0.1 |
| Sectors decreasing in GDP share |  |  |  |  |
| Agriculture, livestock, forestry \& fishery | 17.9 | 15.4 | 13.2 | -4.6 |
| Manufacturing | 27.2 | 27.4 | 25.1 | -2.0 |
| Services | 10.7 | 10.0 | 9.9 | -0.8 |
| Mining \& quarrying | 4.1 | 4.2 | 3.9 | -0.1 |

Source: BPS, ‘GDP at 2000 constant market prices by industrial origin (billion Rupiahs), 2000-2014'; available at: http://www.bps.go.id/linkTabelStatis/view/id/1200(accessed 24 May 2016).

### 2.1.2. Urban Poverty Has Remained Sticky Downward

The trend in economic indicators depicted above is, to some extent, reflected in the trend in the headcount poverty ratio. Urban and rural poverty suffered an increase in the late 1990s as a consequence of the Asian financial crisis. Between 1996 and 1998, the urban poverty ratio increased notably from 9.4 to 17.6 per cent and rural poverty increased from 24.6 to 31.9 per cent (Figure 9.5). Bringing the poverty rate down in the subsequent period to the pre-crisis level has been prolonged. Rural poverty rate shows a trend decline below the 1996 level only

Figure 9.5:
Headcount Poverty Ratio (\%): 1996-2013


Source: BPS; available at: http://www.bps.go.id/linkTabelStatis/view/id/1494 (accessed 24 May 2016).
since 2007. Subsequently, the rural poverty rate declined substantially by 7 percentage points, at 18 per cent in September 2013. In contrast, the urban poverty rate consistently remained above the level reached in $1996,{ }^{6}$ and has fluctuated around 10 and 12 per cent since 2009. The period of slow decline in poverty in the 2000s has been accompanied by an increase in income inequality, as captured by the Gini ratio: from the low of 0.308 in 1999 to 0.41 by 2013 (BPS, Table 23-6).

In summary, the Indonesian economy has experienced a systemic shock in the late 1990 s, followed by a stagnant period of economic growth, even though the growth rate remained high compared to the ASEAN average. More worryingly, the poverty rate has declined relatively slowly over almost two decades. In particular, the urban poverty rate has been sticky downwards, and in the 2010s, it remained higher than in 1996. One of the most effective means of further eliminating poverty is through active participation in the labour market and decent conditions of work and adequate remuneration therein.

### 2.2. Labour Market Trends

One notable feature of the Indonesian labour market at the aggregate level is its stability over time. In spite of large fluctuations in the GDP growth rate and an increase in incidence of poverty in the late 1990s, many key labour market indicators displayed little changes, except in real wages (Figure 9.6). In 1998, real wages contracted sharply, which subsequently recovered to the pre-crisis level by 2001. While real average wage earnings have tended to increase since then, it has experienced three episodes of the notable decline in 2005, 2008 and 2011. As a result, the increase in real average wage earnings has been fairly modest in Indonesia between 1996 and 2012. Gender differences in average monthly

[^57]Figure 9.6:
Trend in Real Average Monthly Wage Earnings (in Constant 1995 Prices)


Source: Author's calculation from SAKERNAS 1996-2012.
Note: Reported nominal monthly wage earnings (in cash and in kind) are deflated by the provincial capital CPI.
earnings persisted between 1996 and 2012, with little signs of narrowing in the gap. While wage earnings constitute only a portion of the total income of the population, their fluctuations with episodes of the notable decline likely contributed to an observed increase in poverty in the late 1990s and a relatively slow decline in the rural poverty rate and persistence in the urban poverty rate in the 2000s and early 2010s.

Much of the adjustments in the labour market in Indonesia appear to take place through fluctuations in real wages, while many key labour market indicators show little signs of fluctuations. Both male and female labour force participation has remained fairly steady since 1996. It fluctuated around 51 per cent for women, while that of men had fluctuated around 84 per cent. Dispersion from the period average was contained within a narrow bandwidth of two percentage points for women (Figure 9.7).

### 2.2.1. Women's Labour Force Participation Rates

While the magnitude of change in the labour force participation rate at the national level has been small, there is a large diversity across provinces in women's labour force participation rates (Figure 9.7). The variation in women's labour force participation rates across provinces is notably larger than men's. The average gap across provinces between the maximum and the minimum labour force participation rates between 1996 and 2012 was 32 percentage points for women and 10 percentage points for men. Regardless of which province in Indonesia, men are unquestionably the dominant actors in the labour market. For women, in some provinces, they also take active part and in some other provinces, they mainly remain outside of the labour market. Bali is a province where women's labour force participation rate has been persistently high during the 1996-2012 period, at around 70 per cent. Provinces that tend to have one of

Figure 9.7:
Variation in Labour Force Participation Rates Across Provinces (\%): Maximum, Minimum and National Total, by Sex


Source: Author's calculation from SAKERNAS 1996-2012. Since 2008, the August rounds of SAKERNAS have been used.
Notes: The provinces which have maximum and minimum labour force participation rates in one year are shown, along with the total national labour force participation rate for women and men. The provinces shown are: $\mathrm{BK}=$ Bengkulu, $\mathrm{BL}=$ Bali, $\mathrm{DA}=$ Dista Aceh, $\mathrm{JB}=$ Jawa Barat, JKT $=\mathrm{DKI}$ Jakarta, KS = Kalimantan Selatan, KT=Kalimantan Tengah, KT2 = Kalimantan Timur, ML=Maluku, NT=Nusa Tenggara Timur, $\mathrm{SB}=$ Sumatera Barat, $\mathrm{ST}=$ Sulawesi Tengah, $\mathrm{ST} 2=$ Sulawesi Tenggara, $\mathrm{SU}=$ Sulawesi Utara, $\mathrm{PA}=$ Papua, $\mathrm{RI}=$ Riau and $\mathrm{YKT}=$ DI Yogyakarta. The provinces are 1996-equivalent provinces.

Figure 9.8:
Variation in Unemployment Rates Across Provinces (\%): Maximum, Minimum and National Total, by Sex


Source: Author's calculation from SAKERNAS 1996-2012.
Notes: $\mathrm{BK}=$ Bengkulu, BL=Bali, DA=Dista Aceh, JAM=Jambi, JB= Jawa Barat, JKT=DKI Jakarta, $\mathrm{KB}=$ Kalimantan Barat, $\mathrm{KT}=$ Kalimantan Timur, $\mathrm{KT} 2=$ Kalimantan Tengah, ST=Sulawesi Tengah, NB $=$ Nusa Tenggara Barat, NTT = Nusa Tenggara Timur, RI $=$ Riau, $\mathrm{SS}=$ Sulawesi Selatan, $\mathrm{SU}=$ Sulawesi Utara. The provinces are 1996-equivalent provinces.

Figure 9．9：
Emerging Changes in the Structure of Employment by Sex

| Share of employment in agriculture（\％） |  | Share of employment in wage employment（\％） |
| :---: | :---: | :---: |
| 50.0 | 40.0 |  |
| $45.0 \sim$ N | 35.0 |  |
| － | 30.0 |  |
| 30.0 | 25.0 |  |
| 25.0 | 20.0 |  |
| 20.0 | 15.0 |  |
| 15.0 | 10.0 |  |
| 10.0 | 5.0 |  |
| 5.0 |  |  |
|  পoপoరO －TーNNNNNNNNNNNNN |  |  <br>  にTーTNNNNNNNNNNNN |
| $\longrightarrow$ Female Male |  | $\longrightarrow$ Female Male |

Source：Author＇s calculation from SAKERNAS 1996－2012．
Note：There is a break in the series for wage employment in 2001．It is not clear under which employment statuses casual agricultural and non－agricultural workers had been classified into before 2001．Only＇employees＇are presented from 2001 onwards．
the lowest rates of female labour force participation rates include Jawa Barat， Riau and Sulawesi Barat．

## 2．2．2．Demand Side May Be Pulling in More Women to Participate

Even though women participate much less in the labour force than men，among the few who do，they are more likely to experience unemployment than men．During the 1996－2012 period，the average unemployment rate for women is 9 per cent compared to 7 per cent for men．As with the labour force participation rate，there is a clear diversity in unemployment rates across provinces，and the variation is larger among women than among men（Figure 9．8）．

Interestingly，Bali features frequently as a province with the lowest female unemployment rate between 1996 and 2012，even though women＇s labour force participation rate tends to be the highest in Bali．High female participation in the labour market in Bali is most likely driven by the availability of suffi－ cient job opportunities．Other provinces，such as Sulawesi Utara，frequently appear as a province with the highest unemployment rate，even though the female labour force participation rate in the province tended to be one of the lowest．In such provinces，women＇s low participation in the labour market may be driven by the lack of job opportunities for women．It suggests that the diversity across provinces in women＇s participation may be partly driven by the pull of the demand side：more local job opportunities encourage women to be more active．

Figure 9.10:
Share of Employment in Selected Non-agricultural Sectors by Sex (\%)


Source: Author's calculation from SAKERNAS 1996-2012.

### 2.2.3. Recent Structural Changes in the Labour Market

After the global financial crisis, structural changes are becoming more apparent in the labour market. In terms of what women do if they take active part in the labour market, some signs of changes started to become more apparent since the late 2000s. After almost a decade of showing stagnation since the financial crisis of 1997-1998, shares of employment in agriculture showed signs of steady decline since around 2003 for both men and women, and this downward trend became firmly set after 2007-2008 when it consistently stayed below 40 per cent. At the same time, shares of wage employment had been rising, particularly for women (Figure 9.9). ${ }^{7}$

The share of wage employment rose from the trough of 22.5 per cent in 2003 to 33.3 per cent for women. Similar patterns are discernible for men, but as of 2012, men's share in wage employment has not yet surpassed its 1996 level of 38.4 per cent. ${ }^{8}$

The sectors which had shown increase in their employment share differed between men and women. Among men, increases in percentage points were largest in 'construction', 'manufacturing' and 'finance, insurance, real estate and business services' between 1996 and 2012 (Figure 9.10). Among women, percentage point increases were largest in 'community, social and personal services', 'wholesale trade, retail trade, restaurants and hotels' and 'finance, insurance, real estate and business services'. Hence, the move out of agriculture entailed some gender differences in sectoral reallocation of workers. While

[^58]Figure 9.11:
Four Dominant Sub-sectors in Manufacturing Employment (\%)


Source: Author's calculation from SAKERNAS 2000-2012.
Notes: Before 2000, due to differences in industrial classification, it is difficult to consistently estimate sub-sectors of manufacturing employment at the 2-digit level of industrial classification. Four subsectors which have the highest period-average shares in manufacturing employment between 2000 and 2012 are shown separately for men and women.

Figure 9.12:
Share of Vulnerable Employment in Total Employment (\%)

| Share of employment in vulnerable employment (\%) | Share of employment in vulnerable employment (\%): Female |
| :---: | :---: |
| 60.0 |  |
| 50.0 |  |
| 40.0 |  |
| 30.0 |  |
|  |  |
| 10.0 |  |
|  <br>  -TーTNNNNNNNNNNNNN |  |
| Female Male |  |

Source: Author's calculation from SAKERNAS 1996-2012.
manufacturing continues to constitute an important sector of employment for women at around 9 per cent, its share remained fairly constant during the period examined. Even though transport and communications increasingly became an important contributor to GDP in the 2000s (Table 9.1), it has been achieved without any gains in employment. In fact, between 2006 and 2012, the absolute number of people employed in the sector declined by 654,000 and 11,000 for men and women, respectively.

### 2.2.4. Employment in Manufacturing Sector

Within manufacturing, whose growth tends to support structural change of the economy and employment towards higher value-added outputs and earnings, there are both gender similarity and differences in the sub-sectoral composition of employment (Figure 9.11).

In terms of similarity, food products and beverages have notably increased its employment shares for both men and women in similar magnitude between 2000 and 2012. The second dominant manufacturing sub-sector for women is textiles and apparel: between 2000 and 2012, shares of employment in textiles have declined slightly (from $11 \%$ to $9 \%$ ), accompanied by a slight increase in the share of employment in wearing apparel (from $10 \%$ to $12 \%$ ). Hence, in recent years, manufacturing employment has concentrated more on food products and beverages for both men and women, but in the other sub-sectors, gender segregation in patterns of employment continues.

### 2.2.5. Share of Women and Men Engaged in 'Vulnerable' Employment

Young female workers are less and less likely to be in 'vulnerable' employment. Corresponding to the trend discussed above, the share of women and men engaged in vulnerable employment (own-account and contributing family workers) has slowly fallen since its peak in 1998, when it stood at 58.1 per cent and 36.1 per cent for women and men, respectively (Figure 9.12).

In 2011 and 2012, the share of women engaged in vulnerable employment fell below 50 per cent for the first time since 1996. This declining trend has been mainly driven by a decline in the share of vulnerable employment among young and prime working age women since around 2003. Older women aged 55 years and above continue to steadily engage in vulnerable forms of employment throughout the period. In the crisis years of late 1990s, an increase in the share of vulnerable employment is seen for older cohort in 1997 and for younger cohorts in 1998. It should also be noted that more men also temporarily engaged in vulnerable employment during the crisis year of 1998, when it reached a peak of 36.1 per cent. Since 1998, no such obvious supply responses to economic shocks by women or men are clearly discernible.

### 2.2.6. Gender Differences in Occupations

In terms of occupation, women tend to be in sales and men in production or transport equipment operation; the major gender differences in composition of employment by occupation relate to shares of sales workers and production and related workers. While agricultural workers continue to be important for both men and women, their relative importance has declined between 1996 and 2012 to a similar magnitude, at around 34 per cent (Figure 9.13).

It reflects the decline in the share of agricultural employment for men and women shown in Figure 9.8. This has been counterbalanced by an increase in the employment share of production and related workers, particularly among men.
Figure 9.13:
Shares of Selected Occupations in Employment (\%)


[^59]Among women, sales workers constitute the second most important occupation after agriculture, and this share increased very moderately. This also reflects the relative importance of trade, hotels and catering employment among women. In percentage terms, more women have joined the ranks of the professional workers, even though this share still remains less than 10 per cent by 2012. At the same time, gender gap in earnings across almost all occupations remain (ILO, 2011). Administrative and managerial workers earn the highest average salaries, and at 1.2 per cent of the total male employment, men are three times more likely to be in this occupation than women as of 2012.

To summarize, the key trend in the employment situation in Indonesia between 1996 and 2012 from a gender perspective is as follows. First, adjustments to fluctuations in economic growth appear to occur mainly through prices (wages). Real wages have grown relatively modestly in the 2000s, and there is a persistent gender differential in real average monthly wage earnings. Second, the aggregate participation rates have remained steady for both women and men, fluctuating within a narrow range over the years. The aggregate trend hides a huge diversity in female participation rates across provinces. Third, women who do participate are more likely to be unemployed than men. The diversity in unemployment outcomes across provinces is also large, and there are some indications that more job opportunities for women pull more women into the labour force, with low risks of unemployment. Fourth, since the late 2000s, the labour market shows clear signs of structural changes, where both men and women have shifted out of agriculture and increasingly into wage employment. Correspondingly, the incidence of vulnerable employment has followed a declining trend since the late 2000s, more so for men than for women. Fifth, in the earlier crisis years of 1997-1998, vulnerable forms of employment may have been one of the few recourses available to households to support their incomes. In spite of fluctuations in the economic growth in the subsequent years, for example in 2009 when the GDP growth rate slowed to 5.4 per cent, labour market responses in the form of vulnerable employment by women are no longer clearly observable.

Since the national aggregate data tells us very little about the underlying changes in the way women participate and contribute to economic growth, the subsequent sections exploits cross-sectional differences at the individual, the household and the provincial levels to explain women's employment outcomes in Indonesia between 1996 and 2012.

## 3. Determinants of Women's Employment Outcomes in Indonesia

This section examines the cross-section determinants of women's employment outcomes in relation to individual demographic and socio-economic characteristics and provincial-level male employment outcomes. The data used for the
analysis comes from the national labour force survey (SAKERNAS) by the BPS between 1996 and 2012.9

Focus of the analysis on the relationship between male and female employment outcomes for at least two reasons. First, from the household-level perspective, women's employment outcomes are to some extent dependent on how men are faring in the labour market. Women's decision to participate in the labour market depends on the overall need of the household to earn an income and to smooth its consumption over time. Men's employment outcomes may affect women in two potentially opposing ways. On the one hand, during economic downturns, women may engage more actively in the labour market to supplement household incomes in response to men's reductions in incomes or employment. This has been called 'the added worker effect'. On the other hand, as men are the dominant breadwinners in Indonesia (as shown in Figure 9.7), women may be playing a more 'supporting' role through their employment. In such cases, there is a division of labour along the gender dimension at the household level, which can result in gender segregation in the labour market in terms of employment status or occupation. For example, if a male household head runs a small retail shop, there are high chances that the female household members would be helping out in the shop. Similarly, if a dominant source of household income is agriculture, female spouses would be more likely to help out in the farming activities.

The second relates to the fact that male employment outcomes at the provincial level may be capturing the overall climate in the local labour market. A high male employment-to-population ratio in a province can imply that there are greater needs for workers, whether male or female. If more men are working in one province than another, more women may also be working in that province, and vice versa. If there are sufficient employment opportunities in the localities or sectors, as captured by tightness in the male labour market, more women may also be found in the labour market.

### 3.1. Diversity in Employment Opportunities for Men and Women Across Sectors and Provinces

The diversity of situations across provinces has been highlighted as an important factor to bear in mind when examining women's participation and employment in Indonesia. At the same time, there are some potential correlations in men and women's sector of employment at the provincial level. As Figure 9.9 shows, employment shares in some sectors, such as 'wholesale and retail trade, restaurants and hotels' and 'financing, insurance, real estate and business services' show some similarities across gender either in levels of employment shares or in terms of trend over time. Indeed, it can be seen that employment of women and men in

[^60]Table 9.2:
Correlation Coefficient Between Provincial-level Shares of Employment in Different Sectors: Men and Women

| Sectors |  | Male |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 |  | 2 |  | 3 |  | 4 |  | 5 |  | 6 |  | 7 |  | 8 |  | 9 |  |
|  | 1 | 0.839 | *** | 0.037 |  | -0.689 | *** | -0.203 | *** | -0.529 | *** | -0.678 | *** | -0.556 | *** | -0.657 | *** | -0.326 | *** |
|  | 2 | -0.028 |  | 0.408 | *** | -0.003 |  | -0.072 |  | 0.118 | ** | -0.113 | ** | 0.117 | ** | -0.041 |  | 0.104 | ** |
|  | 3 | -0.647 | *** | -0.250 | *** | 0.803 | *** | 0.070 |  | 0.496 | *** | 0.526 | *** | 0.366 | *** | 0.357 | *** | 0.193 | *** |
|  | 4 | -0.127 | *** | 0.133 | *** | -0.017 |  | 0.385 | *** | 0.072 |  | 0.072 |  | 0.125 | *** | 0.211 | *** | 0.012 |  |
|  | 5 | -0.408 | *** | -0.115 | ** | 0.409 | *** | 0.185 | *** | 0.494 | *** | 0.352 | *** | 0.054 |  | 0.382 | *** | 0.259 | *** |
|  | 6 | -0.747 | *** | 0.043 |  | 0.633 | *** | 0.151 | *** | 0.511 | *** | 0.608 | *** | 0.529 | *** | 0.533 | *** | 0.251 | *** |
|  | 7 | -0.529 | *** | 0.053 |  | 0.347 | *** | 0.185 | *** | 0.216 | *** | 0.462 | *** | 0.452 | *** | 0.596 | *** | 0.113 | ** |
|  | 8 | -0.642 | *** | -0.034 |  | 0.416 | *** | 0.197 | *** | 0.185 | *** | 0.613 | *** | 0.381 | *** | 0.920 | *** | 0.261 | *** |
|  | 9 | -0.562 | *** | 0.053 |  | 0.213 | *** | 0.235 | *** | 0.251 | *** | 0.435 | *** | 0.394 | *** | 0.545 | *** | 0.313 | *** |

[^61] Community, social and personal services. ${ }^{* * *}$ means that the correlation coefficient is significant at $1 \%$ and ${ }^{* *}$ indicates significance at $5 \%$.
Table 9.3:
Correlation Coefficient Between Provincial-level Shares of Employment in Different Sectors: Young Women and Prime-age Women

| Sectors |  | Prime-age female |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 |  | 2 |  | 3 |  | 4 |  | 5 |  | 6 |  | 7 |  | 8 |  | 9 |  |
|  | 1 | 0.930 | *** | -0.013 |  | -0.642 | *** | -0.176 | *** | -0.399 | *** | -0.872 | *** | -0.573 | *** | -0.610 | *** | -0.648 | *** |
|  | 2 | -0.024 |  | 0.744 | *** | -0.010 |  | -0.001 |  | -0.040 |  | 0.057 |  | -0.011 |  | -0.116 | ** | -0.036 |  |
|  | 3 | -0.575 | *** | 0.011 |  | 0.832 | *** | -0.069 |  | 0.245 | *** | 0.516 | *** | 0.249 | *** | 0.269 | *** | 0.105 | ** |
|  | 4 | -0.104 | ** | -0.045 |  | -0.031 |  | 0.027 |  | 0.003 |  | 0.053 |  | 0.136 | *** | 0.079 | * | 0.208 | *** |
|  | 5 | -0.266 | *** | 0.009 |  | 0.201 | *** | 0.072 |  | 0.506 | *** | 0.240 | *** | 0.151 | *** | 0.212 | *** | 0.140 | *** |
|  | 6 | -0.726 | *** | 0.039 |  | 0.279 | *** | 0.231 | *** | 0.356 | *** | 0.781 | *** | 0.462 | *** | 0.425 | *** | 0.568 | *** |
|  | 7 | -0.474 | *** | 0.022 |  | 0.130 | *** | 0.224 | *** | 0.155 | *** | 0.460 | *** | 0.569 | *** | 0.392 | *** | 0.432 | *** |
|  | 8 | -0.490 | *** | -0.010 |  | 0.131 | *** | 0.247 | *** | 0.279 | *** | 0.424 | *** | 0.387 | *** | 0.637 | *** | 0.478 | *** |
|  | 9 | -0.729 | *** | -0.107 | ** | 0.232 | *** | 0.220 | *** | 0.232 | *** | 0.605 | *** | 0.517 | *** | 0.617 | *** | 0.809 | *** |

Source: Author's calculation from SAKERNAS 1996-2012.
Notes: Sectors are as follows: $1=$ Agriculture, forestry, hunting and fishery; $2=$ Mining and quarrying; $3=$ Manufacturing; $4=$ Electricity, gas and water; $5=$ Construction; $6=$ Wholesale and retail trade, restaurants and hotels; $7=$ Transportation, storage and communications; $8=$ Finance, insurance, real estate and business services; $9=$ Community, social and personal services. ${ }^{* * *}$ means that the correlation coefficient is significant at $1 \%$ and ${ }^{* *}$ indicates significance at $5 \%$.
some sectors has a clear relationship. Pooling the provincial-level data between 1996 and 2012 and using information on the distribution of employment across nine major sectors, the data shows a clear pattern in the sectors of work for men and women (Table 9.2).

First, concentration of employed men in agriculture also implies high concentration of employed women in agriculture. Higher share of male employment in other non-agricultural sectors means that women are also likely to be working outside agriculture. ${ }^{10}$ Second, men and women tend to concentrate in the same sectors. The correlation coefficients are fairly large for agriculture, manufacturing and finance, insurance, real estate and business services. Higher share of men working in manufacturing in a province also means higher share of women working in manufacturing. A high share of men working in wholesale and retail trade, restaurants and hotels in a province also means that a high share of women in that province work in the same sector, and so on. It suggests that both men and women tend to concentrate their employment in sectors that offer sufficient job opportunities in their respective provinces. Third, there are also some divergences in the sectoral distribution of employment between men and women. This occurs for a relationship between men's share of employment in construction, wholesale and retail trade, restaurants and hotels and finance, insurance, real estate and business services and women's share of employment across sectors. For example, in provinces and years where men are more concentrated in construction, women seem to be more likely to work in trade or manufacturing sectors. This may relate to the fact that the construction sector constitutes an important source of employment for men but only a very minor share of the total female employment as depicted earlier in Figure 9.9.

There may also be some intergenerational effects on the sectoral choice of work among women. Table 9.3 presents a disaggregated female sample between young ( $15-24$ year olds) and prime-age ( $25-54$ year olds) women. Young women tend to follow a very similar sectoral composition of employment as with the older cohort. The correlation coefficients are fairly large in agriculture, manufacturing and community, social and personal services.

Hence, in spite of notable gender differences in composition of employment in some sectors, such as construction and manufacturing, there are also some similarities in the sectoral distribution of employment in other sectors, such as in agriculture, finance and trade. This subsection serves to give a summary glimpse of the complex and diverse labour market situations and opportunities facing Indonesian men and women. To further address the question of who, among Indonesian women, are likely able to meet the challenges and take up available employment opportunities, an examination of data at the micro-level is required. This is discussed in the following section.

[^62]Figure 9.14:
Predicted Probability of Women's Employment by Age Groups and Education


Source: Author's calculation from SAKERNAS 1996-2012.
Note: The model used is the baseline model, which does not include information on the male provincial level labour market outcomes.

### 3.2. Who Are Taking Up the Available Employment Opportunities?

Women's employment outcome is examined at the macro level, and then disaggregated by sectors and statuses, to capture any structural changes in the labour market. The sample consists of women of working age, which is further divided into youth (15-24 year olds), prime-age women (25-54 year olds) and older women (aged 55 years and above). ${ }^{11}$ The main factors that are included to account for female employment outcomes include individuals' socio-demographic characteristics (age, age-squared, educational attainment and household membership status), household-level information (size ${ }^{12}$ ), geographical variables (urban dummy, regional dummies) and male labour market situation at the provincial level (share of male wage employment in the total male employment and $\log$ of male average real wages). ${ }^{13}$ The reason for using the share of male wage and salaried employees in the total male employment in each province is to capture the differences in potential employment opportunities available for women and men and the differences in the structure of the labour market across provinces. Wage

[^63]Figure 9.15:
Predicted Probability of Women's Wage Employment (15+) by Age Groups and Education


Source: Author's calculation from SAKERNAS 1996-2012.
Note: The model used is the baseline model, which does not include information on the male provincial level labour market outcomes.
employment outcomes likely capture better the changing economic climate and developments in the labour market than other statuses in employment. ${ }^{14}$ Figures that are presented may differ somewhat from the trend presented in Section 2.2 because they represent estimated outcomes, as against actual outcomes, for an 'average' woman in the sample.

### 3.2.1. Predicted Likelihood of Employment

The predicted likelihood of employment for women experiences a trough in 2005-2006 for all age groups, which was a year of very low growth. Since 20052006, it undergoes an increase beyond the estimated employment rate in 1996, for women aged 25-54 years, and a more subdued recovery for the other cohorts (Figure 9.14). Prime-age women have the highest predicted probability of being employed throughout the period: it is 57.0 per cent by 2012. Young women face the lowest likelihood of being employed, at 31.7 per cent in 2012. This is an expected pattern, as the youth cohort is expected to stay on longer in education.

By levels of educational attainment, the likelihood of employment is the least for those with junior or senior general secondary education (Figure 9.14), which reflects a $U$-shaped relationship between education and participation as found in other countries including India (as discussed in Chapter 4). Women with higher education are the most likely to be employed, with predicted probability of

[^64]Figure 9.16:
Predicted Probability of Women's Employment in Selected Sectors (Manufacturing, Trade and Services) by Age Groups and Education

|  | Manufacturing employment, by education |
| :---: | :---: |
| Trade employment, by age groups | Trade employment, by education |
| Services employment, by age groups | Services employment, by education |

Source: Author's calculation from SAKERNAS 1996-2012.
Notes: The model used is the baseline model, which does not include information on the male provincial level labour market outcomes. 'Trade employment' refers to employment in wholesale and retail trade and hotels and restaurants, and 'services employment' refers to employment in community, social and personal services.
employment lying above 60 per cent since $1996^{15}$ and reaching 70 per cent by 2012. The next group of women who are likely to face higher chances of employment are those with secondary technical and vocational education. It highlights the importance of women attaining a certain level of education to be in employment. At the same time, between 1996 and 2012, the predicted likelihood of employment shows a trend increase among women with secondary education, from an average of 37 per cent in the late 1990s to around 44 per cent in the early 2010s.

In terms of chances of wage employment, however, it is the youth who face the highest chances between 1996 and 2012 (Figure 9.15). Young women's predicted chances of being in wage employment increase notably since 2009. This concurs with the observed trend where the share of vulnerable employment among young women experienced the largest decline (as depicted in Figure 9.11). For prime-age women, the chances of being in wage employment also increase since the late 2000s, but it still remains 25 percentage points below that of young women.

And by education, it has clearly been the highly educated women with a diploma and above who have access to wage employment opportunities (Figure 9.15). Apart from a sharp dip by more than 10 percentage points in the probability of having wage employment in 2008, best educated women on average face more than 80 per cent chances of ending up in wage employment. Another notable trend relates to those with junior secondary education or less, and those with vocational education. Chances of having being a wage employee increased for those

Figure 9.17:
Effects of Male Labour Market Outcomes on Women's Employment by Age Groups


Source: Author's calculation from SAKERNAS 1996-2012.
Notes: EPR=employment-to-population ratio. The graphs shown are the marginal effects on the estimated coefficients of provincial-level male share in wage employment in the total male employment and male average earnings.

[^65]with secondary education or less between 1996 and 2012, while for those with vocational secondary education, it declined notably. In 1996, chances of being in wage employment stood at 67 per cent for those with vocational secondary education. This declined to a low of 45 per cent in 2009, before recovering again to 56 per cent in 2012. The link between having a vocational education and being a wage employee had weakened notably during the period examined. Having higher educational attainment is clearly important for women to have wage employment, but they may also be vulnerable to external shocks, as witnessed in the immediate aftermaths of the global financial crisis.

Three selected non-agricultural sectors of employment are examined in relation to their relative importance in employing women in Indonesia (see Figure 9.10). These sectors are: manufacturing, wholesale and retail trade and hotels and restaurants ('trade') and community, social and personal services ('services'). It is notable that young people's likelihood of employment in these sectors has increased in trade and services sectors (Figure 9.16). In the manufacturing sector, young women consistently have higher chances of being employed than other cohorts; but this likelihood has declined slightly over time, from an average of 25 per cent in the late 1990s to 22 per cent in the early 2010s.

The relationship between the level of education attained and the sector of employment is diverse across sectors, and it has changed over time (Figure 9.16). Sectors that require higher level of education are in 'services', while 'trade' and 'manufacturing' require less educational inputs. Having a vocational education increases the chances of employment in the manufacturing and trade sectors between 1996 and 2012, but the link between vocational education and services sector employment have notably become weaker. Having a senior secondary education has increasingly become important in increasing the chances of employment in the trade sector, and to a lesser extent in the services sector. In the sectors where important proportion of employed women are concentrated, having a senior secondary education and above seems to play an increasingly important role in ensuring access to these employment opportunities.

### 3.2.2. Women's Employment: A Demand-pull?

This subsection examines the relationship between the overall employment opportunities available at the provincial level, as captured by men's share of wage employment and their average real wage incomes in each province, and women's employment rate and wage employment. A positive relationship suggests either a demand-pull or an overall lack of employment opportunities for men and women. A negative relationship suggests either a possibility of women being crowded out of the labour market due to the secondary nature of their participation or an 'added worker effect' among women to stabilize income and consumption at the household level when men are working or earning less.

The extent to which women's pattern of employment relates to the share of men in wage employment varies significantly by age group (the left panel of Figure 9.17). During the 1997-1998 crisis years, both young and prime-age women are more likely to have been employed in provinces where men's incidences of wage

Figure 9.18:
Effects of Male Labour Market Outcomes on Women's Wage Employment by Age Groups


Source: Author's calculation from SAKERNAS 1996-2012.
Note: The graphs shown are the marginal effects on the estimated coefficients of the provincial-level male share in wage employment in the total male employment and log of male average earnings.
employment are low. This finding tends to support the presence of 'added worker effect'. At the same time, the association is strongly positive for older women, meaning that older women's employment tends to be lower in provinces with lower incidence of male wage employment in the late 1990s and early 2000s. Since then, while the likelihood of employment for women in their prime working age and older cohort tends to be negatively associated with men's incidence of wage employment, the association turns positive for young cohort. Where there are greater opportunities for men to work as a wage worker, young women also tend to work more.

The association between average male earnings and women's employment probability is negative on the whole for all cohorts (the right panel of Figure 9.17). However, the magnitude of the negative association is relatively small for young women, and it has tended to remain positive since around 2008. Between 2008 and 2012, in provinces where men earn relatively well, young women also tend to be more actively engaged in the labour market in recent years. Average male earnings may be reflecting better employment and incomes prospects for workers, and young women have increasingly been taking part in the opportunities available.

While women, particularly the younger cohort, may be increasing their participation and driving the changes in the structure of female employment, it is important to understand the type of work they undertake. In the following text, we focus our analysis on women's chances of being in wage employment.

Development of a wage labour market reflects an important advance in the labour market in countries where the share of wage and salary employees in the total employment tends to be low. This is indeed the case in Indonesia, where the share of women's wage employment in the total employment stood at less than a third between 1996 and 2012 (see Figure 9.9). The extent to which women take part in wage employment reflects, to some extent, the existence of an enabling environment for women to balance their time between household maintenance
and care work and market wage work. Furthermore, earning wages and salaries should, in principle, constitute one source of bargaining power for women's position in the household.

In provinces where male incidence of wage employment is higher, women also tend to be engaged more in wage employment, and vice versa. This positive association is particularly strong for young women (Figure 9.18). The positive association also consistently holds for women in prime age, unlike the case for total employment (Figure 9.17). It suggests that women take up the available wage employment opportunities when there are such opportunities, and stay away from the wage labour market when the opportunities are limited.

In relation to average male provincial-level earnings, the association is also positive on the whole, except for the predicted incidence of wage employment of prime-age women in the late 1990s and in 2000 and for older women intermittently during the period examined (the right panel of Figure 9.18). Higher average earnings of men at the provincial level do not 'crowd out' women's incentives to participate in the labour market. Rather, higher average earnings of men may be capturing some tightness in the wage labour market, encouraging more women, particularly young women, to undertake wage work. Even though differences in average real monthly earnings across gender persist, they tend to move together (Figure 9.6). Higher average provincial-level wage incomes for men likely means higher average wage offer for women. Hence, the opportunity cost of not taking up the offered wages is higher, acting as an incentive for more women to take up wage employment.

The rising incidence of women's wage employment, particularly since 2010 (Figure 9.9), likely reflect a positive trend. Women seem to take up wage employment opportunities particularly in provinces where such opportunities are more likely available. Their chances of ending up with wage work are partly driven by women's supply response to available demand for wage work. At the same time, access to wage employment seems to be skewed towards better endowed female population, as captured by educational attainment. Enhancing educational attainment, qualifications and competence of women with secondary education and less (including vocational education) to have higher chances of accessing the wage labour market remains an important policy consideration. However, attaining higher education may not suffice to ensure continued employment of women in the wage labour market, as it seems to be susceptible to external shocks, such as the one experienced in 2008-2009.

## 4. Concluding Discussions

The chapter examines the cross-sectional determinants of women's employment outcomes in Indonesia in relation to individual demographic and socio-economic characteristics and in relation to men's provincial employment and average wages. The data used comes from the national labour force surveys (SAKERNAS) by the

BPS between 1996 and 2012. The labour market outcomes during this period have been characterized by some structural changes, notably since the late 2000s, where both men and women have shifted out of agriculture and increasingly into wage employment. This shift out of agriculture had been faster for women than for men.

The analysis highlights a few key points for further analytical exploration. First, the labour market participation and employment opportunities facing Indonesian women are diverse across localities, and an aggregate national-level analysis tends to limit a good understanding of the situation. Second, women, particularly the young cohort, are experiencing structural changes in the labour market. This entails a move away from agricultural employment and vulnerable forms of employment toward wage and salaried employment, in non-agricultural sectors such as community, social and personal services, wholesale and retail trade, and hotels and restaurants. Young women have been, and continue to be, important participants in the manufacturing sector. Within the manufacturing sector, however, there are some gender segregations across its sub-sectors, where women tend to concentrate in textiles and apparel, while men tend to concentrate in wood and furniture production. Food products and beverages is a sub-sector that increasingly engages both men and women. Third, women's sectoral pattern of employment highly correlates with that of men's at the provincial level. For example, if manufacturing employs a high share of employed men in one province, then the female share of manufacturing employment in the same province also tends to be higher.

By using micro-data, Section 3 further depicts some evidence of responsiveness of women to employment opportunities available in their localities. For instance, women tend to engage more in wage employment in provinces where male average wages are higher than in other provinces. Higher male average wages may be capturing a tighter labour market at the provincial level for both men and women. This positive association signals the responsiveness of women to locally available wage employment opportunities. It suggests that the observed trend of the increase in the incidence of female wage employment could partly be driven by 'positive' factors, particularly among the better educated women, such as higher level of wages at the provincial level and by the aspirations of women to take part in the wage labour market.

The chapter notes the possibility that Indonesian women are fairly responsive to existing employment opportunities (or the lack of it). Women may be more active in the labour market if there is work, and stay out if there is less remunerative work outside the household. This is particularly the case among the younger cohort. Yet, at the national level, the differences across men and women in labour force participation have remained consistently high between 1996 and 2012, at more than 30 percentage points. Given the potential responsiveness of women to the income-earning opportunities in the labour market, supporting and activation measures to facilitate women's entry to the labour market, as well as policy attentions towards their career development, may pay off. Such supporting measures would range from ensuring achievement of adequate levels of education, better access to labour market information at the local levels, support to expanding on-the-job training opportunities, availability and affordability of care services for young children and access to social protection. To the author's current
knowledge, much of the policy discussions in relation to women's employment seem to be focused on the protection of overseas female migrant workers, and more policy attention needs to be given to the promotion of women's employment within the national economy. The Government of Indonesia recognizes raising the labour force participation rate of women to be a challenge (The Government of Indonesia, 2014). Greater policy dialogue and coordination across responsible ministries and local governments towards enhanced participation and the rights of women in the labour market are needed. The analysis here suggests that in order to accelerate structural change and development of the economy through an inclusive growth process, more policy debate on the promotion of women's employment at the national, provincial and lower levels of government would be fruitful. Women have been important contributors to the economic development of Indonesia, including active support to household survival during economic crisis. Generating further culturally and locally sensitive analysis to feed into policy discussions and decisions is in order. Such analysis would include geographically disaggregated analysis of aspirations of young women in the labour market, returns to investment in education and training among women of different age groups, enabling environment to balance household care work, income needs and employment opportunities in the labour market among prime-age women, and the needs of older women in terms of incomes and care.
Appendix: Summary Statistics
Table A1:
Summary Statistics for Women Aged 15 Years and Above: Selected Years

| Dependent variable: | 1996 |  | 2001 |  | 2006 |  | 2012 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $O B S=66$ |  | OBS $=72$ |  | $O B S=80$ |  | OBS $=87$ |  |
|  | 996 | 307 | 710 | 010 | 358 | 363 | 119 | 770 |
| Women's employment (1 if employed, 0 otherwise) | Mean | S.D. | Mean | S.D. | Mean | S.D. | Mean | S.D. |
| Women's labour force participation | 0.507 | 0.500 | 0.518 | 0.500 | 0.481 | 0.500 | 0.514 | 0.500 |
| Women's employment | 0.477 | 0.499 | 0.463 | 0.499 | 0.416 | 0.493 | 0.479 | 0.500 |
| Age | 35.9 | 15.8 | 36.2 | 15.6 | 36.8 | 15.8 | 37.9 | 16.3 |
| Age squared | 1535.3 | 1366.5 | 1553.6 | 1350.9 | 1603.9 | 1381.6 | 1700.8 | 1455.5 |
| Education: |  |  |  |  |  |  |  |  |
| None/less than primary (base) | 0.332 | 0.471 | 0.273 | 0.445 | 0.209 | 0.407 | 0.225 | 0.418 |
| Primary | 0.360 | 0.480 | 0.353 | 0.478 | 0.351 | 0.477 | 0.279 | 0.448 |
| Junior secondary | 0.149 | 0.356 | 0.188 | 0.390 | 0.214 | 0.410 | 0.218 | 0.413 |
| Senior secondary | 0.089 | 0.285 | 0.102 | 0.303 | 0.132 | 0.338 | 0.148 | 0.355 |
| Vocational | 0.048 | 0.215 | 0.052 | 0.221 | 0.049 | 0.215 | 0.062 | 0.242 |
| Diploma and above | 0.022 | 0.148 | 0.033 | 0.179 | 0.045 | 0.207 | 0.068 | 0.251 |
| Urban | 0.383 | 0.486 | 0.449 | 0.497 | 0.443 | 0.497 | 0.502 | 0.500 |
| Household size | 4.8 | 2.1 | 4.4 | 1.8 | 3.6 | 1.5 | - | - |

(Table A1 Continued)

| Dependent variable: |  |  | 2001 |  | 2006 |  | 2012 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $O B S=66$ |  | $O B S=72$ |  | $O B S=80$ |  | $O B S=87$ |  |
|  | 996 | 307 | 710 | 010 | 358 | 363 | 119 | 770 |
| Women's employment (1 if employed, 0 otherwise) | Mean | S.D. | Mean | S.D. | Mean | S.D. | Mean | S.D. |
| Position within household: |  |  |  |  |  |  |  |  |
| Female household head | 0.087 | 0.281 | 0.090 | 0.287 | 0.089 | 0.284 | 0.095 | 0.294 |
| Female spouse | 0.568 | 0.495 | 0.598 | 0.490 | 0.582 | 0.493 | 0.562 | 0.496 |
| Other members (base) | 0.345 | 0.475 | 0.312 | 0.463 | 0.330 | 0.470 | 0.343 | 0.475 |
| Regions |  |  |  |  |  |  |  |  |
| Sumatera | 0.195 | 0.397 | 0.197 | 0.398 | 0.193 | 0.394 | 0.205 | 0.404 |
| Jawa and Bali (base) | 0.626 | 0.484 | 0.630 | 0.483 | 0.620 | 0.485 | 0.607 | 0.488 |
| Kalimantan | 0.051 | 0.220 | 0.050 | 0.218 | 0.052 | 0.223 | 0.055 | 0.229 |
| Sulawesi | 0.070 | 0.255 | 0.069 | 0.254 | 0.072 | 0.259 | 0.071 | 0.257 |
| Lainnya (others) | 0.052 | 0.222 | 0.053 | 0.225 | 0.057 | 0.231 | 0.061 | 0.239 |
| Provincial-level male variables |  |  |  |  |  |  |  |  |
| Share of wage employment Total | 0.318 | 0.057 | 0.258 | 0.063 | 0.221 | 0.064 | 0.295 | 0.061 |
| Share of wage employment Youth | 0.065 | 0.014 | 0.047 | 0.013 | 0.036 | 0.011 | 0.048 | 0.012 |
| Share of wage employment Prime age | 0.234 | 0.042 | 0.198 | 0.049 | 0.173 | 0.051 | 0.227 | 9,946 |
| Share of wage employment Older | 0.019 | 0.042 | 0.012 | 0.004 | 0.012 | 0.003 | 0.020 | 0.005 |
| Log of real average monthly earnings: Total | 12.1 | 0.2 | 12.2 | 0.2 | 12.2 | 0.2 | 12.3 | 0.2 |
| Log of real average monthly earnings: Youth | 11.7 | 0.9 | 11.8 | 0.2 | 11.8 | 0.2 | 11.8 | 0.2 |
| Log of real average monthly earnings: Prime age | 12.2 | 0.2 | 12.3 | 0.2 | 12.3 | 0.2 | 12.4 | 0.2 |
| Log of real average monthly earnings: Older | 12.0 | 0.4 | 12.1 | 0.4 | 12.2 | 0.2 | 12.3 | 0.2 |

Source: Author's calculation from SAKERNAS, selected years.
Note: Weighted data is used.
Summary Statistics for Employed Women Aged 15 Years and Above as per Wage, Agricultural and Vulnerable Employment: Selected Years

| Dependent variable: |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  | 987 | 656 | 672 | 785 | 468 | 480 | 739 | 189 |
| Women's wage/agricultural/vulnerable | Mean | S.D. | Mean | S.D. | Mean | S.D. | Mean | S.D. |
| Share of employed women in wage employment | 0.274 | 0.446 | 0.248 | 0.432 | 0.265 | 0.442 | 0.333 | 0.471 |
| Share of employed women in agriculture | 0.448 | 0.497 | 0.445 | 0.497 | 0.411 | 0.492 | 0.345 | 0.475 |
| Share of employed women in manufacturing | 0.149 | 0.356 | 0.152 | 0.359 | 0.146 | 0.353 | 0.153 | 0.360 |
| Share of employed women in trade | 0.252 | 0.434 | 0.252 | 0.434 | 0.265 | 0.442 | 0.278 | 0.448 |
| Share of employed women in services | 0.132 | 0.339 | 0.129 | 0.335 | 0.149 | 0.356 | 0.192 | 0.394 |
| Share of employed women's vulnerable employment | 0.531 | 0.499 | 0.556 | 0.497 | 0.519 | 0.500 | 0.470 | 0.499 |
| Age | 36.8 | 13.8 | 37.4 | 13.4 | 38.0 | 13.4 | 38.7 | 13.4 |
| Age squared | 1541.4 | 1139.1 | 1582.2 | 1124.3 | 1621.3 | 1133.9 | 1677.1 | 1145.8 |
| Education: |  |  |  |  |  |  |  |  |
| None/less than primary (base) | 0.380 | 0.485 | 0.308 | 0.462 | 0.229 | 0.420 | 0.235 | 0.424 |
| Primary | 0.367 | 0.482 | 0.375 | 0.484 | 0.370 | 0.483 | 0.288 | 0.453 |
| Junior secondary | 0.097 | 0.296 | 0.135 | 0.342 | 0.166 | 0.372 | 0.166 | 0.372 |
| Senior secondary | 0.068 | 0.252 | 0.078 | 0.268 | 0.109 | 0.312 | 0.136 | 0.343 |
| Vocational | 0.058 | 0.233 | 0.056 | 0.230 | 0.053 | 0.224 | 0.068 | 0.252 |
| Diploma and above | 0.030 | 0.170 | 0.048 | 0.213 | 0.073 | 0.260 | 0.107 | 0.309 |
| Urban | 0.303 | 0.460 | 0.378 | 0.485 | 0.397 | 0.489 | 0.469 | 0.499 |
| Household size | 3.8 | 1.7 | 3.5 | 1.6 | 3.5 | 1.5 | - | - |

(Table A2 Continued)

| Dependent variable: <br> Women's wage/agricultural/vulnerable employment ( 1 if employed in wage/agricultural/ vulnerable employment, 0 otherwise) | 1996 |  | 2001 |  | 2006 |  | 2012 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $O B S=31$ |  | $O B S=33$ |  | $O B S=33$ |  | $O B S=41$ |  |
|  | 987 | 656 | 672 | 785 | 468 | 480 | 739 | 189 |
|  | Mean | S.D. | Mean | S.D. | Mean | S.D. | Mean | S.D. |
| Position within household: |  |  |  |  |  |  |  |  |
| Female household head | 0.118 | 0.323 | 0.123 | 0.328 | 0.124 | 0.330 | 0.113 | 0.316 |
| Female spouse | 0.602 | 0.490 | 0.637 | 0.481 | 0.609 | 0.488 | 0.619 | 0.486 |
| Other members (base) | 0.280 | 0.449 | 0.240 | 0.427 | 0.266 | 0.442 | 0.269 | 0.443 |
| Regions |  |  |  |  |  |  |  |  |
| Sumatera | 0.203 | 0.402 | 0.201 | 0.401 | 0.192 | 0.394 | 0.191 | 0.393 |
| Jawa and Bali (base) | 0.609 | 0.488 | 0.625 | 0.484 | 0.612 | 0.487 | 0.619 | 0.486 |
| Kalimantan | 0.058 | 0.233 | 0.051 | 0.220 | 0.061 | 0.240 | 0.057 | 0.231 |
| Sulawesi | 0.059 | 0.235 | 0.057 | 0.231 | 0.058 | 0.233 | 0.064 | 0.245 |
| Lainnya (others) | 0.067 | 0.251 | 0.066 | 0.248 | 0.072 | 0.258 | 0.069 | 0.253 |
| Provincial-level male variables |  |  |  |  |  |  |  |  |
| Share of wage employment Total | 0.313 | 0.054 | 0.254 | 0.060 | 0.218 | 0.065 | 0.293 | 0.062 |
| Share of wage employment Youth | 0.064 | 0.014 | 0.047 | 0.013 | 0.036 | 0.011 | 0.047 | 0.012 |
| Share of wage employment Prime age | 0.231 | 0.039 | 0.195 | 0.046 | 0.170 | 0.051 | 0.226 | 0.047 |
| Share of wage employment Older | 0.019 | 0.007 | 0.012 | 0.004 | 0.012 | 0.004 | 0.020 | 0.005 |
| Log of real average monthly earnings: Total | 12.0 | 0.2 | 12.1 | 0.2 | 12.2 | 0.2 | 12.3 | 0.2 |
| Log of real average monthly earnings: Youth | 11.7 | 0.2 | 11.7 | 0.2 | 11.8 | 0.2 | 11.8 | 0.2 |
| Log of real average monthly earnings: Prime age | 12.1 | 0.2 | 12.2 | 0.2 | 12.3 | 0.2 | 12.4 | 0.2 |
| Log of real average monthly earnings: Older | 11.9 | 0.3 | 12.1 | 0.4 | 12.2 | 0.2 | 12.3 | 0.2 |

Source: Author's calculation from SAKERNAS, selected years.
Note: Weighted data is used.

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## 10

# Women and Men in China's Labour Market 

## Is Inequality on the Rise?

Sukti Dasgupta, Makiko Matsumoto and Cuntao Xia

## 1. Introduction

China's formidable economic growth, averaging 10.2 per cent annually in the last three decades, has created unprecedented opportunities for its women and men. ${ }^{1}$ More than half a billion people climbed out of poverty into better living standards since the start of the reform phase, in 1978. ${ }^{2}$ It is noteworthy that the share of working poor in China too declined significantly during the period, from 88.8 per cent in 1991 to 13.6 per cent in $2013 .{ }^{3}$ However, this has also been a period when income inequality has increased significantly, with the Gini growing from 0.291 in 1980 to 0.421 in $2010 .{ }^{4}$ More recent data from the National Bureau of Statistics (NBS) presents a Gini Coefficient that is 0.469 in 2014. ${ }^{5}$ During this period of increasing inequality, rising gender gaps in some labour market indicators have been observed, especially in participation rates and earnings.

[^66]It is worth noting that women's participation in economic activity in China is amongst one of the highest in Asia with a labour force participation rate (LFPR) of 63.9 per cent in $2013 .{ }^{6}$ This is partly the legacy of the Communist Party's rule in China, since 1949 and the constitution of the Communist Party in which women are considered equal to men in all spheres of life (Yu and Liu, 2000). In 1968, Mao Zedong had envisioned a China in which 'women hold up half the sky'. In keeping with this vision, the Government of China implemented specific measures to ensure women's participation in the labour force through the provision of childcare and social security systems.

The end of the Cultural Revolution in 1978 and the 'reform and opening up' strategy that was adopted by the third plenary session of the Communist Party of China marked a turning point in China's economic and political development. There was a gradual loosening up of the concept of full employment and social security guarantee by the government. By 1996, the government-assigned job placement strategy for graduates was fully lifted. ${ }^{7}$ By the late 1990s, State Owned Enterprise (SOE) reform deepened the transformation in the Chinese political economy and in employment. Ownership of small and medium enterprises were decentralised while the government kept control over some key large enterprises. Before China's transition to a socialist market economy, the SOEs provided life-long employment and social security for all male and female employees in the SOE work units. SOE reform, therefore, had significant implications for the employment situation in the country. During 1998-2003 more than 28.2 million SOE and collective employees were laid off of which 13.4 million were women (The Information Office of the State Council of the People's Republic of China, 2004). As part of the reform process, China joined the World Trade Organization (WTO) in 2001. This led to a massive rise in Chinese exports and inflow of foreign direct investment (FDI) followed. China's trade-togross domestic product (GDP) ratio rose by 24 percentage points, from 38.3 per cent in 2001 to 62.3 per cent in 2007, just before the global economic crisis. ${ }^{8}$ Many of those employed in these export-oriented factories were women.

In the 1990s, again, the focus on gender equality in official policy was reemphasised. The Law of the People's Republic of China on the Protection of Women's Rights and Interests entered into force in 1992, guaranteeing six equal rights for women in the sphere of politics, education, work, ownership of property, as well as personal rights and rights of marriage and family. The principle of 'equal pay for equal work' was clearly enshrined again in this law, with an aim to protect women's employment, income and benefits. This law was revised in 2005, highlighting gender equality not only at work, but also in access to social security. Furthermore, it explicitly barred gender discrimination by prohibiting 'any content in the labour contract or service agreement that limits female employees' marriage or pregnancy.'9 The China Employment Promotion Law, effective since

[^67]2008, also includes a clearly stated objective against discrimination on the grounds of ethnicity, race, gender or religious belief (Thomas et al., 2010).

By mid 1990s, the Chinese government's commitment to gender equality was globally articulated at the Fourth World Conference on Women which was held in Beijing in 1995. At this conference the Beijing Declaration and Platform for Action was adopted which aimed towards removing obstacles to women's participation in all public and private spheres and ensuring their rights to a full and equal share in economic, social, cultural and political decision-making. In the same year, the State Council promulgated the first National Program for Women's Development in China (1995-2000), upholding the goal of gender equality and women's rights in the economic and social spheres. In accordance with its commitment to gender equality, China ratified the International Labour Organization (ILO)'s Equal Remuneration Convention, 1951 (No. 100) and Discrimination (Employment and Occupation) Convention, 1958 (No. 111) in 1988 and 2006, respectively (Haspels and Majurin, 2008). The 12th five-year plan of China (2011-2015) also clearly echoes the goal of gender equality-it stipulates that China shall strengthen labour protection, social welfare, health care, poverty relief and legal assistance for women.

Notwithstanding these policy commitments and high LFPR, several recent studies in China have pointed to the increasing gender gap in employment and wages, especially at the recruitment stage and at the higher management and skill levels, since China's transition to a socialist market system from 1978 (Wang and Cai, 2008; Chi and Li, 2014; Appleton et al., 2013; Tang and Long, 2013). ${ }^{10}$

Against this backdrop, this chapter provides a summary update examining the nature and causes of the observed trends in women's labour force participation and employment in China. In particular, it probes the factors that influence disparate outcomes between women and men in participation rates, employment and wages, and carries out a decomposition analysis to better understand the factors that explain the gender disparities in wages.

The chapter draws its analysis mainly from data published in the NBS' China Statistical Yearbook (various years), NBS and the Ministry of Human Resources and Social Security's (MoHRSS) China Labour Statistical Yearbook (various years), and from other official and academic sources such as China Family Panel Studies (CFPS) data from Peking University, and the ILO Trends Econometric Model. It is necessary to point out that while a voluminous amount of data can be obtained for analysis, there are notable challenges for conducting an in-depth and long-term analysis of the gender dimension of labour market outcomes. These

[^68]challenges stem from the lack of published time series data on labour market outcomes for men and women, for example for the economically active population, unemployment and average wages in urban units. Nevertheless, there is a clear story that emerges about the declining participation rates of women and differences in earnings between the sexes during the last 20 years that merits serious discussion.

## 2. Increasing Gender Gap in Participation and Wages: What Has Been Said

China has one of the highest female LFPR in international comparison (Maurer-Fazio et al., 2005; Haspels and Majurin, 2008). However, in recent years, women's LFPR has been declining, prompting Organisation for Economic Co-operation and Development (OECD, 2014) to note that a reversal of this trend is critical to narrow gender disparities in China. Some Chinese scholars too have noted this trend with concern (see for example, Chi and Li, 2014 and Wang and Cai, 2008).

There are also several studies that focus on the link between rising gender inequality and China's economic transition, in particular, the increasing gap between women and men in participation rates and wages that resulted from the privatization of the SOEs. He and $\mathrm{Wu}(2014)$ conclude that 'women are "losers" in the course of China's market transition'. Du et al. (2006) argue that the downsizing of SOEs led to a sharp decrease in labour force participation for urban women compared to that for urban men, and laid-off female workers found it more difficult to be re-employed. Liu (2011) has noted that progress towards gender equality has slowed during the reform period. Song and Dong (2011) find that women are disadvantaged in occupational mobility and women's status has worsened during the economic transition. It has also been noted that rural women, who are the largest group of women workers in China, have been the most ignored in this reform process (Lin, 2003).

In addition to increasing gaps in LFPR, there has also been a further widening of the gender wage gap as noted by some scholars. Wang and Cai (2008) find that there is evidence of disparity between women and men in employment opportunities and wages, using the data from the China Urban Labour Survey (CULS) collected from five big cities ${ }^{11}$ in 2001. Using China's Urban Household Surveys, Chi and $\operatorname{Li}$ (2014) find a widening gender pay gap since the 1980s. With the same data set, Appleton et al. (2013) also find that economic reform has contributed to a widening gender wage gap. Tang and Long (2012) find that the overall gender earnings gap has increased since 2002, especially for the higher earnings group. According to the NBS, the average urban and rural annual incomes of employed women were respectively 67.3 per cent and 57 per cent of that of men

[^69]in 2010 (NBS, 2013). The National Program for Women's Development in China (2011-2020) ${ }^{12}$ noted the existence of gender discrimination in employment and education, and pointed to the lower rates of learning and earning by women workers relative to men.

Liu, Meng and Zhang (2000) find that the increase of the gender wage gaps in Shanghai and Tianjin is mainly attributable to the privatization of SOEs. At the beginning of the SOE reform, female urban employees' income was about 15 per cent less then male employees', but the gap increased to about 25 per cent in 2000 (Cohen and Feng, 2009). Similar results are found in the research carried out by Maurer-Fazio and Hughes (2002), during the period of transition and reforms towards a socialist market-oriented economy, showing that gender wage disparity is most pronounced in the most liberalized sectors and the lowest in the stateowned sectors which are the least liberalized.

Another strand of literature has focussed on the limited opportunities that women have in top management. An ILO global report titled 'Women in Business and Management: Gaining Momentum' (ILO, 2015) has noted that in spite of women's high LFPR, only 16.8 per cent of senior managers are women and this places China at the 88th rank amongst 126 countries when it comes to progress on women in top management levels. In addition, 40 per cent of Chinese companies are composed of all-male board members. The World Bank's Enterprise Surveys (2012) has a similar finding-only 17.5 per cent of firms are led by a female top manager in China, while the percentage is 29.3 per cent in the Asia and the Pacific region as a whole. ${ }^{13}$ Furthermore, only 5.6 per cent of CEOs and 8 per cent of board directors are women (ILO, 2015). Women have less likelihood of winning such positions (McKinsey \& Company, 2012) and women managers are paid less than their male counterparts (Xiu, 2010).

Although the share of female managers is still relatively low, in the recent two decades, the number of female entrepreneurs increased rapidly; more than 60 per cent of these entrepreneurs started their businesses after 1996 (Zhou et al., 2013). The recent Global Entrepreneurship Monitor Women's Report gives an overview of women's status in 67 economies. In China, the share of entrepreneur population amongst both women and men is small, but women's total entrepreneurial activity rate is 11 per cent-4 per cent lower than men's (Kelley et al., 2013).

## 3. Trends in Female Labour Force Participation and Employment

The chapter uses ILO's Key Indicators for the Labour Market (KILM) 8th edition data to examine LFPR and employment-to-population ratios (EPR) due to lack

[^70]of time series data from the published NBS data sources on (a) annual information on the working-age population ( 16 onwards) and (b) a breakdown of the labour force by sex. ${ }^{14}$ The KILM data for China are ILO estimates, based on data from national sources, and provide an overall direction of trends in the Chinese labour market.

Using the data from the NBS, if we divide the total economically active population by the total population ( $0+$ ), the ratio is around 58 per cent and has remained fairly constant between 2000 and 2012, with very small variations. From the census data $(2000,2010)$, the working-age population (tentatively defined as 16-60 for men and women) can be derived. Using this information, the total LFPR has indeed declined between 2000 and 2010, from an estimated 92 per cent to 86 per cent. These estimates are approximately $9-10$ percentage points higher than the KILM estimates for the population aged 15-64. This may be partly due to inconsistency between survey-generated estimates on the economically active population and census data on population, and partly due to differences in the definition of working-age population used in the KILM. Furthermore, the official NBS data does not provide gender disaggregated data; hence, we preferred to use ILO estimations for this section on LFPRs and employment-to-population ratios. In later sections, when we discuss educational attainment and sectoral transformation as well as wages, we use national data from surveys.

### 3.1. Gender Gap in Labour Force Participation and Employment

The LFPR in China for both women and men aged 15 years and above has shown a trend decline since the mid-1990s (Figure 10.1). During this period, women's LFPR declined by 9 percentage points, from 72.7 to 63.9 per cent, while men's participation rate declined by 6 percentage points from 84.8 to 78.3 per cent. The gap between male and female labour force participation has been fairly stable, though in recent years the gap has widened from 12.1 percentage points in 1990 to 14.4 percentage points in 2013.

When we disaggregate the data by age group, it is clear that much of the decline in LFPR is due to a marked decline in the participation rate of young men and women by 20 and 26 percentage points, respectively, between 1990 and 2010 (see

[^71]Figure 10.1:
Labour Force Participation Rates (\%): 1990-2013


Source: ILO, Key indicators of the labour market (KILM), 8th Edition.

Figure 10.2). After that, there was a moderate turnaround. This most likely reflects the fact that the young age cohort is studying longer. The cohort which experienced the next largest decline in the participation rate is women aged between 25 and 34 years, while that of their male counterpart declined only moderately. Women in this age group are normally in the child-bearing age, and this may explain their increased likelihood of withdrawal from the labour market. The latter fact reflects in the reigning social beliefs about women and their place in society (Hong, 2014) as well as decreased institutional support provided to workers with family responsibilities for childcare (Liu et al., 2009).

Along with a moderate increase in the LFPR gap between women and men, the gap in EPR has slightly widened as presented in Figure 10.3. Women's EPR has declined at a faster rate, standing at 61.5 per cent in 2013, compared to men's at 74.2 per cent. ${ }^{15}$

The above figures are from the ILO's Trends Econometric Model which estimates a continuous time series for the whole country. With the declining trend in both LFPR and EPR for both men and women, and a slight increase in gender gaps for both, the gender gap in the estimated unemployment rate has remained fairly constant at around 1.3 percentage points. Men's estimated unemployment rate lies above that of women's throughout the 1991-2013 period. Much of the decline in the EPR is driven by the decline in labour force participation, and this explains a fairly steady unemployment rate over more than two decades.

From national sources, we have data for only the registered urban unemployment rate and this has remained low at less than 5 per cent since 1990. Disaggregation of unemployment is not published as a time series from the national statistical data

[^72]Figure 10.2:
Labour Force Participation Rate (\%) by Age Groups of Men and Women: 1990-2013


Source: ILO, Key indicators of the labour market (KILM), 8th Edition.
Note: For the ASEAN estimate, Timor-Leste is excluded between 1996 and 2001, and Myanmar is excluded between 1996 and 2000.

Figure 10.3:
Gender Gap in Employment-to-Population Ratio (\%): 1991-2013


Source: ILO, ILO—Trends Econometric Model, October 2014.
sources. However, as unemployment tends to be more prominent in the urban areas in middle- and low-income countries, the ILO estimates are mostly capturing the urban unemployment situation. The ILO's estimated higher urban unemployment for men than for women needs to be understood in the context of differences across the urban and rural areas. For example, male urban unemployment rates may be higher if more rural men than women migrate to urban areas in search of better paying jobs but are not able to find jobs.

The data suggests that this may indeed be the case: between 2010 and 2012, approximately two-thirds of the rural migrant workers in urban areas consisted of men. ${ }^{16}$ Also, within urban areas, examining the reasons behind spells of unemployment reveals some gender gaps in the division of work between unpaid household care work and paid employment. In 2012, 35.6 per cent of urban unemployed women reported the need to take care of housework as the reason for leaving employment, as against 3.4 per cent of unemployed men (NBS and MoHRSS, 2013, p. T1-64).

In summary, gender gaps in labour force participation and employment outcomes are fairly narrow in China but over the last two decades or so this gap has been on the rise, particularly during the 2000s. The 2000s has been marked by the deepening integration of China into the global economy, as symbolized by its membership in the WTO in 2001, which obliged China to engage in further policy reforms to transition towards a more market-oriented economy. The path of transition followed may have revived a more traditional gender division of roles in households and the labour market. One route through which women could have been more negatively affected, as already noted earlier in this chapter, relates to the state-sector reforms. From 1998 to 2003, a total of 28.18 million persons had been laid off from the SOEs, of which 13.36 million were women (Information Office of the State Council of the People's Republic of China, 2004). Inclusion of reforms of the urban collective units further contributed to job losses of around 13 million between 1996 and 2000 (Fewsmith, 2001). According to Dong and Pandey (2012), the SOEs targeted for reforms were more likely to be concentrated in inefficient, capital-intensive sectors, which tended to be male dominated. However, at the enterprise level, more women may have been affected because of their lower occupational status. ${ }^{17}$ Moreover, women who experienced a layoff tended to experience downward occupational mobility and a larger gender wage gap upon re-employment (Knight and Li, 2006). Hence, the process of transition and restructuring of state sectors in the late 1990s and early 2000s likely resulted in a cumulatively negative impact on women's employment and earnings. This in turn, may have contributed to the observed divergence in the LFPR and employment growth between men and women in the 2000s.

### 3.2. Gender Gap in Educational Attainment

Educational attainment of both men and women improved between 2004 and 2012 (Figure 10.4). The share of employed population with primary education and less declined for both men and women, while those with junior secondary education and above increased. Among women, the largest gain in employment share occurred for those with junior secondary school (4.4 percentage points

[^73]Figure 10.4:
Educational Attainment of Employed Men and Women (\%) ${ }^{18}$ : 2004 and 2012


Source: ILO, Key indicators of the labour market (KILM), 8th Edition.
Note: For the ASEAN estimate, Timor-Leste is excluded between 1996 and 2001, and Myanmar is excluded between 1996 and 2000.
increase between 2004 and 2012), while among men, it occurred for those with senior secondary school (a 4.4 percentage points increase). The overall education profile of employed men, therefore, tended to move towards a higher educational profile than that of employed women.

Nevertheless, the education gap has closed at the higher levels of attainment. Among those in regular higher education, ${ }^{19}$ the share of women enrolled increased notably since the early 1990s to dominate (i.e., slightly above 50 per cent) over men since 2009 (Ministry of Education of the People's Republic of China, Various years). Such a positive trend could signal better job prospects for young women in the medium term, as long as women's educational attainment is adequately recognized and remunerated.

It is worth noting in this context that a report by the Global Entrepreneurship and Development Institute (2013) indicates that the percentage of the highly educated female population is 31 per cent higher than the percentage of female business owners in China (Global Entrepreneurship and Development Institute, 2013). The relatively lower entrepreneurial activity rate of women may mean that there are barriers to setting up businesses for women which leads to a loss of potential contribution of women to the Chinese economy.

[^74]Figure 10.5:
Employment by Occupation and Sex (\% of Total Employment): 2003-2012


Source: NBS and MoHRSS (2004-2013).

## 4. Gender Segregation at Work

Segmentation in the kind of employment women and men undertake generates gender differences in the working conditions and their incomes from work. This section examines some of the potential gender segmentation in employment, particularly in relation to educational attainment.

### 4.1. Women More Likely to Be in Agriculture than Men

The most dominant occupation in China continues to be agriculture and water conservancy labours ${ }^{20}$ for both men and women, even if the share of employed men and women in this occupation declined notably in the 2000s. From its peak in 2006 at 58.4 per cent for men and 67.2 per cent for women, it declined to 33.0 per cent for men and 44.5 per cent for women by 2012. Nevertheless, employed women remained much more likely to undertake agriculture and water conservancy

[^75]work than men, by a period average of 10 percentage points between 2003 and 2012. In the process of structural change that has been taking place in China, it signals that women are facing greater impediments to move out of agrarian work compared to that of men.

### 4.2. More Women Also Likely in Service Providing Occupations

The other two dominant occupations for men and women are production, transport equipment operators and related workers and business service personnel. More employed men were increasingly engaged as production workers, more than doubling in share from just 13.5 per cent in 2003 to 30.1 per cent by 2012. While the share of employed women in production work also rose during the same period, it was engagement in business service that became the second dominant occupation for women. The likelihood of employed women as business service personnel ${ }^{21}$ almost doubled from 11.9 per cent to 22.6 per cent during the same period. Throughout the period, however, employed men were over three times more likely to be a unit head ${ }^{22}$ than employed women (NBS and MoHRSS, 2004-2013).

This is true for other occupational categories as well. As shown in Figure 10.6, only 25 per cent of 'unit heads' consisted of women in 2012. There are some signs

Figure 10.6:
Share of Women in Each Occupation (\%): 2005-2012


Source: NBS and MoHRSS (2006-2013).

[^76]Figure 10.7:
Share of Highly Educated Men and Women in Professional and Technical Occupation by Education (\%): 2003-2012


Source: NBS and MoHRSS (2004-2013).
of improvement for women in this regard, however, as the share of unit heads who were women was only 22 per cent in 2005. Moreover, the share of women was almost 50 per cent or above among professional and technical personnel, business service personnel and agriculture and water conservancy personnel between 2005 and 2012.

There is also a clear relationship between education and occupation for both women and men, but it differs between both. Having less than junior high school education implies a high likelihood of working in agriculture and water conservancy. Between 2003 and 2010, an average of 87 per cent and 91 per cent of illiterate or semi-illiterate men and women, respectively, worked in agriculture and water conservancy (NBS and MoHRSS, 2004-2013). The occupational distribution by education attained changes clearly when men and women have senior secondary education and above. Production, transport equipment operators and related workers is the dominant occupation for men with senior secondary education at an average of 29 per cent between 2003 and 2012, while it is business service personnel for women, at an average of 33 per cent during the same period. For highly educated men and women with a college degree and above, the dominant occupation is professional and technical personnel, as shown in Figure 10.7. For women, this is more a dominant occupation than is the case for men. For example, more than 50 per cent of women with a university degree and above worked as professional and technical personnel between 2003 and 2012 (with a slight exception of 2004 for women with a university degree). For men, it is only those with a postgraduate degree and above who are more than 50 per cent likely to be working as professional and technical personnel.

The main difference between highly educated men and women in occupational distribution is that educated men are more likely to be a unit head or clerks. For college-educated men, work related to production and transport equipment operation also constituted an important share between 2003 and 2012. For
example, among university graduates, unit heads account for an average of 11 per cent during the same period, while the same average share stood at 4 per cent for women. Men with university education are almost three times more likely than women to be a unit head.

In terms of employment in urban units, as of 2012, there were four female-dominated sectors, all in services: hotels and catering services, financial intermediation, education and health, social securities and social welfare (NBS, 2014). Of the four sectors, financial intermediation and education came to be female dominant since around 2008 and 2009. The 15 other sectors are dominated by men. ${ }^{23}$

The sectoral distribution of employment in urban work units by education attained by men and women exhibits a similar pattern as those observed in occupational distribution by education attained (NBS and MoHRSS, 2004-2013). There is a high likelihood of those with education of less than junior school to be in agriculture. Those who have graduated from junior or senior schools tend to be concentrated in manufacturing. On the other hand, having more than a college education increases the likelihood of working in various service sector activities, more notably in education, public health and public administration. Highly educated women with a college degree and above are more likely to work in the education sector than men, while highly educated men with a college degree and above are more likely to work in public administration.

### 4.3. Share of Women's Employment in Manufacturing Is on the Decline

The productivity in manufacturing (constant 2011 PPP US\$) increased rapidly in China from US\$ 6,828 per worker in 1991 to US\$ 20,626 per worker in 2003 and to US $\$ 45,564$ per worker in $2011 .{ }^{24}$ However, in the urban manufacturing sector, the total share of women employed in the sector has been on the decline. From the Chinese Labour Statistical Yearbook we find that the share of women in urban manufacturing units declined from 43.4 per cent in 2003 to 39.0 per cent in 2012. This has been underpinned by an across-the-board decline in the share of women employed in almost all manufacturing sub-sectors.

There have been some changes in the pattern of female employment away from the sub-sectors of manufacturing where women constituted more than 60 per cent of the workforce in 2003, such as manufacture of textiles (65\%), to other

[^77]Figure 10.8:
Share of Women in Total Employment of Selected Manufacturing Sub-sectors (\%): 2003 and 2012


Source: NBS and MoHRSS (2004-2013).

Figure 10.9:
Employment Status, Men and Women (\%): 2005-2009 and 2011-2012


Source: NBS and MoHRSS (2006-2010, 2012-2013).
sub-sectors. Between 2003 and 2012, there was an increase in the share of women employed in the manufacture of transport equipment (from 5.7\% to 6.5\%) and in the processing of food from agricultural products ( $3.0 \%$ to $4.1 \%$ ). There is a concentration of women in other sub-sectors such as manufacture of communication equipment, computer and other electronic equipment, manufacture of textile wearing apparel and manufacture of leather, fur and feather. However, as women move out of light manufacturing without gaining broader access to the higher value added manufacturing sector, women's share in total employment in almost all the manufacturing sub-sectors declined between 2003 and 2012 (Figure 10.9 and Table 10.1). Out of the 29 manufacturing sub-sectors, the only sub-sectors

Table 10.1:
Ratio of Employed Persons in Manufacturing Sectors in Urban Units by Sex (\%): 2003 and 2011

| Industry | 2003 |  | 2011 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Female | Male | Female | Male |
| Manufacturing | 43.4 | 56.6 | 39.5 | 60.5 |
| Processing of food from agricultural products | 41.3 | 58.7 | 42.8 | 57.2 |
| Foods | 49.3 | 50.7 | 47.5 | 52.5 |
| Beverage | 39.7 | 60.3 | 37.4 | 62.6 |
| Tobacco | 42.8 | 57.2 | 37.6 | 62.4 |
| Textile | 65.1 | 34.9 | 61.7 | 38.3 |
| Textile wearing apparel, footwear and caps | 72.0 | 28.0 | 65.6 | 34.4 |
| Leather, fur, feather and its products | 69.0 | 31.0 | 58.9 | 41.1 |
| Wood, bamboo, rattan, palm and straw products, processing of timbers | 41.2 | 58.8 | 37.2 | 62.8 |
| Furniture | 35.4 | 64.6 | 35.5 | 64.5 |
| Paper and paper products | 39.3 | 60.7 | 36.6 | 63.4 |
| Printing, reproduction of recording media | 48.2 | 51.8 | 43.1 | 56.9 |
| Articles for culture, education and sport activity | 62.8 | 37.2 | 57.9 | 42.1 |
| Processing of petroleum, coking, processing of nucleus fuel | 32.5 | 67.5 | 28.8 | 71.2 |
| Chemical raw material and chemical products | 33.5 | 66.5 | 32.0 | 68.0 |
| Medicines | 47.9 | 52.1 | 46.9 | 53.1 |
| Chemical fibre | 40.5 | 59.5 | 39.7 | 60.3 |
| Rubber and plastic | 47.2 | 52.8 | 42.7 | 57.3 |
| Non-metallic mineral products | 32.7 | 67.3 | 28.9 | 71.1 |
| Manufacture and processing of ferrous metals | 26.0 | 74.0 | 21.3 | 78.7 |
| Non-ferrous metals | 29.8 | 70.2 | 25.1 | 74.9 |
| Metal products | 35.8 | 64.2 | 30.4 | 69.6 |
| General purpose machinery | 32.6 | 67.4 | 27.2 | 72.8 |
| Special purpose machinery | 32.1 | 67.9 | 28.6 | 71.4 |
| Transport equipment | 31.9 | 68.1 | 26.8 | 73.2 |
| Electrical machinery and equipment | 44.5 | 55.5 | 42.0 | 58.0 |
| Communication equipment, computer and other electronic equipment | 57.7 | 42.3 | 47.9 | 52.1 |
| Measuring instrument and machinery for cultural activity and office work | 49.8 | 50.2 | 45.2 | 54.8 |
| Artwork, other manufacture | 57.6 | 42.4 | 53.1 | 46.9 |
| Recycling and disposal of waste | 48.1 | 51.9 | 31.3 | 68.8 |

Source: NBS and MoHRSS, 2004 and 2012.
where women's share in employment slightly increased during the same period are processing of food from agricultural products ( $41.3 \%$ to $42.8 \%$ ) and manufacture of furniture ( $35.4 \%$ to $35.5 \%$ ).

This slower pattern of change in occupational and sectoral employment of women out of agriculture and within urban manufacturing sub-sectors as compared to men implies that women's employment is increasingly concentrating in the services sectors, where the share in total female employment rose from 56.5 to 59.1 per cent between 2003 and 2012. The service sector offers a diverse set of earning opportunities, ranging from low pay and precarious work, for example in smallscale retail, domestic work, the food, beverage (or restaurant) and entertainment sector, to higher paying services, for example in the application of information technology. This makes it difficult to draw a clear implication on gaps in earnings and employment prospects facing women, and is examined in further detail.

By status in employment, between 2005 and 2012, women continued to be concentrated in self-employment while after 2010, men became more concentrated in wage employment (Figure 10.9). For men and women, having a senior school education and above ensures higher chances of being an employee, while having junior school education or less is associated with higher chances of being self-employed.

## 5. Explaining Earnings Disparity Between Women and Men

Various studies have pointed to an earnings disparity between women and men in China as noted in Section 1 of the chapter. However, there are still data limitations in carrying out a simple analysis of earning differences between men and women and across occupations and sectors, simply because such data is not easily available. But according to the 2013 earnings data for the non-agricultural sectors by occupation and by sector, we find that the emerging occupation for womenbusiness service personnel-had the lowest average recorded earnings at 39,300 yuan renminbi (CNY) (US\$ 6,339) ${ }^{25}$ per annum, followed by the second emerging occupation-production and transport equipment operators-at CNY40,000 (US\$ 6,452). ${ }^{26}$ Hence, while the move out of agricultural work may have resulted in some improvements in the earnings of women and men, women tend to dominate in the lowest paying occupations.

The analysis of average earnings by occupation and sector suggests a stronger likelihood on the existence of a gender pay gap. In hotels, catering services and the health services, social securities and social welfare sectors-two of the four

[^78]female-dominated sectors in 2012-the average earnings for business service personnel lay below average at CNY29,500 and CNY37,600 (US $\$ 4,758$ and US $\$ 6,065$ ) in 2013. Business service personnel in the education sector were paid slightly above the national average at CNY45,100 (US\$7,274). The average earnings in those two sectors for professional and technical personnel also lay well below the national average of CNY63, 100 (US\$10,177), at CNY40,300 and CNY53,300 (US\$6,500 and US\$8,597), respectively.

A decomposition analysis using micro-data from the China Family Panel Studies (CFPS) 2012 confirms the existence of discrimination in pay between men and women. The surveys have been conducted since 2007 by Peking University and the data source provide a very detailed set of social and economic information at the individual, household and community levels in urban and rural China. The total sample in 2012 is 35,720 individuals. From this sample, the following subsamples are retained: people aged 16 years and above with non-missing information on their gender and education, and excluding Qinghai, Ningxia Hui Autonomous Region and Xinjiang Uygur Autonomous Region due to very small sample sizes from these localities. This leaves us with a total sample of 32,463 . Labour market status of individual respondents is derived from the questions, and current work is determined by examining the reported end date of the respondents' work history. ${ }^{27}$ The sample for the analysis is then further restricted to those reporting non-agricultural wage job as their current work.

A simple Blinder and Oaxaca pooled decomposition model ${ }^{28}$ is applied to explain the gender gap in post-tax hourly earnings from non-agricultural wage jobs ${ }^{29}$ to gauge the magnitude of gaps in earnings due to gender differences in the composition of workers, in terms of age, education and other characteristics as against gaps in earnings due to gender differences in their returns. Gender

[^79]Table 10.2:
Selected Description of the CFPS 2012

|  | Total | Of which female |
| :--- | :--- | :--- |
| Total number of currently employed | 17 | $56.0 \%$ |
| Of which: | 318 |  |
| $\quad$ Non-agricultural wage employment | 7,213 | $37.5 \%$ |
| Average hourly post-tax earnings (CNY) | 16.5 | 13.1 |

Source: Authors' calculation from CFPS 2012, the Institute of Social Science Survey (ISSS) of Peking University.
Note: Data without applying the sampling weight is shown.
difference in returns are differences in earnings that cannot be explained by gender differences in background characteristics and is often attributed to the existence of discriminatory practices in the labour market. ${ }^{30}$ The independent variables included are information on age and its square, ${ }^{31}$ educational attainment, location, occupation or sectors of work, reported tenure in the current job in terms of number of years, whether the job is located outside of own county/city/district or not, dummies of having also worked in other types of jobs within the last year, ${ }^{32}$ urban-rural location and provincial dummies.

In 2012, non-agricultural wage employment constituted 42 per cent of total current employment, according to the survey data as shown in Table 10.2. Women accounted for 37.5 per cent of total non-agricultural employment.

The predicted difference between men and women in log of hourly post-tax earnings stands at 0.316 , which translates into hourly earnings of men being approximately CNY2.42 (US\$0.40) higher than that of women. The estimation reported here on gender differences in earnings due to 'discrimination' is high: it is 91.5 per cent. ${ }^{33}$

Previous studies have produced varied results on differences in earnings between men and women in China, ranging from a low of 20 per cent to a high of 80 per cent (Haspels and Majurin, 2008). Using the same series, that is, CFPS in 2009, Su and Heshmati (2011) find that about 86 per cent of the estimated wage gap is due to unexplained factors that they attribute to discrimination. Compared to their results, the estimated share of earnings that is due to unexplained factors in this chapter is higher by around 6 percentage points. The result reported here

[^80]Table 10.3:
Results of Decomposition: 2012

| Dependent variables: Log of hourly post-tax earnings | Coefficient | Standard error |
| :--- | ---: | :--- |
| Predicted outcome |  |  |
| Male predicted average log earnings | 2.190 | 0.032 |
| Female predicted average log earnings | 1.875 | 0.042 |
| Differences in log of earnings: | 0.316 | 0.053 |
| Difference due to: |  |  |
| Explained by background characteristics | 0.026 | 0.034 |
| Age | -0.009 | $0.004^{* *}$ |
| Education | -0.027 | $0.014^{*}$ |
| Work (duration, sector) | 0.058 | $0.023^{* *}$ |
| Other work within the last year | 0.022 | $0.008^{* * *}$ |
| Location (urban, provinces) | -0.016 | 0.028 |
| Unexplained (can be attributed to discrimination) | 0.289 | $0.048^{* * *}$ |
| Age | 0.310 | 0.461 |
| Education | 0.344 | $0.069^{* * *}$ |
| Work (duration, sector) | -0.081 | $0.069^{* * *}$ |
| Other work within the last year | 0.043 | 0.028 |
| Location (urban, provinces) | -0.003 | 0.092 |
| Constant | -0.323 | 0.480 |

Source: The Institute of Social Science Survey (ISSS) of Peking University, CFPS, 2012.
Notes: ${ }^{* * *}$ Statistical significance at 1 per cent; ${ }^{* *}$ Statistical significance at 5 per cent; ${ }^{*}$ Statistical significance at 10 per cent. Sampling weights were used. Standard errors are robust. Total of 20,428 observations were used.
provides an indication of rather high and perhaps, increasing, gender discrimination in the labour market in terms of earnings (Table 10.3).

Amongst other studies that carried out a decomposition analysis, Wang and Cai (2008) suggest that discrimination accounts for more than 60 per cent of the gender earning differential in Shanghai, Wuhan, Shenyang, Fuzhou, and Xi'an in 2001, based on data from the CULS. From the Chinese household income projects, Tang and Long (2012) find an increase of 'unexplained earnings gap' from $0.17 \log$ points in 2002 to 0.27 log points in 2007 and argue that this is due to gender-based discrimination, which has increased. Recent analysis by the China Center for Human Capital and Labour Market Research confirms that returns to work experience in the labour market are significantly lower for women as compared to men (quoted in World Bank, 2013).

In summary, men and women seem to be engaged in different types of work and in work that requires different levels of qualifications. However, the above decomposition analysis shows that differences in educational levels are not sufficient to explain women's lower earnings, and points to the effects of discrimination against women in the labour market. This may lead working women to be
disadvantaged in the labour market as compared to men, as also illustrated by the composition of men and women across different income groups. According to the NBS and the All-China Women's Federation (ACWF), women were disproportionately represented in low and lower-middle income quintiles in both urban and rural areas in 2010 (ACWF and NBS, 2011). Furthermore, in the same year, men constituted 69.1 per cent and 75.6 per cent of persons falling within the highest income group in urban and rural areas, respectively. In contrast, in the low income group in the same year, women accounted for 59.8 per cent and 65.7 per cent in urban and rural areas, respectively.

## 6. Factors Influencing Gender Segregation in the Labour Market

In spite of much progress and a strong legislative and institutional foundation to promote gender equality at the workplace, challenges remain. Furthermore, in recent years-as noted in the Introduction-there appears to be a re-emergence of gender stereotypes related to women's and men's roles in early capitalist or market economy societies, that is, men as the breadwinners and women as caregivers. We identify four main factors that influence gender segregation in the labour market:

## 1. Access to work

2. Care work
3. Social security
4. Retirement age

### 6.1. Access to Work

The government of China has implemented a legislative framework to deter gender discrimination at the workplace and in recruitment-for example, the 2008 Law of the People's Republic of China on Promotion of Employment. Some studies, nevertheless, point to the finding that it is more difficult for women in China to find a job than it is for men (Bulger, 2000). A common reason for reluctance to hire women is pregnancy and childcare-which are seen as costs to the firms and organizations. Some job advertisements clearly state that they prefer male workers, which goes against the equal opportunity legislation (Xia, 2001). A survey carried out by Zhang and Li (2011) among 1,320 women workers from various enterprises in Shandong province found that 74 per cent believe that gender discrimination in recruitment exists (males first, females second). According to the MoHRSS, more than 66 per cent of the new jobs which are advertised through the public employment service centres in 117 cities have specified the gender required. A similar conclusion was reached by researchers of the China University of Political Science and Law, based on a survey among the students from 11 universities in 6 cities carried

Figure 10.10:
Percentage of New Jobs with Requirement on Gender: 2007-2011


Source: MoHRSS, Analysis of supply and demand in the labour market in some cities, 2007-2011.
out in 2008 and 2010, which showed that 69 per cent have specified the preferred gender (The Constitutional Government Research Institution of China University of Political Science and Law, 2010).

Although the overall share of jobs with a gender preference has declined, the gap of the 'market demand' between men and women has become wider as illustrated in Figure 10.10 based on analysis by the MoHRSS.

Furthermore, this gender-based discrimination in recruitment appears to be particularly pronounced in the case of new graduates who are looking for work. A survey by Southwest University of Political Science and Law reveals that more than 70 per cent of female college students believe that gender discrimination against women exists and is something that they will face when hunting for jobs. This is compounded by the fact that in recent years, the challenge of finding decent jobs for Chinese graduates has been increasing. There were about 6.39 million college graduates entering the labour market in 2013 (NBS, 2014). Female graduates, on average, need to send out nine resumes to get one interview opportunity, and 91.9 per cent feel that employing units have a gender bias against women workers. ${ }^{34}$

### 6.2. Care Work

The NBS carried out a time use survey in 2008 which found that women spend more time on childcare than men do-leading, often, to a double burden of work

[^81]and care responsibilities. In China, women spend almost 4 hours per day on housework, while men spend 1.5 hours on average (NBS, 2010). This is not surprising, nor indeed peculiar to the Chinese situation. Women generally tend to spend more time on care duties, even when working, than men do (see, for example, Antonopoulos, 2009; Daly and Standing, 2001). Women's care responsibilities also often influence employers' perceptions about women's commitment to work, leading to discrimination against women when it comes to hiring decisions (Bulger, 2000; Haspels and Majurin, 2008). In general, provision of childcare is a critical 'enabling' factor for women's productive employment.

It has been pointed out by Jia and Dong (2011) that part of the current problems around access to childcare for women can be related to the closure of SOEs during China's economic reform. The SOEs usually had in place childcare facilities which are absent in the new enterprises, and this has had a negative impact on women's employment. Du and Dong (2010), Kilburn and Dater (2002) and Liu et al. (2009) have also noted that China's transition has led to a decline in governmental support for childcare and shifted the responsibility of childcare to the families, making it more difficult for many women to reconcile their work and care duties. Furthermore, the issue of balancing work with family responsibilities has become particularly acute for women migrating to cities for work (Maurer-Fazio et al., 2009).

In 1993, the Regulations on the Health Care of Female Staff issued by the Ministry of Health, the Ministry of Labour, the Ministry of Human Resource, ${ }^{35}$ the All-China Federation of Trade Union (ACFTU) and the ACWF stipulated that 'Units with more than five nursing infants should gradually provide child-nursing rooms for female staff'. In 2012, the State Council passed the Special Rules on the Labour Protection of Female Employees under which Article 10 states, 'Employment units with large number of female staff should establish gynaecological clinics, rest rooms for pregnant women, and child-nursing rooms.'

However, these laws have not always been enforced. A childcare facility is often viewed as an added cost by enterprises and many are reluctant to make that additional expenditure. The implementation of the 2012 Special Rule has proved difficult as evident from a report of the National Health and Family Planning Commission. ${ }^{36}$

Recognizing the importance of enabling workers with family responsibilities to reconcile work and family, the state and workplaces should provide for many more public childcare facilities. This will be critical for ensuring that women are able to participate in the labour market on equal terms with men. Also critical is the need to change societal perceptions about women's primary role as mothers and caregivers-which often prompts women to leave the labour force and care for their husbands and families, and those who do not do so are not favourably viewed as they fail to carry out their primary duties. A further negative

[^82]consequence is the perception that women will 'not be as committed to their work as men' and, therefore, are often side-lined in promotions (Fincher, 2014; Haspels and Majurin, 2008).

There are also concerns that the relaxation of the 'One-child Policy' at the end of 2013, will likely cause a further decline in women's LFPR in coming years in the absence of adequate childcare facilities at the workplace (He and Zhu, 2012). ${ }^{37}$

### 6.3. Access to Social Security

Along with access to childcare, access to social security is critical for enabling women's participation in paid employment. Social security includes medical insurance, unemployment benefits, maternity benefits and pension. Very often, the design of social security policies is based on a male breadwinner female homemaker model which limits the access of women workers to social security benefits and to work. On the other hand, access to medical insurance and job protection during the child-bearing months can secure and increase women's participation in the labour force significantly (ILO, 2001).

After the People's Republic of China was established in 1949, the government stipulated a number of regulations and laws to guarantee social security coverage for sickness, injury, birth, retirement and death as well as while waiting for paid jobs. One such initiative was the labour insurance fund, solely paid by the enterprises and the ACWF (Wu, 1997). Before the opening-up in 1978, SOEs work units were the main centres of social activities, taking care of staff's welfare, providing living places, medical service, children's education and endowment insurance. Employees would sign lifetime contracts with SOEs, a relationship that is often referred to as the 'iron rice bowl'.

However, the old system, based on traditional lifetime security, the 'iron rice bowl', is fast changing, and many challenges remain. China has achieved remarkable progress in setting up a market-compatible social security model since the 1990s. Currently, the national social assistance scheme covers about 700 million persons (almost half of the Chinese population) in 2012. ${ }^{38}$

In recent years, there has been a policy focus on women's social security. Women and social security was added as a new subject in the National Program for Women's Development in China (2011-2020) to improve maternity protection, medical insurance, pension coverage, unemployment insurance and work-related injury insurance. As a result, an increasing number of women are now participating in social security schemes (NBS, 2012).

[^83]Figure 10.11:
Number of Persons Participating in Insurances: 2005-2011 (Index of 2005=100)

| Basic medical insurance | Unemployment insurance |
| :---: | :---: |
|  |  |
| Work-related injury insurance | Maternity insurance |
| 150.0 | 300.0 |
| $140.0$ | 250.0 |
| $\begin{aligned} & 130.0 \\ & 120.0 \end{aligned}$ | $200.0$ |
| 110.0 | 150.0 |
|  |  |

Source: Calculation based on statistics from the NBS, 2012.
Note: All workers (both male and female) shall participate in maternity insurance and the maternity insurance premiums shall be paid by the employing entities. The spouse of the worker who is not in employment will be paid the benefit of medical fees associated with giving birth (The NPC Standing Committee, 2010).

As Figure 10.11 shows, the rates of insurance participation have increased dramatically in the past decade for both men and women. The growth rates of the number of women joining social insurances are higher than the rates of men. In particular, for basic medical insurance, the compound annual growth rate for women was 13.3 per cent from 2005 to 2011, 4.7 percentage points higher than the rate of men during the same period.

In terms of maternity protection, the State Council agreed to extend maternity leave from 90 days to 98 days in 2012, ${ }^{39}$ and no-work unit could reduce female employee's salary because of maternity leave (The NPC Standing Committee, 2005). A new article was added into the Law of the People's Republic of China on the Protection of Women's Rights and Interests in 2005 stating the state's commitment to implementing maternity protection.

In 2013, (Figure 10.12), 5.22 million women benefited from maternity protection, a 20 -fold increase in the 2001 figure. The coverage of maternity

[^84]Figure 10.12:
Number of Beneficiaries of Maternity Insurance (Thousand Persons): 2001-2013


Source: MoHRSS and NBS (2013), MoHRSS (2013).
insurance of urban employees reached 95 per cent in 2010, from around 70 per cent since the start of the new century.

It is obvious that the government has achieved some success in improving women's social security access. The number of employed women covered by social security in urban entities has gone up quite significantly. However, challenges still exist.

Differential rates of social security coverage by women and men remain an issue and hamper women's access to continuous employment in China. While 56.4 percent of urban men were covered by medical insurance and 85 percent of elderly men in urban areas were covered by pension schemes in 2001, the share of urban women covered by medical insurance was 47.7 per cent and of those covered by pension schemes was 59.3 per cent. Access to unemployment insurance also varied-for urban men it was 33.7 per cent and for urban women it was 29.7 per cent, while work injury assistance was 47.4 per cent for urban men and 37.2 per cent for urban women. ${ }^{40}$

Furthermore, as Drew (2011) points out, China's current system is based on urban social security, and is closely connected with formal employment and has an urban household registration certificate (Hukou). Women, in rural areas and those without proper jobs are still not covered by social security measures. According to the ILO's Social Protection Report 2014 (ILO, 2014), China's expenditure on social protection is 6.3 per cent of the GDP. This is relatively small compared to the global average ( 8.6 per cent).

### 6.4. Retirement Age

China's mandatory age for retirement was set by the State Council in 'The Labour Insurance Regulations of the People's Republic of China' in the 1950s, further

[^85]Table 10.4:
Population by Age Group (thousand persons): 2010 and 2020

| Age <br> group | 2010 |  |  |  | 2020 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Female | Total | Share of female | Total | Female | Total | Share of female |
| 15-64 | 999,569 | 482,760 | 73.5\% | 73.6\% | 1,003,953 | 482,769 | 70.1\% | 70.0\% |
| 65+ | 113,546 | 58,846 | 8.4\% | 9.0\% | 167,691 | 86,036 | 11.7\% | 12.5\% |
| 50+ | 329,982 | 163,428 | 24.3\% | 24.9\% | 458,238 | 227,817 | 32.0\% | 33.0\% |
| 50-64 | 216,436 | 104,582 | 15.9\% | 16.0\% | 290,547 | 141,781 | 20.3\% | 20.6\% |

Sources: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: the 2012 Revision Database.
approved in 1978 by the Standing Committee of the People's Congress (The State Council, 1978). The law stipulates a retirement age for men as 60 , for female cadres as 55 and for other women as 50 . Compared to most developed countries, this implies a relatively early retirement for women. However, some women who are guaranteed a pension, especially those in low-quality jobs may prefer to exit the labour force earlier than men (Giles, 2009; Liu et al., 2009). However, the differential retirement age has led to debates for over a decade, not only because of gender equality considerations, but also because the retirement ages of both sexes are relatively low. The labour force in China is decreasing, while the population is ageing. It is predicted that the population over the age of 65 will increase from 8.35 per cent in 2010 to 11.7 per cent in 2020 . However, the economically active population aged between 15 and 64 will decline by 3.4 per cent in the same period. In terms of women, one-third of the female population will be above 50 in five years, which means one out of three women will retire and rely on pension after 2020 (see Table 10.4).

Haspels and Majurin (2008) and the World Bank (2014) have pointed out that this lower mandatory retirement age causes many women to miss years of work and thereby, career advancement opportunities and social security entitlements. The 10 -year retirement age gap creates potential earnings loss for women both from 10 years of lost earnings and lower pension rates (Chen and Turner, 2015). It has also been noted that this policy of early retirement for women may reflect the belief that older women are less capable than men when they age (Liu, 2007), which amounts to discrimination against women (Zhang, 2012) and violates both the international human rights law and the Chinese Constitution. In summary, the unequal retirement age for women constrains their ability to work. It also limits their career development opportunities and the investments made to develop their skills while lowering their representation at the higher management levels and creating disparities in social security benefits.

The current debates have led to some fresh thinking on the retirement age. In 2013, The Decision on Major Issues Concerning Comprehensively Deepening Reforms adopted by the Third Plenary Session of the 18th Communist Party of China (CPC) Central Committee decided to 'stipulate policies for gradually suspending the retirement age of employees' in the near future. This was based on the understanding that the retirement age has remained unchanged since its adoption
in 1950s and that it needs to adapt to the needs of the contemporary society and that early retirement for both men and women is a waste of human resources.

The Judiciary Committee of Internal Affairs of the National People's Congress (NPC) has suggested that women should be given the option to retire early or late. ${ }^{41}$ Another suggestion by the Chinese Academy of Social Sciences is to delay female employees' retirement age by one year every three years and delay male employees' retirement age by one year every six years from 2018. Gradually, the mandatory retirement age will be 65 for both men and women by $2045(\mathrm{Li}, 2014)$.

More recently, in March 2015 during the NPC and Chinese People's Political Consultative Conference (CPPCC), Mr Yin Weimin, Minister of MoHRSS, said that the Government of China would begin drafting a new retirement policy which would be unveiled in 2017 and implemented from 2022 onwards. The new policy will progressively raise the retirement age for women and men, taking into account the shrinking labour force and the ageing population in the country (Hui, 2015; Wall Street Journal, 2015).

## 7. Concluding Remarks

China's economic growth in the last three decades has created unprecedented opportunities for its women and men, as many have climbed out of poverty and enjoy better living standards. After the establishment of the People's Republic of China in 1949, there was a push towards gender equality and the Constitution of the People's Republic of China guarantees equal rights to women and men on a number of important areas. However, cultural norms about the role of women in the household and in society have continued to persist, and in some senses, appear to have become more pronounced during the reform phase.

Prior to the economic reform in China, the work units in SOEs were the main centres of employment and social security-the model referred to as the 'iron rice bowl'. As the Chinese economy has sought reform and moved from a traditional planned economy towards a socialist market economy with Chinese characteristics, the older models have given way to new systems. But this has also had an impact on lifetime security and gender equality. As noted earlier in this paper, SOE reform, in particular, has had an impact on women's work. Almost half of all workers who were laid off from SOEs during the reform phase 1998 to 2003 were women. The transition to a socialist market economy, marked by reform of China's SOEs, may have led to a resurgence of a more traditional gender division of work in households and the labour market.

The government of the People's Republic of China has nevertheless, been very active and committed to gender equality and social security at the legal and policy level. Several landmark laws and regulations prohibiting discrimination in hiring and in payment, promoting childcare, promoting social security and a safe

[^86]workplace for women have been formulated by the government over the years. However, success in implementation has not always been uniform.

In recent years, the LFPR for both women and men have declined, but for women it has declined at a faster rate. This may be because of longer years of education of the 15-24 age group, which is a positive outcome. But the female LFPR for the 25-34 age group, the child-bearing age, has also declined. Moreover, the employment to population ratio of women has declined at a rate faster than men's, and also more steeply than the LFPR. In terms of where women work, a sectoral analysis reveals that women are more likely to be engaged in low-productivity agriculture and services, and in those occupational groups which have the lowest average wage.

Furthermore, China's economy and its manufacturing sector have moved up the productivity and skills ladder-China's manufacturing productivity has increased almost 6.7 folds between 1991 and 2011. However, the share of women in manufacturing in urban units has declined between 2003 and 2012. This decline is evident across the board, but especially significant for previously femaledominated sectors such as textiles and garments and footwear where women's share has declined from 72 per cent to 65.6 per cent over the same period. The only manufacturing sub-sectors where women's share of employment has increased marginally are food processing and furniture. Part of this is likely due to the education and skills gap that exists between women and men, though the education gap between women and men has declined over the years as reported in Section 3.

A simple decomposition analysis using the CFPS data from the ISSS of Peking University shows that much of the differential outcomes in wages between women and men, 91 per cent to be precise, is unexplained. This is in line with earlier findings using a decomposition analysis. In other words, women and men of similar educational attainment often end up with different wage outcomes. Possibly, at least part of this can be attributed to discrimination and gender stereotypes on what men and women can and should do in work and in life.

In this context, we highlight four areas that require further attention from a policy perspective:

1. Equal access to employment for women and men, especially for graduates entering the labour force.
2. Better provision of childcare facilities to create an enabling environment for male and female workers with family responsibilities. This will promote equality for women in the labour market, given that they are considered to be the primary caregivers in the family.
3. Improved coverage of social security measures which has started to improve quite significantly for women alongside men over the last decade.
4. Re-examination of the differential retirement age for women and men with a view to enable women to retire at the same age as men and make it possible for both sexes to retire earlier if they wish.

Gender inequality in China, as measured by the gap in the LFPR, is lower than what is observed in most other Asian countries, and quite similar to that in the

OECD countries. However, the recent trends towards a greater gender gap in access to quality employment and in earnings are a matter of concern which is getting attention at the highest levels. President Xi Jinping in a meeting with elected leaders of the ACWF on 31 October 2013, noted that China's state and Party commitment to development needs to integrate gender equality and offer assistance to improve the environment for women to access quality jobs, develop their livelihoods and exercise their rights. ${ }^{42}$

In some areas, further legal and policy reform will be needed to create an environment conducive to gender equality, for example, in better outlawing discrimination in job recruitment, enabling women and men to equally access employment in all sectors and occupations and gradually harmonizing the retirement ages of men and women. In addition, main challenge lies in effectively implementing and enforcing the existing laws and policies on gender equality in the labour market. Thirdly, concerted efforts are needed to ensure that attitudes towards women and their role in the economy, politics and society favour equal opportunities, remuneration and treatment for women and men.

[^87]
## Appendix A

Table A1:
Descriptive Statistics from CFPS Data: 2012

|  | Total |  | Female |  | Male |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | S.D. | Mean | S.D. | Mean | S.D. |
| Dependent variable: Log of hourly post-tax earnings | 2.067 | 1.066 | 1.873 | 1.086 | 2.200 | 1.032 |
| Explanatory variables: |  |  |  |  |  |  |
| Age-related variables: |  |  |  |  |  |  |
| Age minus number of years worked in current job | 31.15 | 11.00 | 31.04 | 10.35 | 31.23 | 11.42 |
| (Age minus number of years worked in current job) ${ }^{2}$ | 1,091.5 | 788.0 | 1070.3 | 718.0 | 1105.9 | 832.0 |
| Education: |  |  |  |  |  |  |
| Illiterate/semi-illiterate | 0.075 | 0.264 | 0.078 | 0.269 | 0.073 | 0.261 |
| Primary | 0.145 | 0.352 | 0.137 | 0.344 | 0.151 | 0.358 |
| Junior secondary | 0.292 | 0.455 | 0.275 | 0.447 | 0.303 | 0.459 |
| Senior secondary and vocational training | 0.225 | 0.418 | 0.214 | 0.410 | 0.233 | 0.423 |
| College (3 years) | 0.158 | 0.365 | 0.181 | 0.385 | 0.143 | 0.350 |
| College (4 years) | 0.098 | 0.297 | 0.106 | 0.307 | 0.093 | 0.290 |
| Master's | 0.006 | 0.075 | 0.008 | 0.091 | 0.004 | 0.062 |
| Doctoral | 0.0001 | 0.009 | 0.0002 | 0.015 | - |  |
| Current work-related variables: |  |  |  |  |  |  |
| Tenure (in years) | 6.974 | 8.236 | 5.472 | 6.908 | 7.998 | 8.887 |
| Sector of current work: |  |  |  |  |  |  |
| Agriculture, forestry, animal husbandry and fishery | 0.012 | 0.110 | 0.012 | 0.109 | 0.013 | 0.111 |
| Mining | 0.018 | 0.134 | 0.003 | 0.052 | 0.029 | 0.168 |
| Manufacturing | 0.276 | 0.447 | 0.259 | 0.438 | 0.287 | 0.452 |
| Production and supply of electricity, gas and water | 0.012 | 0.110 | 0.007 | 0.083 | 0.016 | 0.125 |
| Construction | 0.114 | 0.318 | 0.035 | 0.184 | 0.168 | 0.373 |
| Transport, storage and postal service | 0.057 | 0.232 | 0.026 | 0.160 | 0.078 | 0.268 |
| Information transmission, computer service | 0.013 | 0.113 | 0.011 | 0.104 | 0.014 | 0.118 |
| Wholesale and retail | 0.104 | 0.305 | 0.166 | 0.372 | 0.061 | 0.240 |

(Table A1 Continued)

|  | Total |  | Female |  | Male |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean | S.D. | Mean | S.D. | Mean | S.D. |
| Hotel and catering service | 0.041 | 0.198 | 0.069 | 0.253 | 0.022 | 0.146 |
| Finance | 0.025 | 0.157 | 0.029 | 0.167 | 0.023 | 0.150 |
| Real estate | 0.021 | 0.142 | 0.021 | 0.142 | 0.021 | 0.142 |
| Rental and commercial service | 0.015 | 0.123 | 0.016 | 0.126 | 0.015 | 0.121 |
| Scientific research, technical service and geological prospecting | 0.008 | 0.088 | 0.009 | 0.095 | 0.007 | 0.083 |
| Water resource, environment and public facility management | 0.011 | 0.103 | 0.016 | 0.126 | 0.007 | 0.084 |
| Residential and other service industry | 0.022 | 0.145 | 0.021 | 0.142 | 0.022 | 0.147 |
| Education | 0.056 | 0.231 | 0.090 | 0.287 | 0.033 | 0.179 |
| Health, social security and public welfare | 0.028 | 0.165 | 0.052 | 0.223 | 0.011 | 0.106 |
| Culture, sports and entertainment | 0.008 | 0.090 | 0.010 | 0.100 | 0.007 | 0.083 |
| Public administration and social organization | 0.090 | 0.286 | 0.085 | 0.279 | 0.093 | 0.290 |
| Other industries | 0.003 | 0.056 | 0.002 | 0.049 | 0.004 | 0.061 |
| Location-related variables: |  |  |  |  |  |  |
| Urban | 0.679 | 0.467 | 0.718 | 0.450 | 0.652 | 0.476 |
| Province dummies (not shown) | - |  | - |  | - |  |
| Number of observations (weighted, in millions): | 166.8 |  | 67.6 |  | 99.2 |  |

Source: Peking University, CFPS 2012.

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## 11

# Mapping Out a Way Forward Can Policies Make a Difference? 

## Sukti Dasgupta and Sher Singh Verick

## 1. Introduction

From an economic growth and poverty reduction perspective, Asia has been the best performing region over a number of decades. As widely acclaimed, this trajectory has been built on significant gains in education and other human development dimensions, which has been accompanied by falling fertility rates. Urbanization and industrialization have transformed many parts of the region, from an agrarian society to a modern economy based on labour-intensive manufacturing. These conditions would suggest that women across Asia had many more opportunities to participate in labour market, especially in wage employment.

However, participation of women in the labour force has either fallen or remained rather stagnant in a number of countries in Asia. On an average, female labour force participation declined in East Asia from 70.8 per cent in 1994 to 63.3 per cent in 2014, while it has fallen from 36.4 to 30.6 per cent in South Asia over the same period. Female labour force participation in Southeast Asia and the Pacific remained stable at roughly 59 per cent. Though the trend in the region was due, in part, to increased educational enrolment among adolescent girls, which is a positive development, it also reflects that growth and transformation have often not been supportive of increased participation of women in the labour market.

Moreover, as stressed in this volume, gender differences in labour force participation rates provide only a partial view of the disparities that women face in the labour market. Far more revealing is the access women have to decent work. Across Asia, 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, such as Cambodia and Nepal. In most countries, when women work, they tend to earn less (the well-known gender wage gap), work in less productive jobs and are over-represented in unpaid family work and other forms of vulnerable work. Employment segregation by gender is prevalent in all countries.

Against the backdrop of growth and increased integration of nations in the global economy, this edited volume has explored two interrelated questions: What has been the role of women in this process of economic transformation in Asia? And, to what extent have women gained from this economic transformation?

## 2. Main Findings

Based on the findings from a comparative review of the region and in-depth studies of countries covering Bangladesh, Cambodia, China, India, Indonesia and Sri Lanka, this volume highlights both diverse trends and commonalities in the challenges women face in gaining access to more and better jobs. The approach taken goes beyond the framework provided by the U-shaped hypothesis, which has dominated comparative analysis of female labour force participation across the world. Rather, the selection and the analysis of countries in this volume is built on a typology that consists of three sets of countries: low to middle income and high female labour force participation (e.g., Cambodia); low to middle income and low participation (South Asia apart from Nepal); and middle to high income and middle participation (China and Indonesia). Drawing on these typologies, the book identifies the complex factors affecting women's participation in the process of economic transformation, which include drivers and barriers impacting both demand and supply sides.

The three different groups of countries highlighted above not only indicate different paths for women's labour force participation but also indicate some common challenges. As evident in the labour markets of South Asia, social norms and lack of alternative job opportunities continue to constrain women from accessing jobs. One of the biggest puzzles of recent years is the decline in the labour force participation of women in India, especially in rural areas. Empirical analysis presented in this volume, which draws on both primary and secondary data, shows that this phenomenon is driven by various factors. Some dimensions, such as increased attendance in education and higher household income levels in India, are no doubt a positive reflection of rapid economic development. Additionally, changes in measurement methodology across survey rounds potentially contributed to the estimated decline in female participation due to the difficulty of differentiating between domestic duties and contributing family work. However, the key long-run issue is the lack of employment opportunities for India's women, owing to factors such as inadequate job creation in the vicinity of where women live, and occupational segregation. Insights from the primary survey underscore the impact of reproductive roles, household and care responsibilities, cultural sanctions and patriarchal hierarchies on the degree to which women can work outside the home.

In contrast to the predictions of the U-shaped relationship, there has been an increase in the female labour force participation in Bangladesh-a low-income country-alongside the acceleration in economic growth since the 1990s. In line
with the experience of countries achieving export-oriented industrialization, Bangladesh has witnessed a substantial increase in female employment in labourintensive export-oriented industries in urban areas. The rapid expansion of micro-finance in rural areas has supported women's employment in poultry and livestock. However, Bangladesh's economy and labour market are overly concentrated in a single industry (garments) and consequently, other sectors have not emerged as significant employers of women. Moreover, other labour market deficits for women remain. Further progress is needed in women's access to education and skill training, productive assets like land and credit beyond microcredit, and services of various government institutions, along with further progression in social norms and environment that often act as barriers to women's employment.

Another puzzle emerging from South Asia is that, despite progress on human development over many decades and the more recent positive economic trends, female labour force participation in Sri Lanka has remained stagnant. In this context, there is evidence of important differences in the factors that enable or constrain women from participating in the labour market, notably education. The critical stage in the education cycle for participation is secondary education, beyond which the likelihood of participation rises. The findings suggest that investment in education beyond secondary school and vocational education and training is critical, while highlighting the importance of cultural and householdbased constraints, particularly to married women's participation in the work force. A key factor is household work and the care burden deriving, on one hand, from the lack of institutional support for the care of young children and elderly people and, on the other hand, social norms that impose on women the responsibility for the care and household work. Better implementation of policies and revising laws is needed to promote opportunities for Sri Lankan women in paid work.

The second set of countries in Asia are those with low-to-middle income status but high female labour force participation rates, as found in Cambodia. The female labour force participation rate in Cambodia increased to 84.8 per cent in 2011 from 77.5 per cent in 2004, which is one of the highest rates witnessed anywhere in the world. Women in rural areas have a higher labour force participation rate ( 89 per cent) than those in urban areas ( 62.5 per cent) in 2011. The gender gap in participation rates is, therefore, one of the smallest in Asia. However, Cambodian women face greater barriers to accessing better jobs, which is reflected in their higher representation in informal jobs, lower pay and worse working conditions even though their labour force participation rates remain high. While most women still work in the agriculture sector, the emergence and growth of the garment sector has been critical to increasing wage employment opportunities for women, as also found in Bangladesh. That has certainly had its positive impact as well, since much of the garment sector in Cambodia is formal and is the only sector that has a stipulated minimum wage. Overall, women's work in Cambodia is still characterized as low skill, though the shift to garments indicates some sort of structural change for women's employment. However, the almost complete reliance on external markets also exposes Cambodia's young women workers to much
vulnerability—during the recent economic crisis, women lost their jobs and faced hardships.

Thirdly, turning to the last set of countries consisting of middle-to-high income levels and medium female labour force participation reveals that even when economies advance, barriers, nonetheless, remain for women, constraining their participation in the labour market. This is evident in middle-income countries such as China and Indonesia, and in high-income economies, including Japan and Korea.

In the case of Indonesia, there have been notable structural changes in the female employment situation, particularly since the late 2000s, away from agricultural and vulnerable forms of employment, toward wage and salaried employment in non-agricultural sectors. It highlights the existence of diversity in participation and employment of women across provinces, and this diversity is much greater than among men. This suggests that women are both responsive to the opportunities available in the labour market and yet have remained secondary actors compared to men. Thus, as long as non-agricultural employment opportunities are growing, measures to promote women's greater participation in the labour market would help accelerate structural changes of the economy and the labour market. At the same time, gender gaps in participation and employment remain large, and gaps in terms of earnings and sectors of work persist. On an average, women continue to earn less than men, with little signs of narrowing in the gap over the last two decades. Sectors in which a large portion of women work, including manufacturing and trade, are generally characterized by low skill requirements. Policy action to improve the quality of women's work and to improve access to better-paying employment opportunities is needed.

In the last three decades, China has witnessed an unprecedented period of economic growth; however, this was also accompanied by increasing gender gaps in some labour market indicators. Although women's labour force participation rate in China is relatively high, both women's labour force participation rate and employment-to-population ratio have declined at a faster rate than men's. Women are also more likely to be engaged in low productivity sectors. Furthermore, as productivity in manufacturing rises in China, we find that the share of women in traditionally 'female' sectors, such as garments, is declining. A decomposition analysis shows that much of the differential outcomes in wages between women and men is 'unexplained'. Therefore, women and men of similar socio-economic characteristics often end up with different wage outcomes that cannot be explained by characteristics, such as education sector and region. To improve gender equality in the labour market, four areas require further attention from a policy perspective: (a) measures to promote equal access to employment for women and men; (b) create an enabling environment for workers with family responsibilities; (c) improve coverage of social security measures, especially for rural women; and (d) design an appropriate retirement policy.

In summary, all the studies in this volume show that women across Asia have contributed significantly to Asia's spectacular growth story. Women have been at the centre of the process of economic transformation in a number of countries, as
reflected by their participation in manufacturing. Yet, at the same time, Asian women continue to be constrained by social norms and economic factors that keep them at much lower levels of participation. Female labour force participation in Asia converges at a rate considerably lower than for men, even at the highest levels of income. Furthermore, when they work, it is most likely in jobs that are of lower quality, most notably in South Asia.

## 3. Which Way Forward?

Responding to this situation, the volume calls for a comprehensive approach to improving women's participation in the labour market, which would, in turn, contribute to a more sustainable and inclusive growth process. As a major factor in determining the pace and nature of a country's development path, women's participation must be taken seriously by economic policymakers and not relegated as an exclusively social issue left to line ministries and minor agencies. That said, the policy goal cannot be simply about increasing the female labour force participation rate. It is far more important to address the broader agenda of opportunities for women to enter the labour market and to take up paid employment or establish their own business, that is, enabling higher levels of participation sustained over the working-age period. This is, ultimately, strongly linked to the notion of women's economic empowerment. Participation should be about access to better quality employment, not just employment at any cost.

As noted by Sudarshan (2014), there are certain 'transition' points along the life cycle that have special significance for women's work participation decisions-the completion of education and the transition from education to work, and marriage and birth of children. Therefore, a policy framework encouraging and enabling women's participation is one that is constructed with active awareness of the 'gen-der-specific' constraints that face most women. The overarching policy framework needs to focus on removing the constraints to women's work and on encouraging investments that will generate decent jobs, addressing gender-specific constraints, such as care responsibilities, which would help to avoid the emergence of genderintensified inequalities around work, of which occupational segregation is one example. ${ }^{1}$ In other words, an engendering of policy is needed at all levels of the policy process: in the identification of issues, design of policy, its implementation and evaluation.

Due to complexity of the factors driving female labour force participation, no single policy measure can, therefore, be proposed to improve outcomes for women

[^88]across Asia. 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 for women. 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. Discrimination against women in the labour market impedes their access to work as well as their career development. Women experience 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.

Overall, based on the analysis and insights presented in this volume, six key policy pillars can be presented: (a) inclusive growth and job creation; (b) education and skills development; (c) support for reducing the time burden; (d) transport and infrastructure; (e) legal rights and protection; and (f) measurement.

Inclusive growth and job creation: As highlighted above, a critical factor is access to quality employment for women. While there have certainly been increases in the overall education status of women in Asia over the years, this has not always translated into better employment opportunities. For the less-skilled women on the other hand, access to quality employment remains a major concern. For this reason, policy measures are needed to create a macro-economic environment that supports job creation, particularly those jobs that women are able to access. Nonfarm employment in rural areas, for example, would result in employment opportunities, which are accessible for poorer women. This requires better infrastructure and incentives to spur investment in these locations (tax incentives, access to land, etc.). It also requires that macro-economic and labour market policies are gender sensitive.

Education and skills development: Across the analysis presented in this volume, the importance of education and skills development is highlighted. These need to be consistently improved for girls and young women to provide access beyond secondary schooling, especially in South Asia. A decent education provides the best foundation for making a successful transition from school to work. As clear from the country case studies, education only pays in terms of better outcomes once women have some type of tertiary education. Only in these cases do women have a much higher likelihood of participating and being employed in good jobs. In addition to formal education, greater access is also needed for girls and young women to vocational education and training, which, in turn, increases their occupational choice.

Support for reducing the time burden of care and other household activities: Efforts are needed to reduce the time burden associated with unpaid household work, which would increase opportunities and enable women to make choices about paid work. Measures are required to improve provisions of childcare and elder care through public policy as well as through sharing of care responsibilities between women and men at the household level. Maternity benefits are an essential benefit, as well as policies that support married women's work. Regular parttime work, flexibility in working hours, working from home and other such arrangements should be open to both men and women, but are likely to make
more difference to women's work participation than to men's. In most of rural Asia, the improvement of basic infrastructure (drinking water, sanitation, electricity and fuelwood) would contribute greatly to making women's paid and unpaid work relatively lighter. Without this support, women across Asia, particularly in rural areas, will continue to work in home-based production, which increases their vulnerability to exploitation and exclusion from better employment outcomes (such as access to social security and employment benefits). Related to this dimension is the need for women to be able to access different and, at times, more flexible work arrangements.

Transport and infrastructure: A major challenge is for women to be able to access jobs in a safe and secure manner. In this regard, further policy initiatives are needed to expand public transport to facilitate the movement of women, especially the poor, in addition to provisions of infrastructure, such as public toilets and street lighting to improve the safety of women when travelling to work.

Legal rights and protection: Legal rights range from freedom to work, own property and land (as well as inheritance rights), protection from violence and sexual harassment, equal pay, safe working conditions, non-discrimination, to representation-all of which can increase women's bargaining power within the household and in the workplace and ensure decent work for women in Asia. The institutional framework created by law opens up opportunities. Improving enforcement (and awareness) of legal rights and other mechanisms to protect women from discrimination in the labour market is critical. As some of the studies here highlight, gender-based wage disparities are commonly observed, indicating the need for firmer measures to improve implementation of legal provisions for equal remuneration. Better working conditions will, in turn, attract women to join the labour market and take up employment outside the home. Access to social protection is critical to not only support household incomes, but also to encourage mobility. This requires greater portability of benefits, which is often lacking in countries in Asia.

Measurement: Policymakers need better data on different dimensions of women's participation in the labour market to better understand how they benefit from and contribute to the growth and transformation process. In this context, focus has to go beyond the binary variable and female labour force participation. Given the challenge for women to access decent employment, data collection, monitoring and analysis should also include various indicators to capture different labour market dimensions, covering employment status and working conditions, as well as time devoted to unpaid work. Thus, governments need to invest more in the collection of gender statistics and monitoring and evaluation of key dimensions relevant to women's outcomes in the labour market. Time-use surveys are an important instrument to understand the challenges women face in and out of work. In addition, the 19th International Conference of Labour Statisticians in 2013 provides a broader foundation for a far more comprehensive approach to measuring women's work. ${ }^{2}$

[^89]After decades of rapid development, millions of women in Asia are better educated and are better positioned to take up paid work outside the home. They are living in more urbanized and industrialized countries, which have created prosperity and helped many households escape poverty. One of the key pieces of unfinished business left on the development agenda is the situation facing millions of Asian women in the labour market. In order to achieve greater equality and give women more opportunities and real choices in the world of work, governments across the region-along with other stakeholders-need to give the above highlighted issues, the utmost priority.

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[^0]:    ${ }^{1}$ See studies cited in World Bank (2012).

[^1]:    ${ }^{2}$ 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 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 noted the presence of feminization $U$ hypothesis within countries over time.
    ${ }^{3}$ 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, rapid development is often followed by higher female participation in market work, lower fertility levels and higher education level for girls.

[^2]:    ${ }^{4}$ 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.

[^3]:    ${ }^{5}$ See Sudarshan (2014).

[^4]:    ${ }^{6}$ http://cbs.gov.np/sectoral_statistics/surveys/nepal_labor_force_survey_report_2008

[^5]:    ${ }^{1}$ Fernanda Bárcia de Mattos is with the Regional Economic and Social Analysis Unit, ILO Regional Office for Asia and the Pacific, Bangkok, and Ruchika Chaudhary is with the ILO Decent Work Team for South Asia.

[^6]:    ${ }^{2}$ Ages 15 and above. ILO staff calculations based on the United Nations WPP 2012 Revision Database.
    ${ }^{3}$ ILO staff calculations based on International Monetary Fund, World Economic Outlook Database, October 2014.

[^7]:    ${ }^{4}$ All sub-regional figures for Southeast Asia include the Pacific.

[^8]:    ${ }^{5}$ It is important to note education and skills, though similar, are not one and the same. Skill relates to the ability to carry out tasks and duties in a given job; it may be acquired through formal or informal training and experience. Hence, education is indicative of but does not equal to skill level. For instance, a recent ILO survey of ASEAN employers found that only one-third of respondents agreed the skills of secondary graduates matched enterprise needs. Similarly, only half of the respondents agreed tertiary graduates and those graduating from technical and vocational training programs had competences relevant to their enterprises. See ILO (2012); ILO and ADB (2014).

[^9]:    ${ }^{6}$ The groups for occupations represent broad levels of skills as defined by educational level required and by the type of skills required. The broad occupational categories were chose according to the broad level of education attainment required based on the International Standard Classification of Education (ISCED). See ILO (2015).

[^10]:    ${ }^{7}$ In 2014, it was estimated that women's share in total employment was 44.0 per cent in East Asia, 42.6 per cent in Southeast Asia and the Pacific and 26.4 per cent in South Asia.

[^11]:    ${ }^{8}$ Non-regular work includes non-permanent, part-time and non-typical work (daily workers, temporary agency workers, contract labour).

[^12]:    ${ }^{9}$ Low pay defined as the proportion of regular employees whose wage equals less than twothirds of the median wage of regular employees.

[^13]:    ${ }^{10}$ Thai women tend to continue working through marriage and child-bearing. In the third quarter of 2014, the labour force participation rate for married women stood at 69.6 per cent.

[^14]:    ${ }^{1}$ See http://www.ilo.org/public/english/support/libe/resource/subject/gender.htm

[^15]:    ${ }^{2}$ Author's field notes, August 2011.
    ${ }^{3}$ Author's field notes, January 2013.
    ${ }^{4}$ Author's field notes, February 2013.

[^16]:    ${ }^{5}$ The author's interview with the management of Kudumbashree, September 2012.

[^17]:    ${ }^{6}$ Interview with author, 2009.

[^18]:    ${ }^{7}$ Interview with the author, Bangalore, March 2009.
    ${ }^{8}$ Interview with the author, October 2002.

[^19]:    ${ }^{1}$ The labour force in this chapter includes both the usual principal and subsidiary status (UPSS).

[^20]:    ${ }^{2}$ All five surveys cover the entire Indian Union except for inaccessible villages in Nagaland, Andaman and Nicobar Islands and some districts in Jammu and Kashmir (NSSO, 2011a and b, p. 24). The stratified two-stage sampling procedure is representative at a regional level for both rural and urban areas.

[^21]:    ${ }^{3}$ Based on the most recent NSSO survey round (2011-2012), 28.8 per cent of the whole population lived in urban areas and the remaining 71.2 per cent in rural areas. According to the most recent Census for India, in 2011, 31.2 per cent of the population lived in urban areas versus 68.8 per cent that lived in rural areas (see: http://censusindia.gov.in/2011-provresults/paper2/prov_results_paper2_india.html, accessed on 8 July 2015).

[^22]:    ${ }^{4}$ The NSSO surveys measure participation in the labour market according to three different reference periods: one year (usual principal status), one week (weekly status) and on each day of the reference week (daily status). The usual principal status is determined based on the activity on which an individual spent the majority of his or her time over the past year. In addition to the usual principal status, an individual is assigned a subsidiary status, if he or she worked for a minimum period of 30 days over the past year. It is, thus, possible for an individual to be classified as inactive according to the usual principal status and as employed according the subsidiary status.

[^23]:    ${ }^{5}$ ILO, Key Indicators of the Labour Market, 8th Edition (table 3).

[^24]:    ${ }^{6}$ Unlike the UN System of National Accounts, the processing of primary commodities for own consumption and activities such as begging and prostitution are not treated as economic activities in the Indian NSS.
    ${ }^{7}$ See: http://articles.economictimes.indiatimes.com/2011-06-29/news/29717128_1_nsso-labour-force-chief-statistician, accessed on 8 July 2015.

[^25]:    ${ }^{8}$ Respondents were classified as employed if they answered "yes" to any of the following questions: Along with your domestic duties did you more or less regularly carry out during the last 365 days: free collection of fish, small game, wild fruits, vegetables and so on for household consumption, free collection of firewood, cow-dung, cattle feed and so on for household consumption, husking of paddy for household consumption (commodities prepared in own farm/free collection), grinding of food grains for household consumption (commodities prepared in own farm/free collection), preparation of gur for household consumption (commodities prepared in own farm/free collection), preservation of meat and fish for household consumption (commodities prepared in own farm/free collection), making baskets and mats for household use (commodities prepared in own farm/free collection), bringing water from outside the household premises?

[^26]:    Source: Authors' calculations on the basis of NSS data.

[^27]:    ${ }^{9}$ Based on the World Bank's World Development Indicators, agriculture value added for India in 1994 was 28.3 per cent of GDP which dropped to 23 per cent in 2000, 18.8 per cent in 2005,18 per cent in 2010 and to 17.4 per cent in 2012.

[^28]:    ${ }^{10}$ The effect of living in a Muslim household remains significant but the estimated effect is less than in rural areas.
    ${ }^{11}$ For rural areas, households were classified as self-employed in non-agriculture, agricultural labour, other labour, self-employed in agriculture or 'other'. In urban areas, households were classified as self-employed, regular salaried, casual labour or 'other'.
    ${ }^{12}$ For the augmented definition, see Table 4.2.

[^29]:    * This work was undertaken by National Institute of Labour Economics Research and Development (formerly known as Institute of Applied Manpower Research) and supported by the International Labour Organization (ILO). We would like to acknowledge the SEWA teams from Gujarat and UP for making the primary survey possible and the respondents who patiently spared their valuable time and extended full cooperation to the investigators. Special thanks to Renana Jhabwala for her comments during the preparation of questionnaire and the presentation of this work at an initial stage. We also thank participants at two workshops for their insightful comments.
    ${ }^{1}$ Even though women have legal rights to land, the social and familial structure does not allow them to, and even if she owns it, the land and other assets are largely controlled by men. ${ }^{2}$ The Global Gender Gap Index ranks India 105 out of 135 countries. India ranks 123 in gender gaps in economic participation and opportunity and gaps in LFPR between males and females, 121 in gender gaps in educational attainment and the worst, 135 in differences between women's and men's health (The Global Gender Gap Index introduced by the

[^30]:    World Economic Forum in 2006 is a framework for capturing the magnitude and scope of gender-based disparities and tracking their progress. The index benchmarks national gender gaps on economic, political, education- and health-based criteria, and provides country rankings that allow for effective comparisons across regions and income groups, and over time.)
    ${ }^{3}$ Mehrotra and Biggeri (2007) note that informal, home-based work, along with widespread child labour at home with the family is a normal practice in the majority of Asian economies. The book examines this phenomenon in India, Pakistan, Thailand, the Philippines and Indonesia.

[^31]:    ${ }^{4}$ It may be noted here that even though we classified diamond polishing work as a part of home-based work, in some cases, women went to small workshops (which was a part of some household) within the village, and in such workshops, not more than five to six women worked together.

[^32]:    ${ }^{5}$ One of the authors was the lead author of the vocational education qualifications framework, which was accepted by the Ministry of Human Resource Development and then later notified by the Government of India in December 2013 as an official policy.

[^33]:    ${ }^{1}$ This chapter is based on Rahman and Islam (2013).
    ${ }^{2}$ See for example, Islam (2006).

[^34]:    ${ }^{3}$ Data presented in this paragraph are from various government sources.
    ${ }^{4}$ More detailed analysis of the performance in the area of employment can be found in Islam (2009, 2012) and Rahman et al. (2011).

[^35]:    ${ }^{5}$ For example, the Government of Bangladesh, in its Sixth Five Year Plan (2011-2015) document, expressed the desire to promote girls' education at secondary and tertiary levels as a means of increasing female participation in the labour force. 'To increase women's participation in the labour force, further efforts will be made in SFYP for social mobilization to facilitate women's access to employment and computer literacy which will enable them to enter into the IT sector and utilize ICT' (SFYP document, part 1, p. 48).
    ${ }^{6}$ The existing studies on Bangladesh, however, did not distinguish between the two types of factors in the analysis of determinants of female employment and the following review, therefore, does not try to draw such distinction. Section 5 discusses the demand and supply side factors.

[^36]:    ${ }^{7}$ The results should be used with caution because they are based on 2003 LFS, which has various deficiencies.

[^37]:    ${ }^{8}$ These figures are from Microcredit Regulatory Authority (2012) and Rahman (2011).
    ${ }^{9}$ There is a body of literature on the history of the growth of the RMG industry in Bangladesh and the factors contributing to that growth. One recent example is Lopez-Acevedo and Robertson (2012). See also Yunus and Yamagata (2012), McKinsey \& Company (2011).

[^38]:    ${ }^{10}$ Based on a small sample survey, Majumder and Begum (2000) reported that the share of women in total employment in the industry was 66 per cent already in 1993. On the other hand, Rahman (undated), quoting data from the BBS, mentioned the share as 85 per cent in as recently as 2006-2007.

[^39]:    ${ }^{11}$ According to one estimate (Yunus and Yamagata, 2012), labour cost in the industry in Bangladesh is US $\$ 0.22$ per hour, which is lower than even in Cambodia (US $\$ 0.33$ per hour) and Vietnam (0.38). It is of course pointed out that low wages reflect low productivity of the workers. But the industry in Bangladesh is regarded as holding competitive advantage even after taking into account the productivity differential (Lopez-Acevedo and Robertson, 2012). ${ }^{12}$ Data on gender difference in wages have been presented in other studies also, for example, Majumder and Begum $(2000,2006)$ and Kabeer and Mahmud (2004).
    ${ }^{13}$ Kabeer and Mahmud (2004) point out that female wage rates in the garment industry are higher than in other urban activities.

[^40]:    ${ }^{14}$ Disaggregated data on LFPR for urban-rural and age groups and employment data on sector, status etc. are comparable for LFS rounds of 1996 and later years. Comparable data only for LFPR is available from 1991. As discussed in the previous section, definition of female LFPR and employment in 1996 are somewhat more restrictive than later rounds of LFS.

[^41]:    ${ }^{15}$ Such data has been presented for 2000 and 2006. For other rounds of LFS, the disaggregated data has not been made available.

[^42]:    Ahmed, S. and Mitra, P. 2008. 'Gender wage discrimination in rural and urban labour markets of Bangladesh', Oxford Development Studies, Vol. 38, No. 1, pp. 83-112.
    Amin, S. 2005. 'Selective inclusion or active discrimination? Women and labour market in Bangladesh', Chapter 12. In Centre for Policy Dialogue (ed.), Emerging issues in Bangladesh economy: A review of Bangladesh's development 2005-06 (Dhaka, CPD and UPL), pp. 305-322.

[^43]:    Sources: Data for population older than 10 years of age are from Department of Census and Statistics (2013). Data for population more than 15 years of age are from Department of Census and Statistics (2014).

    Notes: Data for 2005, 2011, 2012 and 2013 include all districts. Data for previous years either excluded both Northern and Eastern Provinces, Northern Province only, or some districts of Northern Province. See Department of Census and Statistics (2014) for details.

[^44]:    ${ }^{1}$ Given these marked differences, we estimate the probability of labour force participation of these three groups of women. We also estimate the participation of married and single men for comparison purposes. See Gunatilaka (2013).
    ${ }^{2}$ See Gunatilaka (2013).

[^45]:    * Contributions to updating the data and narrative in this chapter by Cuntao Xia and Fernanda de Mattos are acknowledged.
    ${ }^{1}$ Compound annual growth rate (CAGR) of GDP in constant PPP (purchasing power parity) 2011 US\$, calculated based on the World Bank, World Development Indicators.
    ${ }^{2}$ CAGR of value-added in constant PPP 2011 US\$, calculated based on the World Bank, World Development Indicators.
    ${ }^{3}$ See: http://www.adb.org/news/adb-president-highlights-cambodia-s-strong-growth-remaining-challenges [accessed 22 April 2015].

[^46]:    ${ }^{4}$ National Institute of Statistic of Cambodia (NIS), Cambodia Socio-Economic Survey. ${ }^{5}$ Ibid.
    However, the figures are very different from those in the latest labour force survey. The survey was conducted by the International Labour Organization (ILO) and the National Institute of Statistics of Cambodia (NIS) to provide reliable estimates of Cambodia's labour force. A sample of 9,600 households from 600 sample enumeration areas distributed across all 23 provinces and Phnom Penh were covered. The report suggests that the LFPR for women over 15 was 62.4 per cent in 2012, and the rates for urban and rural women were 62.6 per cent and 62.4 per cent, respectively.

[^47]:    ${ }^{6}$ Calculated based on ILO's Trends Econometric Model, October 2014.
    ${ }^{7}$ Refers to the wearing apparel sector. Calculation based on NIS and ILO Cambodia Labour Force and Child Labour Survey 2012 Labour Force Report (NIS and ILO, 2013).

[^48]:    ${ }^{8}$ Calculated based on the ILO's Trends Econometric Models, October 2014. Refers to the population of the working poor-defined as those earning less than US\$2 per day (PPP). ${ }^{9}$ Calculated based on the ILO's Trends Econometric Models, October 2014. Refers to the share of the working poor in total employment-defined as those earning less than US\$2 per day (PPP).

[^49]:    ${ }^{10}$ ILO, Key Indicators of the Labour Market, 8th Edition. See http://kilm.ilo.org/2011/ download/kilm03EN.pdf [accessed 1 April 2015].

[^50]:    ${ }^{11}$ Refers to the wearing apparel sector, NIS (2011).

[^51]:    Source: National Institute of Statistic of Cambodia (NIS), CSES, 2004-2011.
    Notes: * International Standard Classification of Occupations (ISCO) skill levels: (Source: ILO KILM 5). ${ }^{* *}$ CAGR refers to compound annual growth rate.

    1. The first ISCO skill level was defined with reference to International Standard Classification of Education (ISCED) category 1 , comprising primary education which
[^52]:    ${ }^{12}$ CIA World Fact Book, see https://www.cia.gov/library/publications/the-world-factbook/ geos/cb.html [accessed 20 April 2015].

[^53]:    ${ }^{13}$ US\$ $1=4,027.25 \mathrm{KHR}$, annual average exchange rate in 2013 from the World Bank, World Development Indicators.

[^54]:    ${ }^{1}$ BPS, Population Census, various years; available at: http://www.bps.go.id/linkTabelStatis/ view/id/1267 (accessed 24 May 2016).
    ${ }^{2}$ Law No. 22/1999 on regional governments and Law No. 25/1999 on fiscal balance between central and regional governments, which became fully effective as of January 2001, underpinned the decentralization process in Indonesia.
    ${ }^{3}$ BPS, SAKERNAS, various years; available at: http://www.bps.go.id/linkTabelStatis/view/ id/970 (accessed 24 May 2016).

[^55]:    ${ }^{4}$ Female labour force participation rates in Malaysia and the Philippines were lower between 2010 and 2013, at 49 and 51 per cent, respectively. However, compared to India, Indonesian women's participation rate is much higher (see Chapter 4 on India in this book).

[^56]:    ${ }^{5}$ 'Food' refers to SITC sections 0 (food and live animals), 1 (beverage and tobacco) and 4 (animal and vegetable oils and fats), and SITC division 22 (oil seeds, oil nuts and oil kernels).

[^57]:    ${ }^{6}$ Except in 2001 when the urban poverty rate stood at 8.6 per cent.

[^58]:    ${ }^{7}$ Wage employment examined here excludes agricultural and non-agricultural casual wage employment, which has been collected as part of SAKERNAS since 2001.
    ${ }^{8}$ Since 2001, casual agricultural and non-agricultural employment are excluded from 'wage' employment. Hence, share of wage employment (employees) before and after 2001 may not be comparable, as it is not clear under which status casual wage workers had been included before 2001. The series from 2001 onwards presented excludes casual wage workers.

[^59]:    Source: Author's calculation from SAKERNAS 1996-2012.

[^60]:    ${ }^{9}$ Since 2008, the August rounds of the labour force survey data have been used, which use a thicker sampling framework that represent district-level situations.

[^61]:    Notes: Sectors are as follows: $1=$ Agriculture, forestry, hunting and fishery; $2=$ Mining and quarrying; $3=$ Manufacturing; $4=$ Electricity, gas and water; $5=$ Construction; $6=$ Wholesale and retail trade, restaurants and hotels; $7=$ Transportation, storage and communications; $8=$ Finance, insurance, real estate and business services; $9=$

[^62]:    ${ }^{10}$ The only divergence from this pattern occurs for the mining and quarrying sector. However, the positive correlation coefficient between shares of men in mining and quarrying and shares of women in agricultural employment is not statistically significant.

[^63]:    ${ }^{11}$ Women's likelihood of participating in the labour force was also examined, but the results are very similar to those of total employment. For this reason, women's labour force participation is not discussed in the rest of the chapter. Furthermore, what matters at the end of the day is what women do in the labour market.
    ${ }^{12}$ Household size variable is not included for 2011 and 2012 due to missing information. For 2007, the household size variable available only refers to the number of household members aged 10 years and above.
    ${ }^{13}$ Because the number of provinces has increased due to splits during the period examined, 1996-equivalent provinces are used for all provincial-level information.

[^64]:    ${ }^{14}$ The empirical estimation procedure that has been applied is the probit model with robust standard errors, where each of the dependent variable takes on the value of 1 if a woman is employed, employed in agriculture, employed as wage employees or employed in vulnerable employment, and 0 otherwise. The summary statistics for selected years are shown in Tables A1 and A2.

[^65]:    ${ }^{15}$ Except for 2007, when it stood at 55 per cent.

[^66]:    ${ }^{1}$ Calculated from World Bank World Development Indicators, the compound average annual GDP (constant 2005 US\$) growth rate was 10.2 per cent from 1990 to 2013.
    ${ }^{2}$ See http://www.worldbank.org/en/country/china/overview (accessed 6 April 2015).
    ${ }^{3}$ The share of the working poor in the total employment, defined as those earning less than US $\$ 2$ per day (PPP) has decreased from 88.8 per cent in 1991 to 13.6 per cent in 2013 (calculated based on the ILO-Trends Econometric Models, October 2014).
    ${ }^{4}$ The World Bank World Development Indicators show that the Gini Index in China increased from 0.291 to 0.421 between 1980 and 2010. The NBS released that the latest Gini Coefficient was amounting to 0.469 in 2014. See http://www.stats.gov.cn/tjsj/zxfb/201502/ t20150211_682459.html (accessed 23 March 2015). But these two Gini Coefficient series are not comparable.
    ${ }^{5}$ NBS website, see http://www.stats.gov.cn/tisj/zxfb/201502/t20150211_682459.html (accessed 23 March 2015).

[^67]:    ${ }^{6}$ ILO—Trends Econometric Model, October 2014.
    ${ }^{7}$ See http://www.hbe.gov.cn/content.php?id=2276 (accessed 11 October 2015).
    ${ }^{8}$ World Bank, World Bank Indicators.
    ${ }^{9}$ National People's Congress (NPC) Standing Committee, Law of the People's Republic of China on the Protection of Women's Rights and Interests, 1992.

[^68]:    ${ }^{10}$ China's economic transition refers to the program of economic reforms called 'Socialism with Chinese characteristics'. During the planned economy period, the state controlled all productive assets from 1949 to 1978. When the decade-long Culture Revolution ended in 1978, the government embarked on a 'Reform \& Opening up' policy led by Deng Xiaoping, which encouraged the formation of rural enterprises and private businesses, liberalized foreign trade and investment, relaxed state control over some prices and invested in industrial production and the education of its workforce (Hu and Khan, 1997).

[^69]:    ${ }^{11}$ Shanghai, Wuhan, Shenyang, Fuzhou and Xi'an.

[^70]:    ${ }^{12}$ The State Council, 2011, No. 24. See http://www.gov.cn/gongbao/content/2011/ content_1927200.htm (accessed 24 March 2015).
    ${ }^{13}$ See http://www.enterprisesurveys.org/data/exploreeconomies/2012/china\#gender (accessed 14 April 2015).

[^71]:    ${ }^{14}$ Using the data from the NBS source, if we divide the total economically active population by total population ( $0+$ ), the ratio is around 58 per cent, and has remained fairly constant between 2000 and 2012, with very small variations. From the Census data $(2000,2010)$, the working-age population (tentatively defined as $16-60$ for men and women) can be derived. Using this information, the total LFPR has indeed declined between 2000 and 2010, from an estimated 92 per cent to 86 per cent. These estimates are approximately 10 to 9 percentage points higher than the KILM estimates for the population aged 15 to 64 . This may be partly due to inconsistency between survey-generated estimates on the economically active population and Census data on population and partly due to differences in the definition of working-age population used in the KILM.

[^72]:    ${ }^{15}$ The wider gender gap in the LFPR than the employment population ratio around 2013 implies that men are more likely to be active, that is, employed or unemployed, than women, and also more likely to be unemployed than women.

[^73]:    ${ }^{16}$ NBS, Monitoring and Investigation Report of Rural Workers in China, 2010-2012.
    ${ }^{17}$ Using a firm-level panel data between 1995 and 2001, they indeed find that women face higher probability of discharge in relation to output growth of enterprises.

[^74]:    ${ }^{18}$ Including employment in urban and rural areas.
    ${ }^{19}$ Regular higher education is a term used officially in China. The higher education system in China includes regular higher education, adult education and state-administered examinations for self-directed learners. Because the number of regular higher education institutions is limited, adult education is another option for the students who have not been enrolled in regular higher education institutions. See Zhu and Lou (2011) and Ma (2003).

[^75]:    ${ }^{20}$ Refers to personnel engaged in agriculture, forestry, animal husbandry, fishery and water conservancy including crop planting production personnel, forestry production and wildlife protection personnel, animal husbandry production personnel, fisheries production personnel, water conservancy facilities management and maintenance personnel, and other agriculture, forestry, animal husbandry, fishery and water conservancy production personnel (MoHRSS, 1999).

[^76]:    ${ }^{21}$ Including sales and purchases personnel, warehouse personnel, catering service personnel, hotels, tourism and fitness entertainment service personnel. transportation service personnel, auxiliary medical service personnel, social service and resident service personnel, other business and service personnel (Dictionary, 1999).
    ${ }^{22}$ 'Unit Head' refers to the persons holding leading positions with decision-making and management authorities in government organs, party-mass organizations, enterprises and public institutions (Dictionary, 1999).

[^77]:    ${ }^{23}$ The 15 sectors are: agriculture, forestry, animal husbandry and fishery; mining; manufacturing; production and distribution of electricity, gas and water; construction; transport, storage and post; information transmission, computer service and software; wholesale and retail trades; real estate; leasing and business services; scientific research, technical services and geological prospecting; management of water conservancy, environment and public facilities; services to households and other services; culture, sports and entertainment; public management and social organization.
    ${ }^{24}$ Calculated based on ILO—Trends Econometric Models, October 2014 and World BankWorld Development Indicators.

[^78]:    ${ }^{25}$ US\$1 $=6.20$ CNY, annual average exchange rate in 2013 from World Bank, World Development Indicators.
    ${ }^{26}$ NBS, 'The Average Wage Status of Different Jobs'. See http://www.stats.gov.cn/tisj/ zxfb/201405/t20140527_558611.html (accessed 23 March 2015).

[^79]:    ${ }^{27}$ The data set contains a recall data on labour market activities. Individuals' current economic activity is drawn from this information: if an individual reports an end date of the latest activity as either the same as the interview year and month (truncation) or not more than one month prior to the date of the interview. The decomposition exercise is carried out only for those in non-agricultural wage employment. While the nature of selection into employment and into non-agricultural wage employment may be different for men and women, preliminary decomposition exercise augmented by selection into employment showed little difference from the simple decomposition result shown in Table 10.3.
    ${ }^{28}$ The estimated equation consists of a pooled model: $\ln w_{m}-\ln w_{f}=\left(E\left(\mathbf{X}_{m}\right)-E\left(\mathbf{X}_{f}\right)\right)^{\prime}$ $\left[\mathbf{W} \beta_{m}+(\mathbf{I}-\mathbf{W}) \beta_{f}\right]+\left[(\mathbf{I}-\mathbf{W})^{\prime} E\left(\mathbf{X}_{m}\right)+\mathrm{W}^{\prime} E\left(\mathbf{X}_{f}\right)\right]^{\prime}\left(\beta_{m}-\beta_{f}\right)$, where the relative weight given to a reference group, $\mathbf{W}$, is derived from the pooled regression over both men and women. For further explanations, see Jann (2008) and Oaxaca and Ransom (1994). The advantage of using a pooled model is to mitigate the problems associated with the choice of a reference group. Different weighting mechanism (0.5) and threefold decomposition (with interaction terms) have also been attempted, and the results yielded are both qualitatively and quantitatively similar.
    ${ }^{29}$ Hourly earnings are estimated from the data, using information on the reported average number of days a month in the current work and average hours of work per day.

[^80]:    ${ }^{30}$ They also capture the effects of other key missing explanatory variables from the model. ${ }^{31}$ When the information on the duration of current work in terms of years is included, age minus the reported number of years in the current job is used.
    ${ }^{32}$ Engagement in other types of jobs within the last year are family agricultural work, nonagricultural self-employment and unpaid family work.
    ${ }^{33}$ This is a rather extreme estimate for contribution of unexplained part to gender differences in earnings. The model used in STATA is oaxaca, with pooled and svy options. Due to the possibility of errors in the application of appropriate weights and survey setting, the same model was fitted without the svy option. However, the qualitative results remain the same.

[^81]:    ${ }^{34}$ See http://news.xinhuanet.com/school/2007-01/17/content_5615256.htm (accessed 12 February 2015) and Han (2010).

[^82]:    ${ }^{35}$ The Ministry and Labour is the predecessor of the Ministry of Labour and Social Security, and the Ministry of Labour and Social Security and the Ministry of Personnel were combined as the Ministry of Human Resource and Social Security in 2008.
    ${ }^{36}$ See http://www.nhfpc.gov.cn/xcs/s3574/201405/d0b33c80dd6f4d399370baf984b0c0ca. shtml\# (accessed 26 March 2015).

[^83]:    ${ }^{37}$ The Central Committee of the Communist Party of China (CPC), Decision of the Central Committee of the Communist Party of China on Some Major Issues Concerning Comprehensively Deepening the Reform, adopted at the Third Plenary Session of the 18th Central Committee of the CPC on 12 November 2013.
    ${ }^{38}$ According to Xiaoyi Hu, the deputy minister of MoHRSS. See http://www.mohrss.gov.cn/ ncshbxs/NCSHBXSgongzuodongtai/201209/t20120905_83913.htm (accessed 19 March 2015).

[^84]:    ${ }^{39}$ The State Council, Special Rules on the Labour Protection of Female Employees (2012).

[^85]:    ${ }^{40}$ All data in this paragraph are taken from Drew (2011).

[^86]:    ${ }^{41}$ See http://news.xinhuanet.com/politics/2011-02/27/c_121127186.htm (accessed 26 March 2015).

[^87]:    ${ }^{42}$ Speech by Xi Jinping, the president of the People's Republic of China, on the ACWF meeting on 4 November 2013, Beijing.See http://www.womenofchina.cn/womenofchina/htmll/ news/leaders/16/6945-1.htm (accessed 18 March 2015).

[^88]:    ${ }^{1}$ Gender-specific constraints refer to social norms and practices that apply to men or women by virtue of their gender. Gender-intensified inequalities reflect norms and customs on, for example, distribution of food, health care and access to property. Gender-imposed forms of disadvantage reflect discrimination in the wider public domain (Kabeer, 2008; Commonwealth Secretariat, Discussion Paper Number 3, Jan 2009).

[^89]:    ${ }^{2}$ See http://www.ilo.org/global/statistics-and-databases/meetings-and-events/interna-tional-conference-of-labour-statisticians/19/lang-en/index.htm (accessed 24 May 2016).

