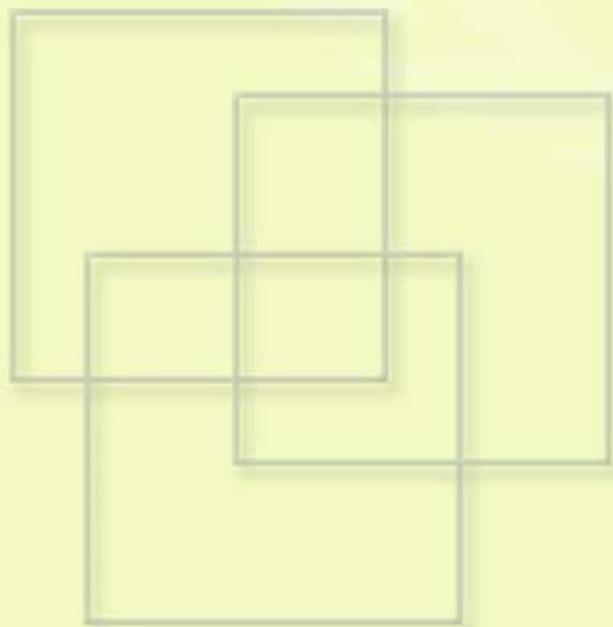


ILO Asia-Pacific Working Paper Series

Women in the labour market in China

Sukti Dasgupta
Makiko Matsumoto
Cuntao Xia
May 2015



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Regional Office for Asia and the Pacific

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Preface

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

This paper by Sukti Dasgupta, Makiko Matsumoto, and Cuntao Xia provides a summary update examining the nature and causes of the observed trends in women's labour force participation and employment in China.

In the past three decades, China has witnessed formidable economic growth, averaging 10.2 per cent annually which has created unprecedented opportunities for its women and men. About half a million people climbed out of poverty into better living standards since the start of the reform phase, in 1978. However, this has also been a period when income inequality has increased significantly. During this period of increasing inequality, rising gender gaps in some labour market indicators have been observed – especially in participation rates and earnings, even though women's participation in economic activity in China is one of the highest in Asia – 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. Notwithstanding these policy commitments and high labour force participation rates, 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.

Against this backdrop, this paper examines the nature and causes of the observed trends in women's labour force participation and employment in China – 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 findings of this paper are highly relevant for labour market policies and gender equality in China in particular, and in the Asia-Pacific region.

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

Tomoko Nishimoto
Assistant Director General and
Regional Director for Asia and the Pacific

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Abstract

This paper reviews the evolution of gender inequality in China's labour market during the economic and social reform since 1978. The reform phase has been a period of high growth in China, but during this period we also observe 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 the employment-to-population rate have declined at a faster rate than men's. Women are more likely to be engaged in low productivity sectors. Our decomposition analysis, using data from China Family Panel Studies (CFPS), shows that much of the differential outcomes in wages between women and men, 91 per cent to be precise, is "un-explained". Therefore, women and men of similar socio economic characteristics often end up with different wage outcomes, mostly because of discrimination and gender stereotypes. To improve gender equality in the labour market, the paper points to four areas that require further attention from a policy perspective: (1) measures to promote equal access to employment for women and men; (2) creation of an enabling environment for workers with family responsibilities; (3) improved coverage of social security measures, especially for rural women; and (4) design of an appropriate retirement policy.

About the authors

Sukti Dasgupta is Head/Senior Economist in the Regional Economic and Social Analysis Unit of the ILO's Regional Office for Asia and the Pacific, Bangkok, Makiko Matsumoto is Employment Specialist, Decent Work Team for East and South East Asia and the Pacific, Bangkok, and Cuntao Xia is Consultant with the Regional Economic and Social Analysis Unit, Regional Office for Asia and the Pacific, Bangkok.

The responsibility for opinions expressed in articles, studies and other contributions rests solely with their authors, and publication does not constitute an endorsement by the International Labour Office of the opinions expressed in them, or of any products, processes or geographical designations mentioned.

Abbreviations

ACFTU	All-China Federation of Trade Union
ACWF	All-China Women's Federation
CFPS	China Family Panel Studies
CPC	Communist Party of China
CPPCC	Chinese People's Political Consultative Conference
EPR	employment-to-population ratio
EU	European Union
GDP	gross domestic product
ILO	International Labour Organization
IMF	International Monetary Fund
KILM	Key Indicators of the Labour Market
LFPR	labour force participation rate
MoHRSS	Ministry of Human Resources and Social Security
NBS	National Bureau of Statistics of China
NPC	National People's Congress
OECD	Organisation for Economic Co-operation and Development
PPP	purchasing power parity
SOE	state-owned enterprise
WTO	World Trade Organization

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 About 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 percent in 1991 to 13.6 percent 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.

It is worth noting that women's participation in economic activity in China is 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 child care and social security systems, especially since the end of the Cultural Revolution in 1978.

The focus on gender equality in official policy was re-emphasised in the 1990s. 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".⁷ "The China Employment Promotion law", effective since 2008, includes a clearly stated objective against discrimination on the grounds of ethnicity, race, gender or religious belief.⁸

At the international level, the Chinese government's commitment to gender equality was articulated at the "Fourth World Conference on Women" which was held in Beijing in 1995. At this conference the

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 Apr. 2015].

³ The share of the working poor in 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 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 Mar. 2015]. But these two Gini coefficient series are not comparable.

⁵ NBS website, see: http://www.stats.gov.cn/tjsj/zxfb/201502/t20150211_682459.html [accessed 23 Mar. 2015].

⁶ ILO – Trends Econometric Model, October 2014.

⁷ 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.

⁸ C. Thomas; N. Haspels; T. De Meyer; M. Paavilainen; H. Zhang: "Equality and non-discrimination in China: Handbook", in *Equality and non-discrimination at work in China: Training package* (Beijing and Bangkok, ILO, 2010).

“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’s (ILO) Equal Remuneration Convention, 1951 (No. 100) and the Discrimination (Employment and Occupation) Convention, 1958 (No. 111) in 1988 and 2006 respectively (Haspels and Majurin, 2008).

The 12th Five-Year Plan of China (2011–15) 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; Song and Xia, 2013; Tang and Long, 2013).⁹

Against this backdrop, this paper 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 paper 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 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 analyses, there are notable challenges for conducting an in-depth and long-term analysis of the gender dimension of labour market outcomes. These 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 twenty years that merit serious discussion.

⁹ China’s economic transition, refers to the programme 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 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).

2. Increasing gender gap in participation and wages — a review of literature policy goal

Liu (2011) has noted that progress towards gender equality has slowed during the reform period – there is clearly a concentration of women workers at the lower end of the skill and productivity spectrum, relative to men. 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” collected from five big cities in 2001. Song and Dong (2011) find women are disadvantaged in occupational mobility and women’s status has worsened during the economic transition.

In terms of labour force participation, China has one of the highest female labour force participation rate (LFPR) in international comparison (Maurer-Fazio, Hughes and Zhang, 2005; Haspels and Majurin, 2008). However, in recent years women’s LFPR has been declining, prompting OECD (2014) to suggest that increasing female labour force participation is critical to narrowing gender disparities in China.

Amongst Chinese scholars, Chi and Li (2014) point to a declining trend of women’s LFPR since 1989. Du, Yang and Dong (2006) believe the downsizing of state-owned enterprises (SOEs) led to a sharp decrease in labour force participation for urban women than that for urban men, and laid-off female workers found it more difficult to be re-employed. He and Zhu (2012) have cautioned 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.¹⁰

Using “China’s Urban Household Surveys”, Chi and Li (2014) find a widening gender pay gap since the 1980s. With the same data set, Appleton, Song and Xia (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 in 2010 (NBS, 2013).

In 2011, “The “National Program for Women’s Development in China (2011–20)”¹¹ 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.

Other studies point to the greater inequality between women and men at the top management level. An ILO global report titled *Women in Business 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

¹⁰ 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.

¹¹ The State Council, 2011 No. 24, See: http://www.gov.cn/gongbao/content/2011/content_1927200.htm [accessed 24 Mar. 2015].

region as a whole.¹² 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, the number of female entrepreneurs increased rapidly in the recent two decades, more than 60 per cent of these entrepreneurs started after 1996 (Zhou et al., 2012). 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).

Another strand of the literature has focused on the link between gender equality and SOE reform in China. Prior to 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. In 1998, a new strategy for SOE reform was implemented to its fullest extent under which many small and medium sized SOEs were privatized while the government continued to have control over a limited number of large SOEs. Since the start of the SOE reform, there has been a significant fall in employment in SOEs. The year-end number of urban employed persons in SOEs reduced from 112.4 million in 1996 to 63.7 million in 2013.¹³

Démurger, Fournier and Chen (2007) indicate that the privatization of the SOEs has had significant impact on gender inequality in the period of 1988 to 1995. Liu, Meng and Zhang (2000) find that the increase of the gender wage gaps in Shanghai and Tianjin is mainly attributable to privatization of SOEs. At the beginning of the SOE reform, female urban employees' income was about 15 per cent less than male employees', but the gap increased to about 25 per cent in 2000 (Cohen and Feng, 2009).

Similar results can be found in Maurer-Fazio and Hughes (2002), during the period of transition and reforms toward "socialist market-oriented economy", showing that gender wage disparity is most pronounced in the most liberalized sectors and the lowest in the state-owned sectors which are the least liberalized. Indeed, He and Wu (2014) have noted "women are 'losers' in the course of China's market transition".¹⁴

Another issue that has invited comments from researchers is the situation of rural women workers. Lin (2003) indicates that rural women form the largest group of women workers in China but they are also the most ignored group during the reform era. They have limited educational opportunities and receive limited social benefits from the government, but the social transition has at least promoted rural women's mobility. According to Zhang, De Brauw and Rozelle (2004), more than 30 per cent of women had off-farm jobs in 2000 from only 10 per cent in 1990, but the ratio still lagged behind that for men.

¹² See: <http://www.enterprisesurveys.org/data/exploreconomies/2012/china#gender> [accessed 14 Apr. 2015].

¹³ NBS, China Statistical Yearbook 2014.

¹⁴ G. He; X. Wu: *Gender Earnings Inequality in Reform-Era Urban China*, Population Studies Center Research Report 14-830 (Ann Arbor, MI, University of Michigan, 2014), p.28.

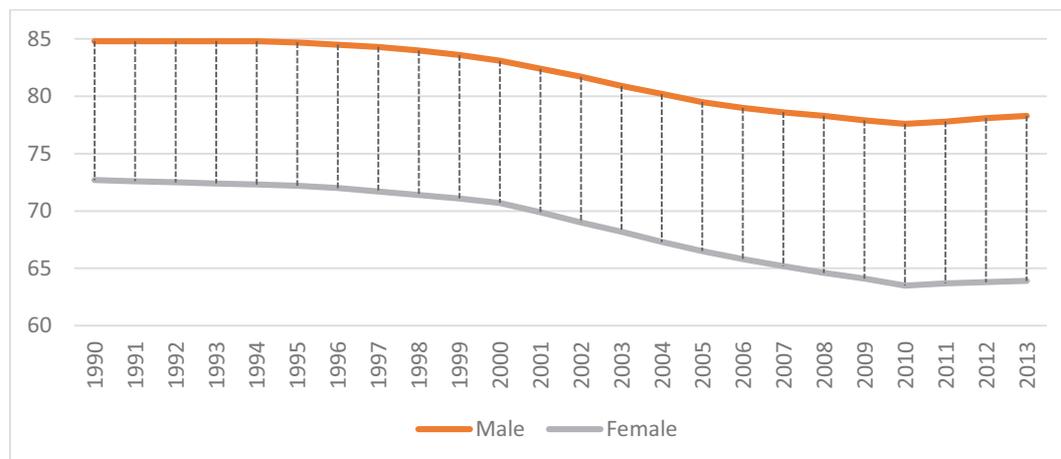
3. Trends in female labour force participation and employment

The paper uses the ILO’s Key Indicators for the Labour Market (KILM), eighth edition data to examine labour force participation rate (LFPR) and employment-to-population ratios (EPR) due to lack of time series data from the published NBS data sources on: (i) annual information on the working age population (16 onwards); and (ii) a breakdown of the labour force by sex.¹⁵ The KILM data for China are national estimates, based on data from national sources, and provide an overall direction of trends in the Chinese labour market.¹⁶

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 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.

Figure 1. Labour force participation rates (LFPR), 1990–2013 (%)



Source: ILO, *Key Indicators of the Labour Market (KILM)*, 8th Edition.

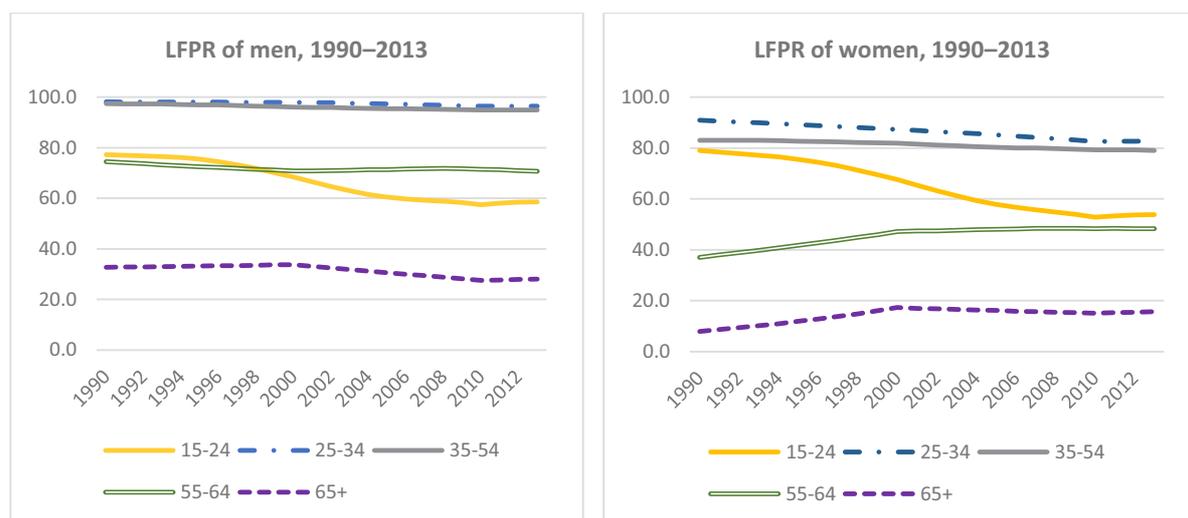
When we disaggregate the data by age group, it is clear that much of the decline in LFPR is due to a marked decline in the participation rate of young men and women by 20 and 26 percentage points, respectively, between 1990 and 2010. After that, there was a moderate turnaround. This most likely

¹⁵ 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.

¹⁶ For more information on the KILM data, definition and methodologies, see: http://www.ilo.org/empelm/what/WCMS_114240/lang--en/index.htm [accessed 21 Apr. 2015].

reflects the fact that the young age cohort is studying longer. The cohort which experienced the next largest decline in participation rate is women aged 25–34 year olds, 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. This latter fact reflects 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 child care (Liu, Zhang and Li, 2009).

Figure 2. Labour force participation rate (LFPR) by age groups, men and women, 1990–2013 (%)

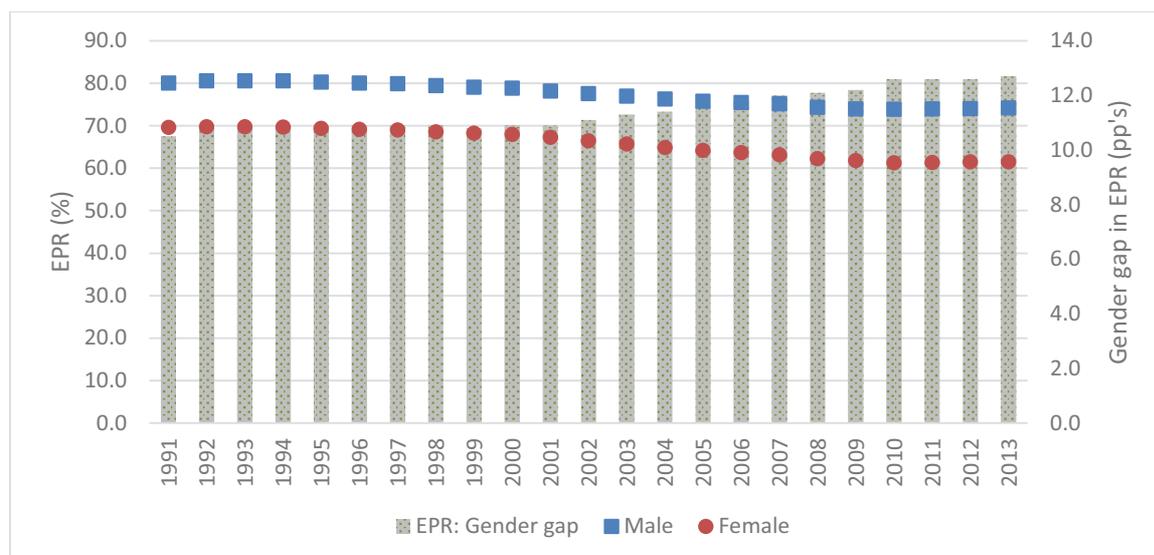


Source: ILO, *Key indicators of the labour market (KILM)*, 8th Edition.

Along with a moderate increase in the LFPR gap between women and men, the gap in EPR has slightly widened as presented in figure 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.¹⁷

¹⁷ 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 more likely to be unemployed than women.

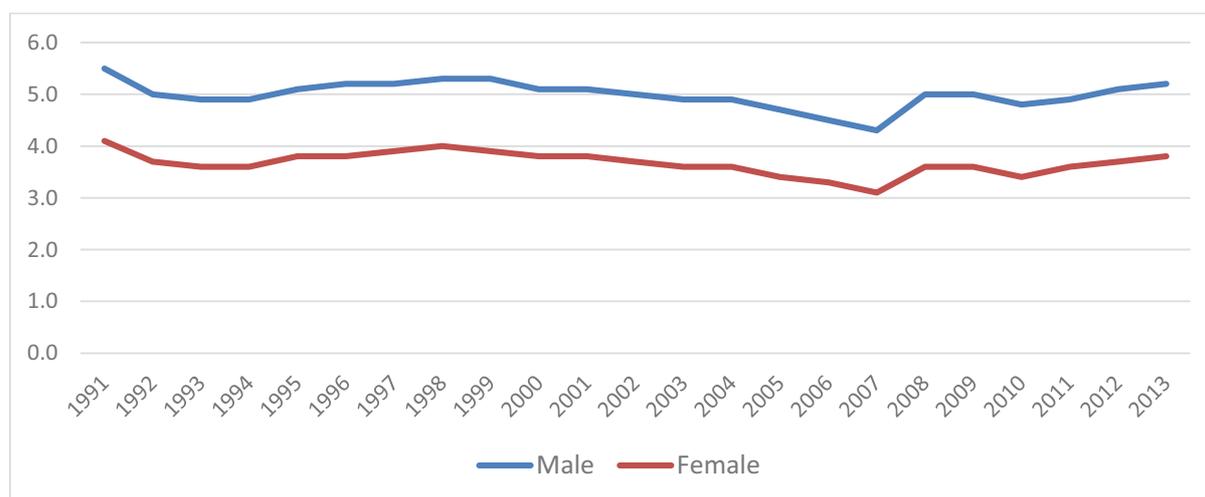
Figure 3. Gender gap in employment-to-population ratio (EPR), 1991–2013 (%)



Source: ILO, *ILO – Trends Econometric Model*, October 2014.

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 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.

Figure 4. Unemployment rate, 1991–2013 (%)



Source: ILO, *Key Indicators of the Labour Market (KILM)*, 8th Edition.

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 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 this may indeed be the case: between 2010 and 2012, approximately two-thirds of the rural migrant workers in urban areas consisted of men.¹⁸ 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 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.¹⁹

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 World Trade Organization (WTO) in 2001, which obliged China to engage in further policy reforms to transition toward 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 paper, 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.²⁰ Inclusion of reforms of the urban collective units further contributed to job losses of around 13 million between 1996 to 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.²¹ Moreover, women who experienced a layoff tended to experience downward occupational mobility and a larger gender wage gap upon re-employment.²² 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. 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 point increase between 2004 and 2012), while among men, it occurred for those with senior secondary school (also 4.4 percentage points increase). The overall education profile of employed men, therefore, tended to move toward a higher educational profile than that of employed women.

¹⁸ NBS: *Monitoring and Investigation Report of Rural Workers in China*, 2010–12.

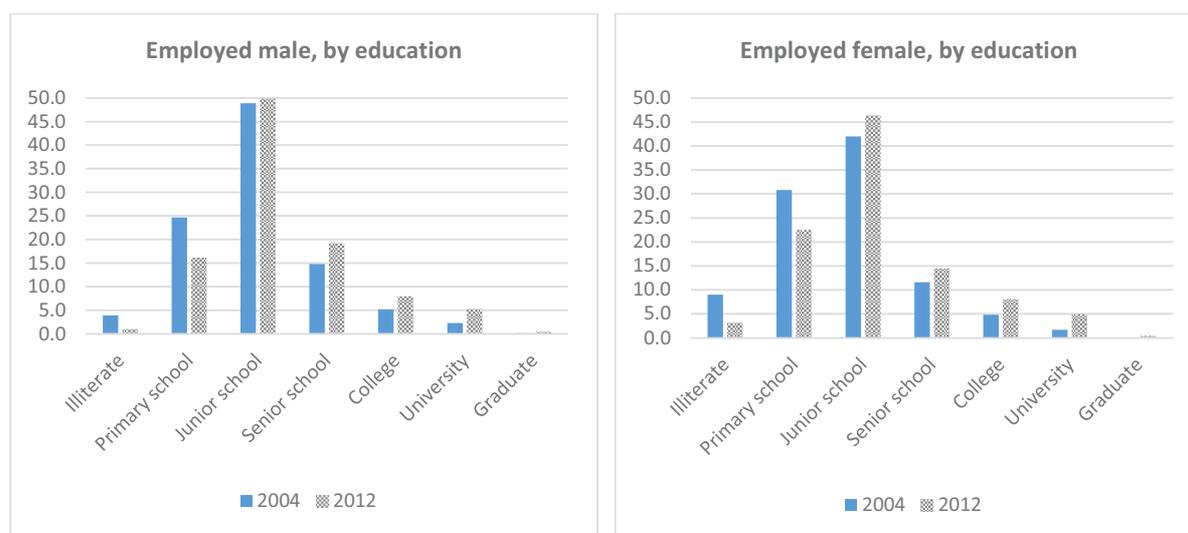
¹⁹ NBS and MoHRSS: *China Labour Statistical Yearbook 2013*, T1–64.

²⁰ Information Office of the State Council of the People’s Republic of China: *China’s Employment Situation and Policies*, Beijing, April 2004.

²¹ 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.

²² J. Knight; S. Li: “Unemployment duration and earnings of re-employed workers in urban China”, in *China Economic Review* (2007, Vol. 17), pp. 103–119, table 6.

Figure 4. Educational attainment of employed men and women,²³ 2004 and 2012 (%)



Note: Employed population refers to 16+ age group. For ease of presentation, while only 2004 and 2012 data are presented, the changes reflect a trend during the period.

Source: NBS and MoHRSS, *China Labour Statistics Yearbook*, 2005 and 2013.

Nevertheless, the education gap has closed at the higher levels of attainment. Among those in regular higher education,²⁴ the share of women enrolled increased notably since the early 1990s, to dominate (i.e. slightly above 50 per cent) over men since 2009.²⁵ 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.²⁶ 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.

²³ Including employment in urban and rural areas.

²⁴ 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: H. Zhu; S. Lou: *Development and reform of higher education in China* (Oxford, Chandos Publishing, 2011); and W. Ma: *Economic Reform and Higher Education in China*, CIDE Occasional Papers Series (Los Angeles, CA, Center for International and Development Education, 2003).

²⁵ Ministry of Education of the People’s Republic of China, *Educational Statistics Yearbook of China*, People's Education Press (various years).

²⁶ The Global Entrepreneurship and Development Institute: *The Gender Global Entrepreneurship and Development Index (GEDI)* (Washington, DC, 2013).

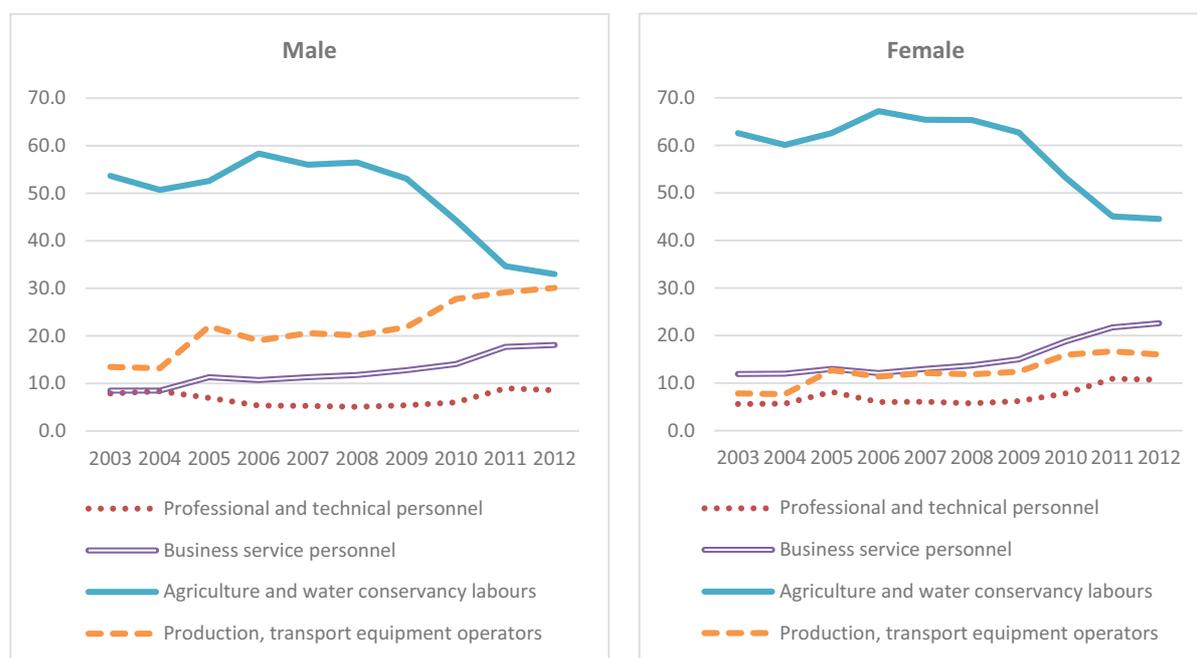
4. Gender segregation at work

Segmentation in the kind of employment women and men undertake generates gender differences in the working conditions they face at workplaces 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 in “agriculture and water conservancy labours”²⁷ 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 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 a greater sticky floor for women impeding their mobility out of agrarian work compared to that of men.

Figure 5. Employment by occupation and sex, 2003–12 (per cent of total employment)



Source: NBS and MoHRSS, *China Labour Statistical Yearbook*, 2004–13.

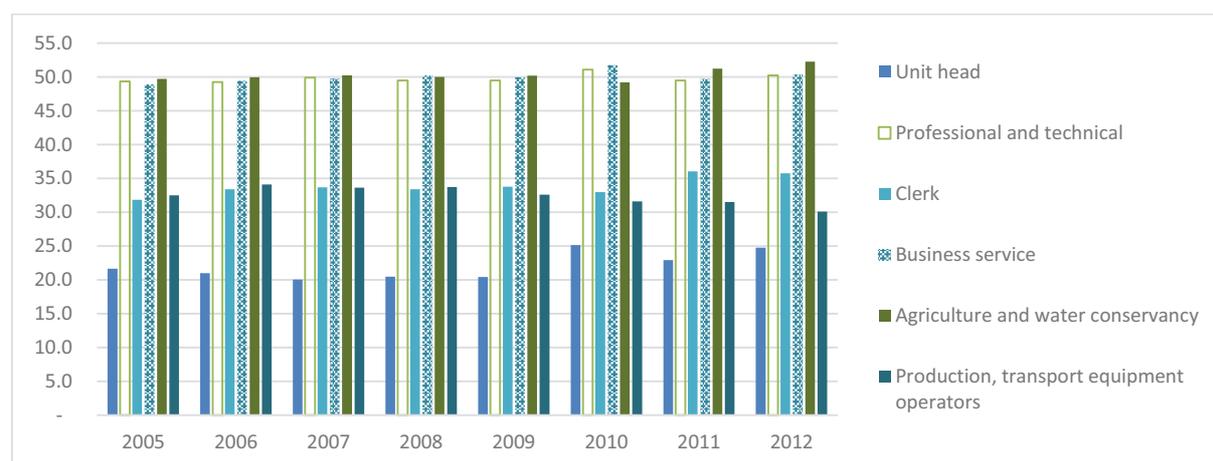
²⁷ Refers to personnel engaged in agriculture, forestry, animal husbandry, fishery and water conservancy. Including crop planting production personnel; forestry production and wildlife protection personnel; animal husbandry production personnel; fisheries production personnel; water conservancy facilities management and maintenance personnel; and other agriculture, forestry, animal husbandry, fishery and water conservancy production personnel (*Dictionary of Occupation in China*, China Labour & Social Security Publishing House, 1999).

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 personnel that became the second dominant occupation for women. The likelihood of employed women as business service personnel²⁸ 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” than employed women.²⁹

This is true for other occupational categories as well. As shown in figure 6, only 25 per cent of “unit heads” consisted of women in 2012. There are some signs of improvement for women in this regard, however, as the share of unit heads who are 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.

Figure 6. Share of women in each occupation, 2005–12 (%)



Source: NBS and MoHRSS, *China Labour Statistics Yearbook*, 2006–13.

There is also a clear relation between education and occupation for both women and men, but it differs between women and men. Having less than junior high school 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.³⁰ 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

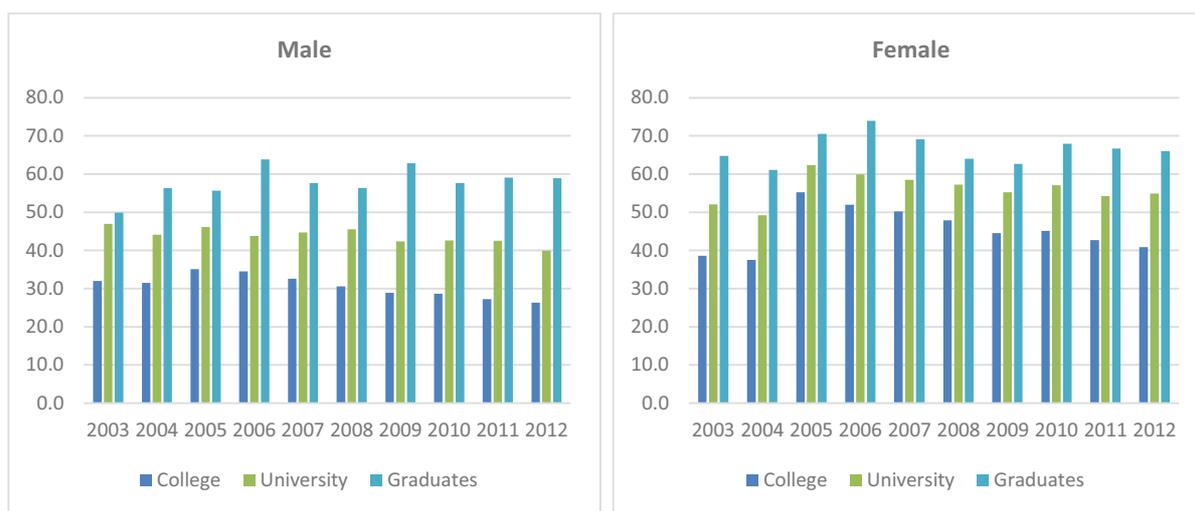
²⁸ Including sales and purchases personnel; warehouse personnel; catering service personnel; hotels, tourism and fitness entertainment service personnel; transportation service personnel; auxiliary medical service personnel; social service and resident service personnel; other business and service personnel (*Dictionary of Occupation in China*, China Labour & Social Security Publishing House, 1999).

²⁹ NBS and MoHRSS: *China Labour Statistical Yearbook*, 2004–13.

³⁰ *ibid.*

above, the dominant occupation is “professional and technical personnel”, as shown in figure 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 post-graduate degree and above who are more than 50 per cent likely to be working as professional and technical personnel.

Figure 7. Share of highly educated men and women in professional and technical occupation by education, 2003–12 (%)



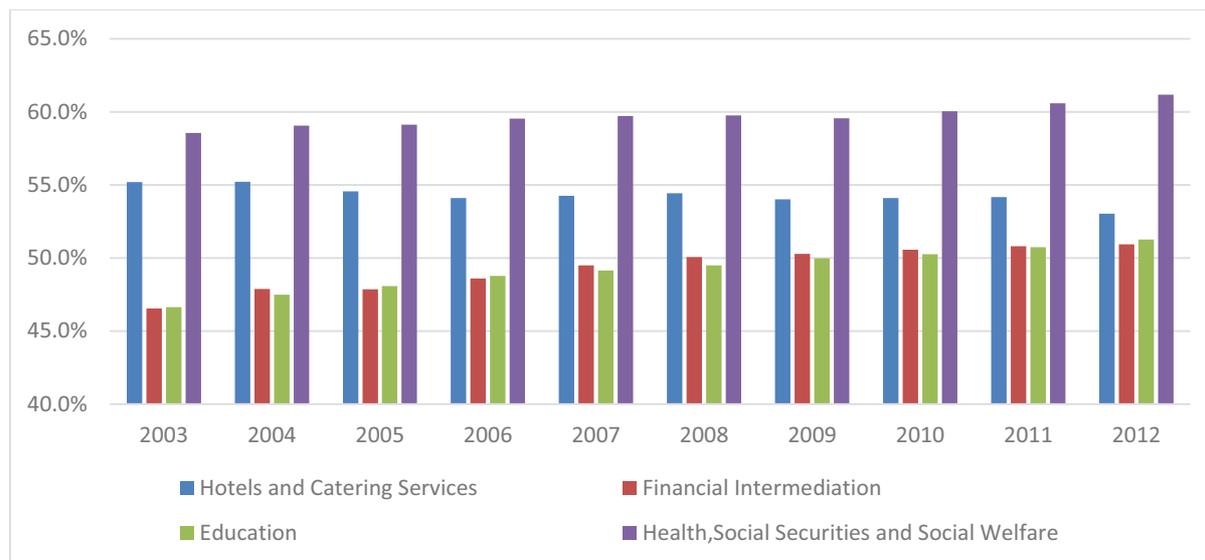
Source: NBS and MoHRSS, *China Labour Statistics Yearbook*, 2004–13.

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 as likely 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” (figure 8). Of the four sectors, “financial intermediation” and “education” came to be female dominant since around 2008 and 2009. The fifteen other sectors are dominated by men.³¹

³¹ 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.

Figure 8. Share of women in employment in urban units by sector, 2003–12 (%)



Source: NBS, *China Population and Employment Statistics Yearbook*, 2013.

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.³² There is a high likelihood of those with 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.

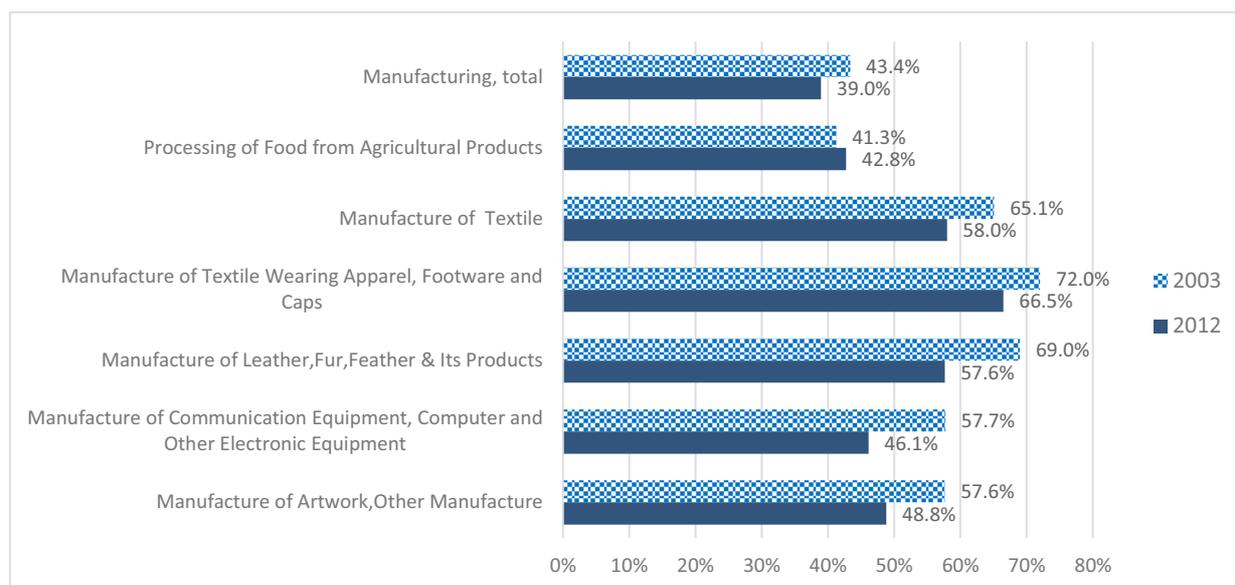
4.3 Women's employment in manufacturing is on the decline

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 to US\$45,564 per worker in 2011.³³ However, in the urban manufacturing sector, the total share of women employed in the sector has been on the decline. From the *China 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 share of women employed in almost all manufacturing subsectors.

³² NBS and MoHRSS: *China Labour Statistics Yearbook*, 2004–13.

³³ Calculated based on ILO – *Trends Econometric Models*, October 2014 and World Bank – *World Development Indicators*.

Figure 9. Share of women in total employment of selected manufacturing sub-sectors, 2003 and 2012 (%)



Source: NBS and MoHRSS, *China Labour Statistical Yearbook*, 2004–13.

There have been some changes in the pattern of female employment away from the subsectors of manufacturing where women constituted more than 60 per cent of the workforce in 2003, such as manufacture of textiles (65 per cent), to other subsectors. 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 per cent) and in the processing of food from agricultural products (3.0 to 4.1 per cent). There is a concentration of women in other subsectors 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 subsectors declined between 2003 and 2012 (figure 9 and table 1 below). Out of the 29 manufacturing subsectors, the only subsectors where women’s share in employment slightly increased during the same period are processing of food from agricultural products (41.3 to 42.8 per cent) and manufacture of furniture (35.4 to 35.5 per cent).

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 (figure 8), ranging from low pay and precarious work, for example in small-scale retail, domestic work, the food, beverage (or restaurant) and entertainment sector, to higher-paying services, for example in 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 below.

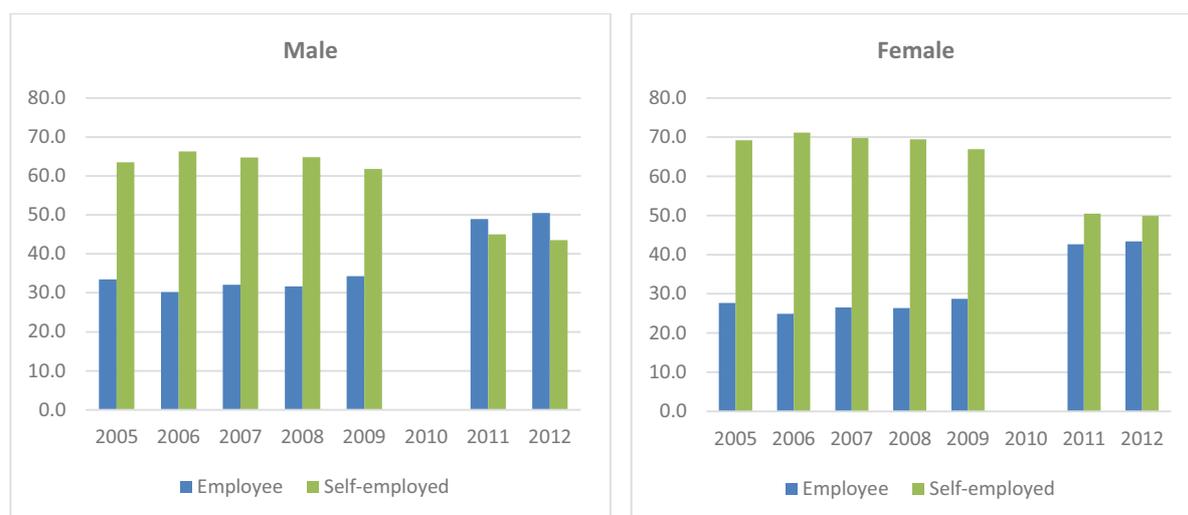
Table 1. Ratio of employed persons in manufacturing sectors in urban units by sex, 2003 and 2011 (%)

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 & 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 & 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 & 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, *China Labour Statistical Yearbook*, 2004–13.

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). For men and women, having a senior school education and above ensures higher chances of being an employee, while having junior school or less is associated with higher chances of being self-employed.

Figure 10. Employment status, men and women, 2005–09, 2011–12 (%)



Source: NBS and MoHRSS, *China Labour Statistical Yearbook*, 2006–10, 2012–13.

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 the Introduction. 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 women – business service personnel – had the lowest average recorded earnings at 39,300 yuan renminbi (CNY) (US\$6,339)³⁴ per annum, followed by the second emerging occupation – production and transport equipment operators – at CNY40,000 (US\$6,452).³⁵ 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 and catering services and the health, social securities and social welfare sectors – two of the four 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.

³⁴ 1 US\$ = 6.20 CNY, annual average exchange rate in 2013 from World Bank, World Development Indicators.

³⁵ NBS, “The Average Wage Status of Different Jobs”.

See: http://www.stats.gov.cn/tjsj/zxfb/201405/t20140527_558611.html [accessed 23 Mar. 2015].

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 provides 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 are derived from the questions, and current work is determined by examining the reported end date of the respondents' work history.³⁶ 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 model³⁷ is applied to explain the gender gap in post-tax hourly earnings from non-agricultural wage jobs³⁸ 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 difference in returns are differences in earnings that cannot be explained by gender differences in background characteristics and is often attributed to existence of discriminatory practices in the labour market.³⁹ The independent variables included are information on age and its square,⁴⁰ educational attainment, location, occupation or sectors of work, reported tenure in 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,⁴¹ 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. Women accounted for 37.5 per cent of total non-agricultural employment.

³⁶ 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 3.

³⁷ The estimated equation consists of a pooled model: $\ln w_m - \ln w_f = (E(\mathbf{X}_m) - E(\mathbf{X}_f))' [\mathbf{W}\beta_m + (\mathbf{I} - \mathbf{W})\beta_f] + [(\mathbf{I} - \mathbf{W})'E(\mathbf{X}_m) + \mathbf{W}'E(\mathbf{X}_f)]'(\beta_m - \beta_f)$, 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.

³⁸ 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.

³⁹ They also capture the effects of other key missing explanatory variables from the model.

⁴⁰ When the information on the duration of current work in terms of years is included, age minus the reported number of years in current job is used.

⁴¹ Engagement in other types of jobs within the last year are family agricultural work, non-agricultural self-employment, and unpaid family work.

Table 2. A selected description of the CFPS 2012

	Total	Of which female
Total number of currently employed	17	56.0%
	318	
Of which:		
Non-agricultural wage employment	7 213	37.5%
Average hourly post-tax earnings (CNY)	16.5	13.1

Note: Data without applying the sampling weight is shown.

Source: Authors' calculation from Chinese Family Panel Studies (CFPS) 2012, the Institute of Social Science Survey (ISSS) of Peking University

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.⁴²

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.⁴³ Using the same series, i.e. Chinese Family Panel Studies (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 paper is higher by around 6 percentage points. The result reported here provides an indication of rather high and perhaps, increasing, gender discrimination in the labour market in terms of earnings.

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 China Urban Labour Survey (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.⁴⁴

⁴² 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 application of appropriate weights and survey setting, the same model was fitted without the *svy* option. However, the qualitative results remain the same.

⁴³ N. Haspels; E. Majurin: *Work, income and gender equality in East Asia: Action guide*, (Bangkok, ILO, 2008), p.47.

⁴⁴ Quoted in “World Bank; the Development Research Centre of the State Council, P. R. C.: “China 2030: Building a Modern, Harmonious, and Creative Society” (Washington, DC, World Bank, 2013)”.

Table 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

Note: *** means statistical significance at 1 per cent. Sampling weights were used. Standard errors are robust. Total of 20,428 observations were used.

Source: the Institute of Social Science Survey (ISSS) of Peking University, China Family Panel Studies (CFPS), 2012. Own estimation.

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 illustrated also 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 2010.⁴⁵ Furthermore, in 2010, 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.

⁴⁵ ACWF and NBS: *Report on Major Results of the Third Wave on the Social Status of Women in China* (Beijing, 2011).

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, i.e. 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.

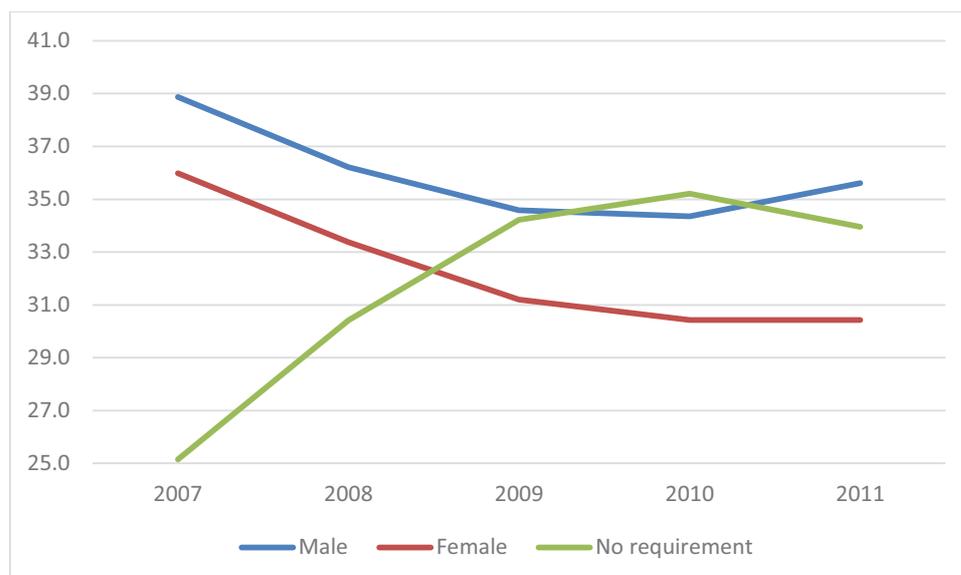
6.1 Access to work

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 in employing units which are advertised through the public employment service centres in 117 cities have gender requirements. 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 six cities carried out in 2008 and 2010 showed that 69 per cent of the employing units had gender requirement.⁴⁶

Although the overall share of jobs with a gender requirement has declined, the gap of the “market demand” between men and women has become wider as illustrated in the figure below based on analysis by the MoHRSS (figure 11).

⁴⁶ The Constitutional Government Research Institution of China University of Political Science and Law: *Survey report of the current status of employment discrimination among college students* (Beijing, 2010).

Figure 11. Percentage of new jobs with requirement on gender, 2007–11 (%)



Source: MoHRSS, *Analysis of supply and demand in the labour market in some cities, 2007–11*.

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 2013.⁴⁷ 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.⁴⁸

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 and care responsibilities. In China, women spend almost four hours per day on housework, while men spend 1.5 hours on average.⁴⁹ 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.⁵⁰ 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

⁴⁷ NBS, China Statistical Yearbook 2014.

⁴⁸ See: http://news.xinhuanet.com/school/2007-01/17/content_5615256.htm [accessed 12 Feb. 2015] and Han, X. (ed.): *The Annual Report on Chinese Women’s State of Life No. 4 (2009–10)* (Beijing, Social Science Academic Press (China), 2010).

⁴⁹ NBS, Time Use Patterns in China—Abstract of the 2008 Time Use Survey (Beijing, 2010).

⁵⁰ See for example M. Daly and G. Standing (eds): *Care work- the quest for security* (Geneva, ILO, 2001). Antonopoulos, R.: *The unpaid care work – paid work connection*, ILO Integration working paper No. 86 (Geneva, ILO, 2009).

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, Zhang and Li (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,⁵¹ 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.⁵²

Recognising 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 consequence the perception that women will "not be as committed to their work as men" and, therefore, are often side-lined in promotions.⁵³

6.3 Access to Social Security

Along with access to child care, 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 are 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.⁵⁴

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

⁵¹ 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.

⁵² See: <http://www.nhfpc.gov.cn/xcs/s3574/201405/d0b33c80dd6f4d399370baf984b0c0ca.shtml#> [accessed 26 Mar. 2015].

⁵³ See for example L. H. Fincher (ed.): *Leftover women: The resurgence of gender inequality in China* (Zed Books, London, 2014). N. Haspels; E. Majurin: *Work, income and gender equality in East Asia: Action guide* (ILO, Bangkok, 2008).

⁵⁴ ILO: *Social security: Issues, challenges and prospects* (Geneva, 2001).

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.⁵⁵ 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 2012.⁵⁶

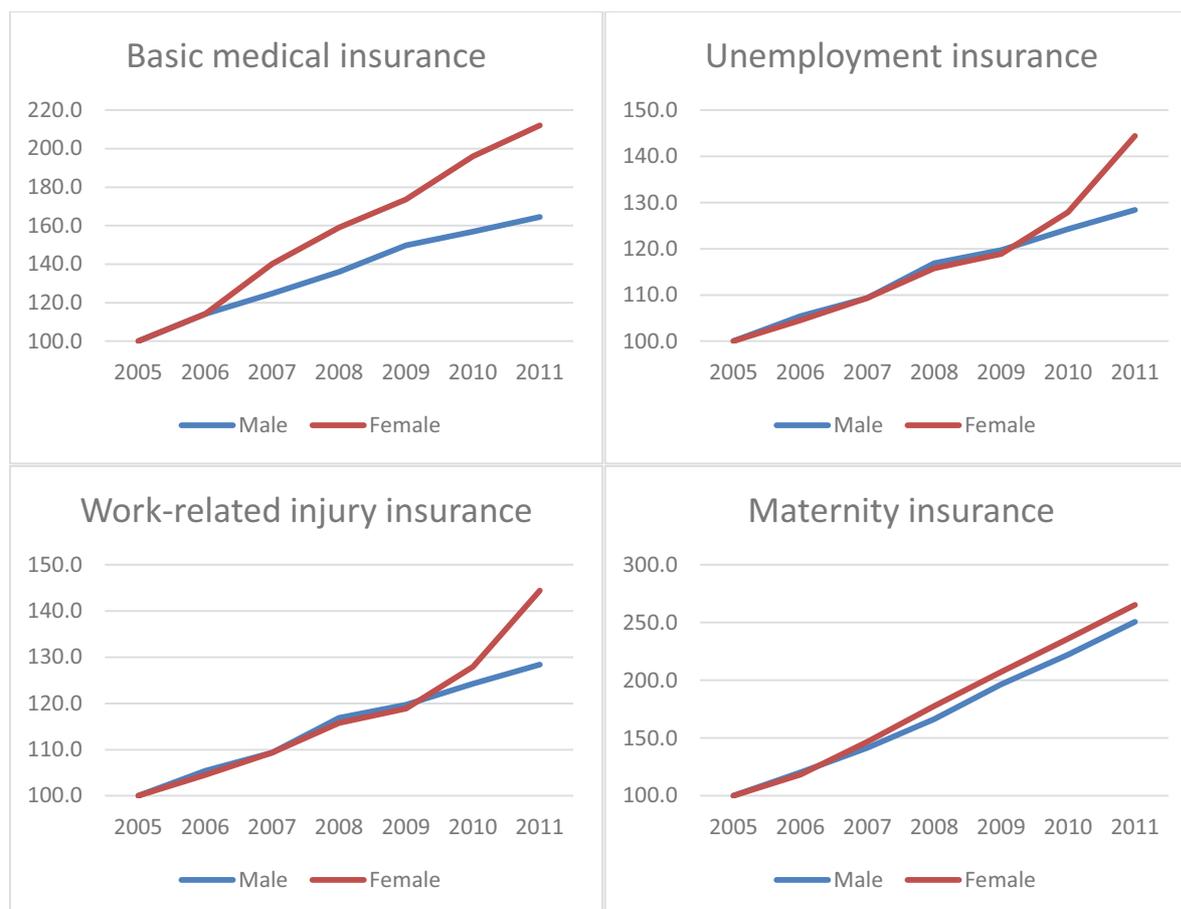
In recent years, there has been a policy focus on women's social security. "Women and social security" was added as a new subject in the "National Program for Women's Development in China (2011-2020)" to improve maternity protection, medical insurance, pension coverage, unemployment insurance and work-related injury insurance. As a result, an increasing number of women are now participating in social security schemes.⁵⁷

⁵⁵ Wu, J. (vice minister, State Commission for Restructuring the Economic System), China's Social Security System, see: <http://wenku.baidu.com/view/637a6019a8114431b90dd87f.html?re=view> [accessed 16 Feb. 2015].

⁵⁶ According to Xiaoyi Hu, the deputy minister of MoHRSS, See: http://www.mohrss.gov.cn/ncshbxs/NCSHBXSGongzuodongtai/201209/t20120905_83913.htm [accessed 19 Mar. 2015].

⁵⁷ NBS: Women and Men in China – Facts and Figures 2012 (Beijing, 2013).

Figure 12. Number of persons participating in insurances, 2005–11 (index, 2005=100)



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.⁵⁸

Source: Calculation based on statistics from the NBS, *Women and Men in China – Facts and Figures 2012*.

As figure 12 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 increased from 2005 to 2011 to stand at 13.3 per cent, 4.7 per cent higher than the rate of men during the same period.

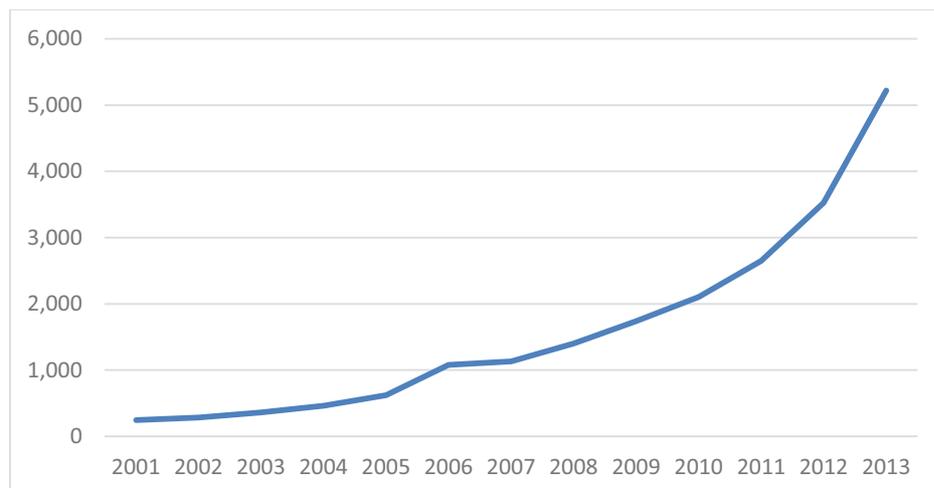
In terms of maternity protection, the State Council agreed to extend maternity leave from 90 days to 98 days in 2012,⁵⁹ and no work unit can reduce female employee’s salary because of maternity leave.⁶⁰ A new article was added into the “Law of the People’s Republic of China on the Protection of Women’s Rights and Interests” in 2005 stating the state’s commitment to implementing maternity protection.

⁵⁸ The NPC Standing Committee, “The Social Insurance Law of the People’s Republic of China” (2010).

⁵⁹ The State Council, “Special Rules on the Labour Protection of Female Employees” (2012).

⁶⁰ The NPC Standing Committee, “Law of the People’s Republic of China on the Protection of Women’s Rights and Interests (revised)” (2005).

Figure 13. Number of beneficiaries of maternity insurance, 2001–13 (thousand persons)



Source: MoHRSS and NBS, *China Labour Statistical Yearbook*, 2013; MoHRSS, *Human Resources and Social Security Development and Statistical Bulletin 2013*.

In 2013 (figure 13), 5.22 million women benefited from maternity protection, a twenty-fold increase on the 2001 figure. The coverage of maternity 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 remains an issue, and hampers women's access to and continuous employment in China. While 56.4 per cent of urban men were covered by medical insurance and 85 per cent 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 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.⁶¹

Furthermore, as Drew (2011) points out that China's current system is based on urban social security, and is closely connected with formal employment and having 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 2014,⁶² China's expenditure on social protection is 6.3 per cent of the gross domestic product (GDP). This is relatively small compared to the global average (8.6 per cent).

⁶¹ All data in this paragraph are taken from Drew (2011).

⁶² ILO: *World Social Protection Report 2014/15: Building economic recovery, inclusive development and social justice* (Geneva, 2014).

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 approved in 1978 by the Standing Committee of the People's Congress.⁶³ The law stipulates a retirement age for men at 60, and for women at 55 (for female cadres). 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, Zhang and Li, 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 age 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 (table 4).

Table 4. Population by age group, 2010 and 2020 (thousand persons)

Age 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%

Source: Population Division of the Department of Economic and Social Affairs of the United Nations Secretariat, World Population Prospects: the 2012 Revision Database.

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 ten 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), 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.

⁶³ The State Council: "The State Council Temporary Measures on Providing for Old, Weak, Sick, and Handicapped Cadres" and "The State Council Temporary Measures on Workers' Retirement and Resignation" (1978).

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.⁶⁴ 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 2045.⁶⁵

More recently, in March 2015 during the NPC and Chinese People's Political Consultative Conference (CPPCC), Mr. Yin Weimin, Minister of MoHRSS has said that the Government of China will begin drafting a new retirement policy, which will 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.⁶⁶

⁶⁴ See: http://news.xinhuanet.com/politics/2011-02/27/c_121127186.htm [accessed 26 Mar. 2015].

⁶⁵ Social Science Academic Press (CHINA): "Twenty Essays on China's Comprehensive Reform" (2014).

⁶⁶ *The wall Street Journal*. 2015. "China sets Timeline for first change to retirement age since 1950s", 10 Mar. and H. Zhang: "New Retirement policy", in *Global Times*, 11 Mar. 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, traditional values have continued to persist, and in some senses, appear to have become more pronounced during the reform phase.

The reform phase has certainly been a period of high growth in China. However, this has also been the period when income inequality has increased significantly, with the Gini coefficient growing from 0.291 in 1980 to 0.421 in 2010⁶⁷. According to NBS, the Gini coefficient was 0.469 in 2014.⁶⁸ During this period of increasing inequality, we also observe increasing gender gaps in some labour market indicators in China.

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 also declined at a rate faster than men's, and also more steeply than the LFPR.

A sectoral analysis reveals that women are more likely to be engaged in low productivity agriculture and services, and average earnings of women amongst the “business service personnel” the most dominant occupational group for women in the non-agriculture sector, is lower than that of men's in the same occupational group.

Furthermore, the paper finds that as China's economy and its manufacturing sector have moved up the productivity and skills ladder – China's manufacturing productivity has increased almost 6.7-fold 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 female-dominated 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 subsectors 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 three.

However, 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 percent to be precise, are “un-explained”. 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, and much of this can be attributed to discrimination and gender stereotypes on what men and women can and should do in work and in life.

⁶⁷ World Bank, *World Development Indicators*.

⁶⁸ NBS, see: http://www.stats.gov.cn/tjsj/zxfb/201502/t20150211_682459.html [accessed 23 Mar. 2015].

Overall, the gender gap in the labour market has been fairly narrow in China but over the last two decades, this gap has been on the rise, particularly during the 2000s, the period of rapid reforms and deepening integration of China into the global economy, and a transition toward a more market-oriented economy. 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.⁶⁹ 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.

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". However, 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. The Government of the People's Republic of China has 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 child care, promoting social security and a safe workplace for women have been formulated by the government over the years. However, success in implementation has not always been uniform.

In particular, the paper points to four areas that require further attention from a policy perspective:

- Equal access to employment for women and men, especially for graduates entering the labour force.
- 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 care givers in the family.
- Improved coverage of social security measures which has started to improve quite significantly for women alongside men over the last decade.
- Re-examination of the differential retirement age for women and men with a view to enable women to retire at the same as men and make it possible for both sexes to retire earlier if they wish.

Gender equality in China as measured by the gap in the LFPR is better than what is observed in most other Asian countries, and quite similar to that in the Organisation for Economic Co-operation and Development (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.⁷⁰

In some areas further legal and policy reform will be needed to create a conducive environment for 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

⁶⁹ The Information Office of the State Council of the People's Republic of China: *China's employment situation and policies* (Beijing, 2004).

⁷⁰ Speech by Xi Jinping, the President of the People's Republic of China, on the All-China Women's Federation (ACWF) meeting on 4 Nov. 2013, Beijing.

See: <http://www.womenofchina.cn/womenofchina/html1/news/leaders/16/6945-1.htm> [accessed 18 Mar. 2015].

retirement ages of men and women. In addition, a 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.

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Appendix

Table A1. Descriptive statistics from China Family Panel Studies (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	1 070.3	718.0	1 105.9	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 & 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 & 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 & supply of electricity, gas & 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 & 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 & retail	0.104	0.305	0.166	0.372	0.061	0.240
Hotel & 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 & commercial service	0.015	0.123	0.016	0.126	0.015	0.121
Scientific research, technical service & geological prospecting	0.008	0.088	0.009	0.095	0.007	0.083
Water resource, environment & public facility management	0.011	0.103	0.016	0.126	0.007	0.084
Residential & 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 & public welfare	0.028	0.165	0.052	0.223	0.011	0.106
Culture, sports & entertainment	0.008	0.090	0.010	0.100	0.007	0.083
Public administration & 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, China Family Panel Studies (CFPS) 2012.

Women in the labour market in China

This paper reviews the recent trends in women's labour force participation in China. Although the rate is relatively high in China, it has declined in recent years, as has the employment to population ratio. Furthermore, there is a significant wage gap between women and men, much of which remains "unexplained" when we carry out a decomposition analysis. To improve gender equality in the labour market, the paper points to four areas that require further attention from a policy perspective: (1) measures to promote equal access to employment for women and men; (2) creation of an enabling environment for workers with family responsibilities; (3) improved coverage of social security measures, especially for rural women; and (4) design of an appropriate retirement policy.

ILO Regional Office for Asia and the Pacific

United Nations Building, 11th Floor
Rajdamnern Nok Avenue,
Bangkok 10200, Thailand
Tel.: +66 2288 1234, Fax.: +66 2288 1735
Email: BANGKOK@ilo.org

www.ilo.org/asia

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