

DISCUSSION PAPER

TRADE LIBERALIZATION, SOCIAL POLICY DEVELOPMENT AND LABOUR MARKET OUTCOMES OF CHINESE WOMEN AND MEN IN THE DECADE AFTER CHINA'S ACCESSION TO THE WORLD TRADE ORGANIZATION



No. 9, February 2016

XIAO-YUAN DONG, SHI LI AND SUI YANG
FOR PROGRESS OF THE WORLD'S WOMEN 2015-2016

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SUMMARY

How trade liberalization affects women's position in the labour market and what role public policy should play to make the process work better for women are among some of the most debated issues in academic communities and in policy-making arenas. This paper sheds light on these contentious issues by analysing the trends in labour market outcomes of women and men in China in the decade after its accession to the World Trade Organization (WTO). The paper first reviews the changes associated with China's economic reforms and opening to international trade and investment since the process started in the late 1970s. The review shows that the Chinese Government has sought to navigate the course of liberalization and globalization to both take advantage of trade liberalization and constrain its more negative social effects. Since the early 2000s, a wide range of policy measures have been introduced to strengthen labour market regulations, reduce inequality and increase social security. However, most of these policy initiatives were 'gender neutral', paying inadequate attention to the institutional constraints that disadvantaged women in the labour market.

The paper next examines the trends in labour market outcomes of women and men by using data from the 2002 China Household Income Project (CHIP) and the 2008 and 2010 Rural-Urban Migration in China (RUMiC) project. The two surveys have the advantage of enabling us to look at three types of individuals: urban residents, migrants and rural residents. Between 2002 and 2010, women's labour force participation increased and rising women's labour force

participation was associated with a dramatic shift in labour allocation from agricultural labour to wage employment in industry and services. The incidence of vulnerable employment and informality declined for both women and men, while women's share in wage employment in non-agricultural sectors increased. Moreover, women and men at all income quintiles experienced rapid wage growth, with the real wages of workers in the lower quintiles growing faster relative to those at the higher quintiles. As a result, both working poor rates and low pay rates declined markedly for both women and men. However, the benefits of economic success following WTO succession were not evenly distributed between the sexes. Women's labour force participation rates (LFPRs) and employment rates remained lower than men's and their unemployment rates higher. Women still accounted for a larger share of low-paid and less-secure employment. While the gender earnings gaps for self-employed workers and migrant workers narrowed, the gender earnings gap for urban residents and rural workers continued to grow. Overall, the gender gaps in both earnings and low-pay rates increased.

Thus, China has been remarkably successful in creating productive employment and reducing income poverty by actively participating in the global market while carefully managing the process. However, economic growth alone, even if it is pro-poor and employment oriented, is insufficient for achieving gender equality in the labour market. To attain this, more concerted efforts to reduce the constraints women face in the labour market are needed.

RÉSUMÉ

L'impact de la libéralisation des échanges commerciaux sur la situation des femmes actives et le rôle que devraient jouer les politiques publiques pour que ce processus serve mieux la cause des femmes font partie des questions les plus débattues parmi les universitaires et les décideurs politiques. En analysant les tendances qui caractérisent le marché du travail pour les Chinois et Chinoises pendant la décennie ayant suivi l'adhésion de la Chine à l'Organisation mondiale du commerce (OMC), le présent document apporte un éclairage nouveau à ces questions controversées. Il commence par examiner les évolutions liées aux réformes économiques chinoises et à l'ouverture de la Chine au commerce et aux investissements étrangers à partir de la fin des années 70. Cet examen montre que le gouvernement chinois s'est employé à naviguer entre la libéralisation et la mondialisation afin de tirer parti de la libéralisation des échanges et d'en minimiser les effets sociaux négatifs. Depuis le début des années 2000, une vaste gamme de mesures politiques ont été mises en place pour renforcer le droit du travail, réduire les inégalités et améliorer la protection sociale. Néanmoins, la plupart de ces initiatives politiques étaient « neutres au regard du genre », ne tenant pas suffisamment compte des contraintes institutionnelles défavorables aux femmes sur le marché du travail.

Le présent document examine ensuite les tendances caractérisant les avancées des Chinois et Chinoises sur le marché du travail en s'appuyant sur les données émanant du Projet sur les revenus des ménages chinois (China Household Income Project - CHIP) de 2002 et du Projet sur les migrations chinoises entre les zones rurales et urbaines (Rural-Urban Migration in China - RUMiC) de 2008 et 2010. Ces deux études nous permettent de nous intéresser à trois profils d'individus : les habitants des zones urbaines et rurales et les migrants. Entre 2002 et 2010, la participation des femmes au monde du travail s'est accrue, ce qui s'est traduit par une réorganisation spectaculaire du

travail, les emplois agricoles d'antan se transformant en emplois salariés dans l'industrie et les services. La prévalence de l'emploi précaire et informel a diminué pour les femmes comme pour les hommes, tandis que la proportion de femmes employées en tant que salariées dans les secteurs non-agricoles a augmenté. Par ailleurs, les hommes et les femmes, à tous les niveaux de revenus, ont bénéficié d'une augmentation rapide des salaires, le salaire réel des employés dans les tranches de revenus les plus bas augmentant plus rapidement que celui des employés dans les tranches de revenus plus élevés. Ceci a eu pour conséquence une diminution marquée du taux de travailleurs pauvres et des bas salaires tant pour les hommes que pour les femmes. Cependant, les retombées des succès économiques qui ont succédé à l'adhésion à l'OMC n'ont pas été réparties équitablement entre les sexes. Les taux de participation des femmes à la vie active et leur taux d'emploi restent moins élevés que ceux des hommes, tandis que leur taux de chômage est plus élevé. Les femmes occupent toujours la majorité des emplois précaires et les moins rémunérés. Les inégalités de revenus entre hommes et femmes ont diminué pour les travailleurs indépendants et migrants, mais elles ont continué à se creuser pour les habitants des zones urbaines et pour les travailleurs ruraux. Globalement, les inégalités entre hommes et femmes se sont accrues tant en ce qui concerne les revenus que les taux d'emploi faiblement rémunérés.

Ainsi, la Chine a obtenu des résultats remarquables en matière de création d'emplois productifs et de diminution de la pauvreté de revenu en participant activement au marché mondial tout en gérant attentivement ce processus. Cependant, la croissance économique, même si elle est axée sur l'emploi et l'aide aux plus démunis, ne suffit pas pour parvenir à l'égalité des sexes sur le marché du travail. Pour y parvenir, il est nécessaire de déployer davantage d'efforts concertés en vue de réduire les contraintes auxquelles les femmes sont confrontées sur le marché du travail.

RESUMEN

El modo en que la liberalización del comercio afecta a la situación de las mujeres en el mercado laboral y la función que debería desempeñar la política pública para que el proceso sea más favorable a las mujeres son algunos de los temas más debatidos en las comunidades académicas y en los ámbitos de formulación de políticas. Este artículo pretende arrojar luz sobre estas controvertidas cuestiones. Para ello, se analizan las tendencias observadas en los resultados referidos a las mujeres y los hombres en el mercado laboral en China durante el decenio posterior a su incorporación a la Organización Mundial del Comercio (OMC). El artículo examina en primer lugar los cambios asociados a las reformas económicas acometidas en China y a la apertura al comercio y la inversión internacionales desde el inicio del proceso, a finales de la década de 1970. Este análisis muestra que el Gobierno chino ha tratado de navegar en el mar de la liberalización y la globalización para sacar ventaja de la liberalización del comercio y limitar sus efectos sociales más adversos. Desde principios del decenio de 2000 se ha introducido una amplia variedad de políticas dirigidas a fortalecer la normativa reguladora del mercado laboral, reducir la desigualdad e incrementar los niveles de protección social. Sin embargo, la mayoría de estas iniciativas fueron neutrales desde el punto de vista del género; es decir, no prestaban suficiente atención a los obstáculos institucionales que situaban a las mujeres en desventaja en el mercado laboral.

A continuación, el artículo estudia las tendencias de los resultados de las mujeres y los hombres en el mercado laboral. Para ello, se utilizan datos de la encuesta sobre los ingresos de los hogares chinos de 2002 y del proyecto sobre migración rural-urbana en China, realizado en 2008 y 2010. Ambas encuestas permiten a las autoras y al autor considerar tres grupos de población: residentes urbanos, migrantes y residentes rurales. Entre 2002 y 2010, la tasa de actividad de las mujeres aumentó. Este incremento estuvo asociado a un cambio drástico en la distribución del trabajo, que pasó de ser fundamentalmente agrícola a convertirse

en empleo asalariado en la industria y los servicios. La incidencia del empleo vulnerable y del carácter informal del trabajo se redujo tanto en el caso de las mujeres como en el de los hombres. También se observa un aumento de la proporción de mujeres en el empleo asalariado en sectores no agrícolas. Además, las mujeres y los hombres pertenecientes a todos los quintiles de ingresos experimentaron un rápido crecimiento de sus salarios; de hecho, los salarios reales de las trabajadoras y los trabajadores situados en los quintiles inferiores aumentaron con más rapidez que los de las trabajadoras y los trabajadores de los quintiles superiores. Como resultado de ello se redujeron las tasas de trabajadoras y trabajadores pobres y de salarios bajos. No obstante, los beneficios derivados de la prosperidad económica tras la incorporación a la OMC no se distribuyeron de forma igualitaria. La tasa de actividad entre las mujeres continuó siendo inferior a la de los hombres, mientras que con la tasa de desempleo sucedía lo contrario. Las mujeres seguían representando una proporción mayor del empleo con salarios bajos y escasos niveles de seguridad. Pese a que la brecha de género en los ingresos de las trabajadoras y los trabajadores por cuenta propia y migrantes se redujo, en el caso de las y los residentes urbanos y las trabajadoras y los trabajadores rurales dicha brecha siguió ampliándose. En términos globales, las brechas de género aumentaron tanto en lo que concierne a los ingresos como a las tasas de salarios bajos.

Puede decirse que, mediante su participación activa en el mercado mundial y una cuidadosa gestión del proceso, China ha cosechado un éxito notable en términos de creación de empleo productivo y de reducción de la pobreza. Sin embargo, el crecimiento económico por sí solo, aunque esté orientado al empleo y busque favorecer a las personas pobres, no basta para lograr la igualdad de género en el mercado laboral. Este objetivo exige esfuerzos más concertados y dirigidos a reducir los obstáculos a los que se enfrentan las mujeres en el mercado laboral.

1.

INTRODUCTION

Since 1978, China has been undergoing transition from a centrally planned to a market-oriented economy while opening up the economy to international trade and investment. In the first two decades of reform, the socialist labour allocation and protection system was dismantled, market forces were dramatically unleashed and the trade regime was gradually liberalized. In November 2001, China joined the World Trade Organization (WTO) in a move that accelerated the country's domestic economic transformation and further integrated the Chinese economy with the global market. The event has had a profound impact on Chinese women and men in the labour market. This paper provides an overview of the major policy changes in the decade after China's accession to the WTO and examines trends in labour market outcomes of Chinese women and men during this period.

How trade liberalization affects labour and gender equality in the labour markets of developing countries has been a subject of considerable debate. Neoclassical economists typically hold a positive view on this issue. Starting from the Heckscher-Ohlin theory of international trade, the argument runs that trade liberalization relocates labour-intensive manufacturing production for export from the global North to the South, and therefore workers in developing countries are potential winners (see Dollar and Kraay 2004). Trade liberalization shifts the economy from capital-intensive heavy industries toward labour-intensive light industries, which should improve women's prospects for productive employment and consequently narrow the gender wage gap.

Opponents of the neo-liberal perspective emphasize the dark side of trade liberalization for labour. They argue that it represents a global shift in power toward capital and away from labour. Because global integration makes it easier for companies to move across borders in search of cheaper labour, the ability of workers to bargain for higher pay and better working conditions has been weakened in all countries. As a result, traditional regular, full-time employment, protected by various forms of state regulations, has given way to casual, part-time and home-based

work (Standing 1999). Moreover, trade liberalization exacerbates income inequality as it tends to disproportionately benefit the already better-off groups and deepen insecurity and poverty for disadvantaged groups (Cornia 1999; UNIFEM 2005). From a gender perspective, feminist economists contend that women do not benefit equally with men from the employment and income gains of trade liberalization because they confront a variety of constraints in the labour market arising from informal institutions such as gender norms and beliefs, as well as formal institutions including regulations and laws (Kabeer 2008; Cagatay et al. 1995). Indeed, studies show that while women's labour force participation has increased in almost all developing countries in recent decades, the greater presence of women in the labour market has coincided with an increase in informal and unprotected employment in many developing countries (ILO 2013; Razavi et al. 2012; UNDESA 2010). There has been little improvement in the quality of employment for women in terms of earnings, benefits, job security and social protection. Instead, many women have seen their wages decline, their working conditions deteriorate and their jobs become more precarious.

A third perspective stresses the role of the nation state in determining trade liberalization's impacts. Rodrik

(2001) argues that the distributional outcome of trade liberalization depends on country-specific conditions. Chief among these are the pre-existing distribution of assets and access to public goods and the effectiveness of the state's response to the adjustment associated with trade liberalization. A more equal distribution of land, capital and human capital and access to physical infrastructures allows broader participation in the opportunities created by greater openness to external trade. Gains from trade liberalization are more likely to be broadly shared in countries where trade reforms are launched to advance the domestic development agenda and concerted efforts are made to contain any negative consequences. Gender outcomes of trade liberalization are also determined by how the various constraints women face are addressed by public policy (Razavi et al. 2012; Cagatay et al. 1995).

In this paper, we examine how these alternative perspectives on trade liberalization and labour and gender relations played out in China in the decade after its accession to the WTO. As is well recognized, women and men are not two separate homogenous groups, and the labour market outcomes of women and men vary widely within each group over other social markers. In the context of China, the presence of rural-urban disparity and the household registration (*hukou*) system divide the population into three distinct groups – urban *hukou* holders, migrants and

rural residents. Most of the existing studies on China's economic reforms and gender focus on a specific group, with urban women being more extensively studied than their rural sisters.¹ The present paper looks at all three groups of Chinese workers to provide a more complete assessment. The analysis seeks to address the following questions: (1) How did Chinese women and men fare in the labour market in the decade after China's entry to the WTO?; (2) Did China's greater integration with the global market contribute to expanding economic opportunities and improving the quality of employment of Chinese workers?; (3) Did women benefit equally with men from the expansion of better job opportunities?; and (4) How did the gender dynamics in the labour market interact with other forms of socio-economic inequality defined by residential status, education, age, marital status and the presence of young children?

The rest of the paper is organized as follows: In the next section we provide an overview of the economic reforms and their impact on women's labour market outcomes before the early 2000s. We then review in section 3 the development of labour market and social policies and macroeconomic trends in the decade since China's accession to the WTO. We describe the data in section 4. The empirical results are presented in section 5. We conclude the analysis with a summary of results.

¹ See Berik et al. (2007) for a literature review on gender and economic transition in China.

2.

ECONOMIC TRANSITION AND WOMEN'S WORK PRIOR TO THE EARLY 2000s

2.1

The labour system under socialism

During the Mao era (1949–1976), China achieved greater gender equality in the workplace. This can be attributed to a socialist labour system modelled in accordance with the theory of Marx and Engels that social production is an integrated process of the production of material products and the reproduction of human beings (Engels 1972; Grapard 1997). However, at the time, China's labour force was segregated by a household registration system called *hukou*. Individuals born in cities received 'non-agricultural *hukou*' while those born in rural areas held 'agricultural *hukou*'. More than 80 per cent of the population held an agricultural *hukou* in the pre-reform period (Cheng and Selden 1994). The two types of *hukou* holders had markedly different entitlements to employment, income, social welfare and protection and public services.

In the cities, most working-age women and men were employed on a full-time basis in state-owned or collective enterprises (Croll 1983). In the Chinese literature, these public organizations are called work units (*dan-wei*). The status of 'public-sector employees' entitled women and men to lifetime employment and a wide range of social services and benefits from maternity leave, childcare, health care and subsidized housing to retirement pensions provided by their work units.

While gender segregation remained prevalent and women earned less than men, the gender wage gap in pre-reform China was remarkably small by international standards (Kidd and Meng 2001).

In rural areas, most able-bodied women and men worked on farmland in a collective system. Rural collectives provided social welfare services (day care, school, medical care and social assistance) to their members (Perkins and Yusuf 1984). Although the services that rural collectives provided were more limited compared to urban work units, education and health care among rural populations were more equally distributed in pre-reform China compared to other countries at a similar level of development. Nevertheless, marked gender differences in earnings and employment were observed in rural communes (Stacey 1983; Wolf 1985).

Under the socialist system, human security and equality were, however, achieved at the expense of efficiency. The labour allocation and reward mechanisms of work units and communes reduced labour mobility and work incentives, which, in turn, led to overstaffing, skill-mismatch and low productivity (Meng 2000).

2.2

Economic reforms and developmental transformations prior to WTO accession

In the late 1970s, China embarked on the path of market reforms and economic opening. In contrast to the shock therapy approach taken by other transition countries, China's transition is characterized by gradualism. Prior to WTO accession, it had undertaken successive waves of reforms: decollectivization and land tenure reforms in the agricultural sector; promotion and later privatization of township and village enterprises (TVEs); relaxation of control over rural-urban labour migration; state sector reforms; and policies to encourage foreign direct investment and liberalize the trade regime. During this period of reforms, the primary concern of the Government was to find the most efficient way of restructuring the economy, and income equality and social fairness were of secondary importance. The economic reforms and opening brought about rapid income growth and lifted hundreds of millions of people out of poverty (Chen and Ravallion 2004). Along with China's remarkable economic success, however, inequalities and social instability also increased sharply (Khan and Riskin 2005; Li et al. 2013).

Women benefited from rising rural incomes and the growth of non-agricultural employment in the post-reform era. Indeed, a growing proportion of rural women moved from agricultural production into off-farm employment with higher compensations (Zhang et al. 2004; Zhi et al. 2013). Urban migration gave rural women more autonomy and freedom and improved their position in the household (Connelly et al. 2010; Zheng et al. 2001). However, labour market discrimination and women's socially ascribed responsibility for unpaid domestic labour prevented them from participating equally in new job opportunities with men. Studies have shown that women, especially married women, were less likely than men to be involved in local off-farm work (Knight and Song 2003; Xia and Simmons 2004), and agricultural production increasingly became the work of married women and elderly people (Mu and van de Walle 2009; Chang, MacPhail

and Dong 2011; Chang, Dong and MacPhail 2011). In the rural industrial sector, women's earnings were much lower than men's (Hare 1999; Rozelle et al. 2002; Dong et al. 2004; MacPhail and Dong 2007). Female migrants in the cities also confronted more obstacles in the labour market than male migrants (Pun 2007). Migrant women with preschool children had lower labour force participation rates than their male counterparts (Maurer-Fazio et al. 2011).

Like their rural sisters, urban women also gained much from rapid economic growth. Gender gaps in education decreased, while women's health significantly improved (NBS 2013). However, economic reforms accentuated women's disadvantage in the labour market. Under increasing pressure to make profits, enterprises became more and more reluctant to accommodate the needs of employees with family responsibilities. The dismantling of the work unit-based socialist welfare system led to a substantial decline in state and employer support for childcare (Liu et al. 2008; Cook and Dong 2011). Moreover, with the state's retreat from socialist ideology, traditional patriarchal values became more influential in society, which affected policy-making. For example, during the public sector restructuring, gender-differentiated mandatory early retirements were widely applied, forcing a large number of women in their late 40s out of the labour market (Giles et al. 2003). In policy circles, rising urban unemployment following the public sector restructuring led to a stronger justification for less secure, 'flexible' forms of employment as reemployment measures, especially in sectors where women predominate (Cook 2010).

In consequence, women faced increasing discrimination in accessing employment, including those at high levels of education (Kuhn and Shen 2013). Women were more likely than men to be laid off in the process of restructuring and less likely to be reemployed (Appleton et al. 2002; Giles et al. 2006; Du and Dong

2009). Women withdrew from the labour force at much higher rates (Dong et al. 2006; Maurer-Fazio et al. 1999; Meng 2012). The decline in women's labour force participation was concentrated among those who were married to husbands with low earnings, less educated, 40–50 years of age, mothers of pre-school children or daughters with disabled elderly parents (Ding et al. 2009; Maurer-Fazio et al. 2011; Liu et al. 2010; Du and Dong 2013). The quality of jobs held by women also deteriorated. Women were more likely than men to undergo downward occupational

changes but less likely to experience upward mobility (Song and Dong 2013). A growing number of urban workers, predominately women, were pushed into the informal sector (Yuan and Cook 2010; Cook and Wang 2010). Consequently, the gender earnings gap was on a steady increase (Gustafsson and Li 2000; Chi and Li 2008; Zhang et al. 2008; Meng 2012). The urban reforms also led to a sharp increase of the earnings gap between mothers and childless women with the same human capital characteristics in the private sector (Jia and Dong 2013).

3.

POLICY DEVELOPMENT AND MACROECONOMIC TRENDS IN THE DECADE AFTER ACCESSION TO THE WTO

China's accession to the WTO in 2001 marked another stage in the transformation of its economy. This was spurred not only by domestic market expansion but also by greater exposure to international market forces. Increased access to world markets for Chinese manufactured goods and foreign investment was expected to fuel growth in employment in industry and services, accelerate the transformation of surplus labour in agriculture into non-agricultural activities and further increase labour productivity and incomes. However, WTO membership also committed China to opening up its domestic markets to foreign competition and putting pressure on agriculture as well as the previously protected industrial sectors, which may increase labour dislocations and exacerbate inter-regional and rural-urban income disparity and overall inequality (Fewsmith 2001; Blum 2002).

Compared to other countries that have undergone similar liberalization, China's socialist legacy of broad-based health and education and women's high labour force participation potentially allows broader participation in opportunities created by greater openness associated with WTO accession. Moreover, farmland in China is collectively owned by the local villagers, and almost all rural households have access to farmland. This unique land tenure system provides rural workers with a buffer against economic shocks associated with market deregulation and trade liberalization (Dong 1996).

More importantly, the Chinese Government, far more than those in other developing countries, has sought to navigate the course of liberalization and globalization to both take advantage of market forces and constrain their most negative dynamics (Naughton 2007; Qian 2003). The Chinese leadership has attempted to counter the potential adverse effects of market deregulation and trade liberalization on Chinese labour (Dong et al. 2010; Wang 2008). After Hu Jintao and Wen Jiabao took office in 2002/2003, a wide range of economic and social policies have been initiated to strengthen labour market regulations, reduce inequality and increase social security. A selective list of key policy measures is reviewed below.

3.1

Strengthening labour market regulations

The Labour Law of 1995 was the first legislation of the People's Republic of China that permitted employers to lay off workers while safeguarding workers' rights to work, pay, working hours, labour protection and security in the new market economy. The Law also stipulates that women and men have equal rights to employment and no employers shall lay-off female employees or lower their wages for reasons of marriage, childbearing and child rearing. In 2004, Minimum Wage Regulations were enacted across the country (Li et al. 2013). In an effort to strengthen labour protection of workers from disadvantaged groups, the Labour Contract Law and the Employment Promotion Law were enacted in 2008. The Labour Contract Law requires that employers sign written labour contracts with and provide social insurance for all employees, regardless of whether they are an agricultural or a non-agricultural *hukou* holder (Gao et al. 2012). The Employment Promotion Law stipulates that the

local governments and employers should safeguard the equal rights to employment for women, workers from ethnic groups, workers with disabilities and health issues and migrant workers, and it also sets out concrete legal remedies for redressing employment discrimination.

In recent years, the official trade union (All-China Federation of Trade Unions (ACFTU)) has expanded its representation in the private sector and become more vocal and active in collective wage consultations and negotiations (Chen 2012). The number of workers, especially migrant workers, who signed labour contracts with their employers, were covered by collective wage agreements or participated in social insurance programmes has increased in recent years (Gao et al. 2012). Despite this progress, the enforcement of labour regulations in small private enterprises remains a major challenge.

3.2

Reducing inequality

The Government's approach to inequality placed greater emphasis on inter-regional and rural-urban disparities than other forms of inequality as these were deemed a major source of social instability (Wang 2008). The main strategy was to promote economic growth in less developed central and western regions and in rural areas by increasing investments in infrastructure and education and providing more support for agricultural production. For instance, in the mid-1990s, 592 counties in central and western China were officially designated as poor counties and received funding from the Government to invest in roads, electricity, irrigation and local schools and to provide microcredit and other supports for rural households (Li et al. 2013). Between 2001 and 2009, another comprehensive anti-poverty programme was introduced to 148,000 of the poorest villages. Since 1994, the Government's fiscal transfers to

less developed central and western provinces have increased steadily (Wang 2008). Increased investment in infrastructure and education in less developed regions is imperative for creating productive, stable employment in these regions.

In addition to anti-poverty programmes, a series of measures have been implemented to support agricultural production and neutralize the potentially deleterious effects of China's accession to the WTO on rural farmers. Included in the policy initiatives are: providing subsidies for grain production; reducing and eventually abolishing agricultural tax and rural levies; providing free nine-year compulsory education; and increasing infrastructural investment (Dong et al. 2010). Statistics from the Organisation for Economic Co-operation and Development (OECD) show that supports for agricultural producers in China went up

from about 3 per cent of gross receipts from farm production in the late 1990s to 11 per cent in 2008–2011.² Given that almost all rural households have contract land and that farmers are at the bottom of the occupational hierarchy, an increase in farm income helps

3.3

Increasing social security

The Government has also stepped up efforts to develop a new social security system to replace the work unit-based and rural collective-based social welfare systems that were dismantled in the 1980s and 1990s.³ The first main component of the new system is the minimum income guarantee programme (*dibao*), which was initially adopted to support laid-off public sector workers in the 1990s and then extended to all urban residents in 2001 and to all rural residents in 2007 (Li 2011). In 2008, 23.3 million urban residents and 43.1 million rural residents received *dibao* allowance.

The second main component is basic medical care insurance, which consists of three sub-programmes (Li 2011). Urban workers and retirees are covered by the Worker Basic Medical Care scheme and the remaining urban residents by the Urban Resident Basic Medical Care scheme. The New Rural Cooperative Medical Insurance scheme covers rural residents. In 2008, these programmes covered 99 per cent of urban workers and retirees, 60 per cent of the remaining urban residents (children, students and people with no employment history) and 85 per cent of rural residents. Old-age security is the third main component of the new social security system. In the late 1990s, pension insurance schemes based on the contribution of employers and employees primarily covered urban workers in the formal sector. In recent years, such schemes were extended to cover migrant workers, the urban informal sector and the rural sector. The New Rural Pension Scheme (NRPS) was implemented in 2009, and more than 326 million rural adults were participating in this programme by

to push up the wage floors of less-skilled workers in non-agricultural sectors. With the aforementioned policy efforts, the upward trends of inter-regional and rural-urban inequalities were reversed in the mid-2000s (Wang 2008).

the end of 2011 (NBS 2012). The main concerns about the three insurance programmes were low pay-out levels and the presence of huge entitlement disparities among urban residents, migrants and rural residents (Li 2011).

Other significant social security programmes include unemployment insurance, insurance for work injury and maternity insurance (*shengyubaoxian*). Maternity insurance represents a new development of maternity leave policy in China. Under the 1995 Labour Law, employers are responsible for paying wage replacements for maternity leave, which tends to create a disincentive to hire young women. In 2005, the government of Shanghai introduced the first maternity insurance programme, which takes the responsibility away from the employer for paying wage replacements for maternity leave.⁴ Since then the maternity insurance programme has been adopted in other cities. In 2012, maternity insurance programmes covered 33.5 per cent of enterprise employees in the cities. In 2010, the Government announced a plan to expand early childhood education programmes to cover children in poor rural counties and migrant children in urban areas (State Council 2010).

In addition to introducing new labour market and social policies, the Government has been vigilant about maintaining macroeconomic stability, with a cautious approach to capital account liberalization and financial sector deregulation. This has minimized China's exposure to global economic turbulence. In response to the 2008 global financial crisis, the Government launched a large fiscal stimulus programme

² See <http://www.oecd.org/tad/agricultural-policies/china-agricultural-policy-monitoring-and-evaluation2011.htm#more>.

³ For an overview of China's social security reforms, see Li (2011).

⁴ The Labour Law stipulates that women are entitled to 90 days of maternity leave with full wage replacement.

to cushion the impact of the crisis on the Chinese economy. Thus, after a brief phase of employment contraction that sent more than 20 million rural migrants back home from the coastal cities, rapid economic growth was back on track.

3.4

Macroeconomic trends

The Chinese economy experienced rapid economic growth and dramatic structural change in the decade after its accession to the WTO. As statistics presented in Table 3-1 demonstrate, between 2001 and 2011, gross domestic product (GDP) grew by 12 per cent per year; per capita GDP grew by 11.5 per cent; and household consumption in urban and rural areas grew by more than 7 per cent. Capital investment and foreign trade have been the primary drivers of this rapid economic growth, as it is evident that gross capital formation and exports and imports grew much faster than the

While steps have been taken to protect the reproductive role of women, the implementation of these protective regulations was problematic in non-public sectors. There was still a lack of concerted efforts by the Government to address the work–family conflicts women face and to fight against gender discrimination in the labour market.

growth in household consumption. Rapid economic growth was associated with a noticeable rise of the state's presence in the economy. Government revenues and expenditures both grew at an annual rate of about 20 per cent. Remarkably, the share of government revenues in GDP rose from 15 per cent in 2001 to 22 per cent in 2011, whereas the share of government expenditures increased from 17 to 23 per cent. Much of the increased government expenditures went to public infrastructure, education, health, social security and support for agricultural production and rural development.

TABLE 3-1
Macroeconomic indicators (2001–2011), China

	2001	2011	Average annual rate of growth (%)
GDP (billion yuan) ¹	11,640.6	38,856.3	12.0
GDP per capita (yuan)	9,153	28,908	11.5
Rural household consumption per person (yuan)	2,133	4,528	7.5
Urban household consumption per person (yuan)	7,506	15,547	7.3
Gross capital formation (billion yuan) (% of GDP)	4,221.8 (36.3)	1,848.9 (47.6)	14.8
Exports (\$US billion) (% of GDP)	266.1 (20.1)	1,898.3 (26.1)	20.3
Imports (\$US billion) (% of GDP)	243.6 (18.4)	1,743.5 (23.9)	20.5

FDI utilization (\$US billion) (% of GDP)	49.7 (3.8)	117.7 (1.6)	10.0
Government revenues (billion yuan) (% of GDP)	1,739.5 (14.9)	8,993.5 (22.0)	20.4
Government expenditures (billion yuan) (% of GDP)	2,006.6 (17.2)	9,458.7 (23.1)	19.3
Public expenditure on capital investment (billion yuan) (% GDP) ²	270.3 (2.3)	1,219.6 (3.1)	15.1
Public expenditure on education (billion yuan) (% of GDP)	216.1 (1.9)	1,428.3 (3.5)	18.9
Public expenditure on health care (billion yuan) (% of GDP)	59.2 (0.5)	556.7 (1.4)	22.4
Public expenditure on social security and protection (billion yuan) (% of GDP)	167.9 (1.5)	961.8 (2.4)	17.5
Public expenditure on agriculture and rural areas (billion yuan) (% of GDP)	86.9 (0.7)	860.4 (2.1)	22.9

Notes:

1. All the indicators measured in yuan are at the 2005 constant price.

2. Public expenditures on capital investment are the amount of investment in fixed assets funded by state budgets.

Source: NBS 2002 and 2012.

The rapid economic growth brought about dramatic changes in the labour market. From Table 3-2, we note that total employment between 2001 and 2011 grew at the same rate of 0.5 per cent per year as population growth. The composition of employment changed dramatically, with workers moving out of primary industry and into secondary and tertiary industries, and out of rural areas and into the cities. The employment share of primary industry and rural areas – the sectors with a large presence of labour surplus – fell, respectively, from 50 per cent in 2001 to 34 per cent in 2011 and from 67 per cent to 53 per cent. In both rural and urban sectors, a growing proportion

of non-agricultural workers were employed in the formal sector, which consists of registered organizations and enterprises where employment was more productive and labour regulations more effectively implemented. Thus, China's rapid economic growth and greater integration with the global market in the past decade have indisputably led to a substantial expansion of more productive employment opportunities for Chinese workers as a whole. How were these new opportunities distributed between women and men with different social, economic and demographic characteristics? We address this question using micro-data in the remainder of the paper.

TABLE 3-2

Trends in employment and employment composition (2001–2011), China

	2001	2011	Average annual rate of growth (%)
Population (million)	1,276.3	1,347.4	0.5
Population aged 15–64 (million)	898.5	1,002.8	1.1
Total employment (million)	727.97	764.20	0.5
Primary industry (million) (% of total employment)	363.99 (50.0)	265.94 (34.2)	-3.2
Secondary industry (million) (% of total employment)	162.34 (22.3)	225.44 (29.5)	3.9
Tertiary industry (million) (% of total employment)	201.65 (27.7)	272.82 (35.7)	3.5
Urban sector (million) (% of total employment)	241.23 (33.1)	359.14 (47.0)	4.9
Organizations and enterprises (million) ¹ (% of urban employment)	126.50 (52.4)	210.06 (58.5)	6.6
Foreign companies (million) (% of urban employment)	6.71 (2.8)	21.49 (6.0)	22.0
Rural sector (million) (% of total employment)	486.94 (66.9)	405.06 (53.0)	-1.7
Private enterprises (million) (% of rural employment)	11.87 (2.4)	34.41 (8.5)	19.0
Registered unemployment rate in urban areas (%)	3.6	4.1	----

Note:

1. Employment in organizations and enterprises includes those employed in government organizations, state-owned enterprises, collective enterprises, share-holding companies, domestic private enterprises and foreign-funded companies.

Source: NBS 2002 and 2012.

DATA DESCRIPTION

To have a broad picture of gender dynamics in the Chinese labour market, we need to have a dataset that covers all three types of households – urban, migrant and rural. For this purpose, the micro-data used in our analysis are drawn from the 2002 wave of the Chinese Household Income Project (CHIP) and the 2008 and 2010 waves of Rural-Urban Migration in China (RUMiC) Project. CHIP and RUMiC are the only two major non-official household surveys available that cover all three types of households.

CHIPs contain four repeated cross-sections for 1988, 1995, 2002 and 2007. The first two waves of CHIPs only cover urban and rural households, with migrant households added to the 2002 wave. The urban and migrant households in the 2002 CHIP were drawn from 12 provinces, whereas the rural households were from 22 provinces. RUMiC is part of the Rural-Urban Migration in China and Indonesia (RUMiCI) project that was initiated in 2008. It covers all three types of household from nine provinces. Both CHIP and RUMiC collected information on urban and rural households using the sample frames of the Urban Household Survey and the Rural Household Survey that are regularly conducted by the National Bureau of Statistics (NBS) of China, and therefore the samples of urban and rural households from the two surveys are compatible.⁵ However, the sample frames of CHIP and RUMiC for migrant households are different. The migrant households in the 2002 CHIP were drawn from residential communities, which may miss workers living in factory dormitories, whereas the migrant households of the 2008 and 2010 RUMiC were selected through workplaces.

The sample for our analysis consists of seven provinces that are covered by both surveys and have information on all three types of households. These provinces include Jiangsu and Guangdong in the eastern region, Anhui, Henan and Hubei in the central region and Chongqing and Sichuan in the western region. The

sample provinces as a whole are considered nationally representative in that they do not include either the richest provinces (Beijing, Shanghai and Zhejiang) or the poorest provinces (Guizhou, Yunnan and Gansu). The seven provinces combined accounted for about 37 per cent of the Chinese population as well as of the national GDP in 2011, and their average GDP per capita was 37,638 *yuan*, slightly lower than the average of 39,441 *yuan* for all provinces in China.

Focusing on working-age women and men between the ages of 16 and 64 years, our sample consists of 10,717 men and 10,680 women in 2002, 18,193 men and 17,137 women in 2008 and 17,877 men and 16,763 women in 2010. The sample individuals are classified into three groups: urban *hukou* holders, migrants (those who have a rural *hukou* and have lived in the cities for more than six months) and rural residents. The distribution of urban *hukou* holders, migrants and rural residents for women and men combined is, respectively, 43.5, 12.0 and 44.5 per cent in 2002, 25.1, 16.3 and 58.6 per cent in 2008 and 23.9, 17.7 and 58.4 per cent in 2010.

Because the observations for 2002 and for 2008 and 2010 were taken from the sub-samples of CHIP and RUMiC for the respective years, there are two discernible discrepancies in the data. The first is that the number of observations for 2002 is noticeably smaller than that for 2008 and 2010 because the seven provinces for the former represent a much smaller subset of the original sample than that for the latter. The

⁵ In fact, some authors (Gao et al. 2012, 2013) call the 2008 RUMiC ‘the 2008 CHIPs’.

second is that the distributions over three types of individuals in the sample for 2002 and the samples for 2008 and 2010 are inconsistent with the national trends of urbanization during the period under investigation. Specifically, the share of urban *hukou* holders in the sample is higher for 2002 than for 2008 and 2010, while the opposite holds for rural residents. This is due to the fact that the provinces in the original samples that do not overlap between the two surveys, and are therefore not included, are on average less urbanized for 2002 than for 2008 and 2010.⁶ Although the variation in sample size is not much of a concern for conducting a meaningful trend analysis, the discrepancy in sample distribution may bias the statistics for the sample as a whole. To address this problem, we weigh the sample observations with the weights derived based on the population distribution when computing overall statistics. The weight is defined as

$$w_j = \frac{1}{s_j} S_j$$

where $j = 1, 2$ and 3 is the index for urban *hukou* holders, migrants and rural residents, respectively; s_j is

the share of type j in the sample; and S_j is the share of type j in the population. The population shares are derived using information from three sources. We first obtain the shares of urban residents and rural residents in the population for 2002, 2008, and 2010 from the 2011 *China Population and Employment Statistical Yearbook* (NBS 2011). We next divide the share of urban residents between urban *hukou* holders and migrants for 2002 based on the information from Li (2008) and for 2008 and 2010 according to the 2008 and 2010 NBS Statistical Communiqué. The population shares of urban *hukou* holders, migrants and rural residents are, respectively, 0.318, 0.072 and 0.610 for 2002; 0.364, 0.105 and 0.530 for 2008; and 0.385, 0.114 and 0.501 for 2010.

Table A1 (see Appendix) presents summary statistics of the distributions and individual characteristics of employed women and men in the sample. The distributions over the seven sample provinces are fairly consistent over three cross-sections, which is reassuring for the compatibility between the 2002 CHIP and the 2008 and 2010 RUMiC.

6 The provinces originally in the 2002 CHIP but not included in our sample include Beijing, Liaoning, Shanxi, Yunnan, Gansu, Shandong, Jilin, Jiangxi, Hunan, Guangxi, Guizhou, Shaanxi and Xinjiang, and the provinces originally in the 2008 and 2010 RUMiC but not included are Shanghai and Zhejiang.

5.

LABOUR MARKET OUTCOMES OF WOMEN AND MEN BETWEEN 2002 AND 2010

5.1

Labour force participation, unemployment and employment rates

Table 5-1 presents labour force participation rates (LFPRs) of women and men in 2002, 2008 and 2010.⁷ For the sample as a whole, men's LFPR increased steadily from 84.9 per cent in 2002 to 85.8 per cent in 2008 and 85.9 per cent in 2010. In contrast, women's LFPR fell from 76.1 per cent in 2002 to 74.9 in 2008 and then rose to 77.7 in 2010. The decline in women's LFPR in 2008 may be a result of the 2008 global financial crisis. Between 2002 and 2010, the gender LFPR gap decreased from 8.8 to 7.4 percentage points. The increase of overall LFPR is primarily attributable to the rise of LFPR among migrant women and rural residents of both sexes. The gender gap in LFPR decreased from 15.2 to 5.0 percentage points for migrants and

from 4.9 to 3.1 for rural residents between 2002 and 2010. The LFPRs of both female and male urban *hukou* holders are lower, compared with migrants and rural counterparts, and the gender gap of urban *hukou* holders (about 14 percentage points) is the largest among the three types of individuals for 2010. One reason for the difference in LFPR between urban *hukou* and rural *hukou* holders is that a majority of workers with an urban *hukou* can retire and claim pensions long before reaching the conventional retirement age of 65 years, whereas most rural *hukou* holders have no pensions and they stop working only when they are physically incapacitated (Pang et al. 2004).

7 These indicators are derived from a question on the current situation and employment status with 10 classes: 1. Engaged in wage employment, farming or self-employment, 2. Employed retiree, 3. Unemployed, 4. Retiree, 5. Homemaker, 6. Unpaid family contributing worker, 7. Disabled, 8. Student/preschooler, 9. Preparing for going back to school/school dropout and 10. Others. The employed individuals are those in 1, 2 and 6 and the unemployed are those in 3; the sum of the employed and unemployed is the people in the labour force.

TABLE 5-1

Labour force participation rates in China in 2002, 2008 and 2010, by sex

	2002			2008			2010		
	Men	Women	M-W	Men	Women	M-W	Men	Women	M-W
Overall	84.9	76.1	8.8	85.8	74.9	10.9	85.9	77.7	8.2
By residential status									
Urban <i>hukou</i> holders	79.4	65.2	14.2	80.3	63.9	16.4	79.3	65.4	13.9
Migrants	96.5	81.3	15.2	97.5	93.5	4.0	95.2	90.2	5.0
Rural residents	86.3	81.4	4.9	86.9	79.6	7.3	88.5	85.1	3.4
By education									
Elementary or lower	89.5	78.7	10.8	89.6	77.2	12.4	91.6	85.6	6.0
Junior middle school	88.4	78.0	10.4	93.2	81.7	11.5	93.2	82.6	10.6
Senior middle school	78.5	70.5	8.0	89.8	75.8	14.0	87.2	74.9	12.3
College and university	81.4	73.7	7.7	86.8	80.7	6.1	86.9	82.8	4.1
By age									
16–24	55.0	58.0	-3.0	59.9	60.1	-0.2	58.1	57.0	1.1
25–34	97.4	91.3	6.1	97.9	92.8	5.1	97.1	92.0	5.1
35–44	97.7	91.7	6.0	98.2	91.3	6.9	98.3	94.9	3.4
45–54	93.8	75.1	18.7	95.9	74.8	21.1	96.6	82.0	14.2
55–64	70.9	45.2	25.7	73.3	46.1	27.2	76.4	56.8	19.6
Marital status (25–54)									
Unmarried	95.4	87.4	8.0	94.3	88.1	6.2	89.2	82.2	7.0
Married	96.2	86.0	10.2	97.8	86.4	11.4	98.1	89.5	8.6
Presence of children aged 0–6									
<i>Age 25–54</i>									
Children	95.2	86.0	9.2	98.5	87.4	11.1	96.5	87.5	9.0
No children	96.3	86.0	10.3	97.0	86.3	10.7	95.4	88.2	7.2
<i>Age 25–35</i>									
Children	96.1	91.4	4.7	99.4	91.1	8.3	96.8	87.9	8.9
No children	98.0	92.9	5.1	96.6	93.3	3.3	92.3	88.1	4.2

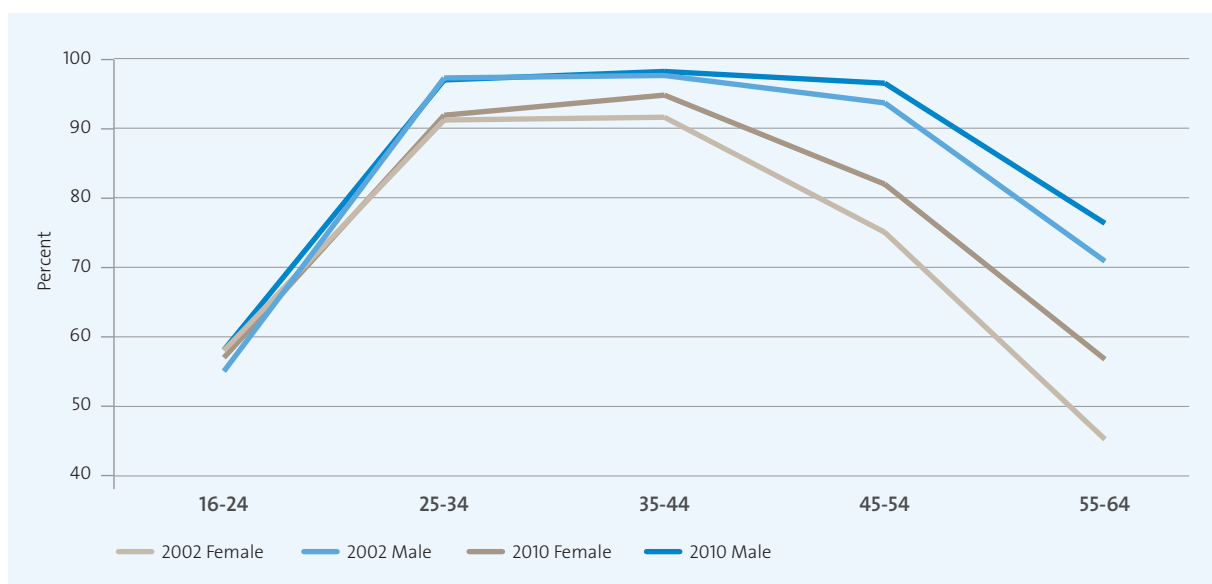
No. working-age people	10,771	10,680		18,193	17,137		17,877	16,763	
Women's share in working-age people (%)		49.8			48.5			48.4	
No. people in the labour force	9,145	8,127		15,609	12,836		15,356	13,205	
Women's share of the labour force (%)		47.1			45.1			46.2	

Source: 2002 CHIP and 2008 and 2010 RUMiC.

With respect to other social markers, we note that the rise of LFPR for women is more discernible among the least and the most educated, whereas the LFPR of men went up more sharply among those with senior-high school or college education. Across age groups (see Figure 5-1), LFPR varies with age in an inverted U-shaped pattern for both women and men, whereas the gender LFPR gap increases with age. Like their male counterparts, more than 90 per cent of women aged between 25 and 44 participated in the labour force and their LFPR increased between 2002 and 2010. While the

LFPR of women aged between 45 and 64 is much lower than that for women aged between 25 and 44, their LFPR went up more markedly than the LFPR for women in younger age groups. The age profile suggests that the vast majority of Chinese women participate in the labour force during the prime ages of childbearing and child rearing. Consistent with the age profile, the statistics by demographic characteristics show that there are no discernible differences in LFPR between married and unmarried women and between women with young children and those without.

FIGURE 5-1
Labour force participation rates in China in 2002 and 2010, by sex and age



Source: 2002 CHIP and 2010 RUMiC.

Why does the LFPR of prime age women remain high in the post-WTO period, despite the decline of state and employer support for women's reproductive role? There are two forces that may mitigate working women's needs for childcare. The first is China's one-child policy, which has lowered the country's fertility rates and thereby minimized the interruption of childbearing and child rearing on women's labour market participation. The second is support from the extended family. In the urban sector, many women retired at 50 and took care of grandchildren while their daughters or daughter-in-laws went to work (Maurer-Fazio et al. 2011). In the rural sector, the fact that most households have farmland not only allowed young women to go back to the labour market quickly after giving birth to a child but also enabled older women to combine farm work with care-giving for grandchildren while their daughters were engaged in off-farm employment (Chang, Dong and MacPhail 2011).⁸

Table 5-2 presents the trends in unemployment between 2002 and 2010. Overall, women's unemployment rate was consistently higher than men's across three cross-sections, but unemployment declined

from 4.2 to 3.2 per cent for men and from 5.7 to 4.8 per cent for women between 2002 and 2010. Of the three types of individuals, the unemployment rates of women and men were highest among urban *hukou* holders and the unemployment rate gap between female and male urban *hukou* holders was also the largest. Migrant women also had higher unemployment than migrant men in all three periods. In contrast to the downward trends for other educational groups, the unemployment rate of individuals with college and university education increased for both women and men between 2002 and 2010; and the gender gap went up from 0.5 to 2.4 percentage points in 2010. Both men and women in the youngest age group (between 16 and 24) had the highest unemployment rate, but their unemployment rates declined markedly from 12.4 and 9.6 per cent in 2002 to 4.6 and 4.7 per cent in 2010, respectively. The unemployment rate for older women (between 45 and 64) and older men (between 55 and 64) increased over time. Lastly, the unemployment rates of married women and women with young children were similar, respectively, to that of unmarried women and women with no young children, and the pattern of difference was stable across three cross sections.

TABLE 5-2
Unemployment rates in China in 2002, 2008 and 2010, by sex

	2002			2008			2010		
	Men	Women	M-W	Men	Women	M-W	Men	Women	M-W
Overall	4.2	5.7	-1.5	3.1	5.2	-2.1	3.2	4.8	-1.6
By sector									
Urban <i>hukou</i> holders	8.4	13.3	-4.9	8.5	14.3	-5.8	8.2	12.7	-4.5
Migrants	1.4	3.1	-1.7	0.8	2.6	-1.8	2.1	3.5	-1.4
Rural residents	2.7	2.7	0.0	0.5	0.5	0.0	0.2	0.2	0.0
By education									
Elementary or lower	1.8	3.0	-1.2	1.5	1.3	0.2	1.5	1.0	0.5

⁸ The results presented here do not mean that family responsibilities have no adverse effects on women's labour force participation in the post-WTO period because a simple comparison of group means cannot tell us how family responsibilities

may affect women, holding constant other factors. The earlier findings reviewed in section 2 that women with family responsibilities were more adversely affected by the economic reforms are mostly obtained from regression analysis.

Junior middle School	4.5	6.1	-1.6	2.1	3.8	-1.7	2.3	3.7	-1.4
Senior middle School	5.7	10.2	-4.5	5.1	11.3	-6.2	4.4	9.2	-4.8
College and university	3.2	3.7	-0.5	3.8	6.8	-3.0	4.1	6.5	-2.4
By age									
16–24	12.4	9.6	2.8	4.0	3.4	0.6	4.6	4.7	-0.1
25–34	3.3	5.3	-2.0	2.5	5.9	-3.4	2.8	3.9	-1.1
35–44	2.3	5.4	-3.1	2.2	6.4	-4.2	2.1	5.5	-3.4
45–54	3.7	5.0	-1.3	3.6	5.8	-2.2	3.4	6.0	-1.6
55–64	2.0	1.5	0.5	4.2	1.4	2.8	4.0	2.8	1.2
By marital status (25–54)									
Married	2.6	4.9	-2.3	2.3	5.3	-3.0	2.2	4.8	-2.6
Unmarried	8.0	7.3	0.7	4.8	9.6	-1.6	5.0	5.8	-0.8
By presence of children aged 0–6									
<i>Age 25–54</i>									
Children	1.8	4.8	-3.0	1.3	5.4	-4.1	1.4	4.4	-3.0
No children	3.2	5.0	-1.8	2.9	5.7	-2.8	2.9	5.1	-2.2
<i>Age 25–35</i>									
Children	2.2	6.1	-3.9	1.2	6.2	-5.0	1.4	5.1	-3.7
No children	4.4	5.4	-1.0	3.0	5.7	-2.7	3.6	3.3	0.3
No. unemployed people	384	463	---	484	667	---	491	634	---
Women's share in unemployed people (%)	---	54.7	---	---	57.9	---	---	56.4	---

Source: 2002 CHIP and 2008 and 2010 RUMiC.

Table 5-3 presents the trends in employment-to-population ratio in 2002, 2008 and 2010.

Consistent with the general trend of rising LFPR and declining unemployment rate, the overall employment-to-population ratio (employment rate) increased from 81.3 to 83.2 per cent for men and from 71.7 to 74.0 per cent for women between 2002 and 2010. The gender gap in employment rates decreased from 9.6 to 9.2 percentage points, and women's share in employment went up from 45.9 to 46.1 per cent between 2002 and 2010. Among the three types of individuals, the employment rates of both female and male urban *hukou* holders were the lowest and their gender employment-rate gap was the largest. While the employment rate of male urban *hukou* holders remained at 72.8 per cent between 2002 and 2010, the employment rate of female urban *hukou* holders increased slightly from 56.6 to 57.0 and therefore

the gender gap decreased from 16.2 to 15.8 percentage points. Compared to their male counterparts, the employment rates of female migrants and rural residents increased more sharply and the gender gaps declined from 16.3 to 6.2 percentage points for migrants and from 4.8 to 3.3 percentage points for rural residents. For the sample as a whole, the employment rates of women and men increased across all education and age classes. With respect to marital status, the employment rate increased for married women but decreased for unmarried women. For women aged between 25 and 54, the difference in employment rates between those with children and those without was negligible and the employment rates of both groups increased. For women aged between 25 and 35, the employment rate was lower for those with young children than those without, by 2 percentage points, in 2002 and the difference declined somewhat over time.

TABLE 5-3
Employment-to-population ratio in China in 2002, 2008 and 2010, by sex

	2002			2008			2010		
	Men	Women	M-W	Men	Women	M-W	Men	Women	M-W
Overall	81.3	71.7	9.6	83.2	71.0	12.2	83.2	74.0	9.2
Women's share in employment		45.9			45.1			46.1	
By residential status									
Urban <i>hukou</i> holders	72.8	56.6	16.2	73.5	54.8	18.7	72.8	57.0	15.8
Migrants	95.1	78.8	16.3	96.7	91.1	5.6	93.2	87.0	6.2
Rural residents	84.0	79.2	4.8	86.5	79.3	7.2	88.3	85.0	3.3
By education									
Elementary or lower	87.9	76.3	11.6	88.3	76.2	12.1	90.2	84.7	5.5
Junior middle school	84.4	73.3	11.1	91.3	78.6	12.7	91.0	79.6	11.4
Senior middle School	74.1	63.3	10.8	85.2	67.3	17.9	83.4	68.0	15.4
College and university	78.8	71.0	7.8	83.5	75.3	8.2	83.3	77.4	5.9
By age									
16–24	48.2	52.4	-4.2	57.5	58.0	-0.5	55.4	54.3	1.1

25-34	94.1	86.5	7.6	95.4	87.4	8.0	94.3	88.4	5.9
35-44	95.5	86.8	8.7	96.0	85.4	10.6	96.2	89.7	6.5
45-54	90.3	71.4	18.9	92.4	70.5	21.9	93.3	77.1	16.2
55-64	69.5	44.6	24.9	70.2	45.4	24.8	73.3	55.2	18.1
By marital status (25-54)									
Married	93.7	81.8	11.9	95.6	81.9	13.7	95.9	85.2	10.7
Unmarried	87.8	81.1	6.7	89.8	79.6	10.2	84.8	77.4	7.4
By presence of children aged 0-6									
Age 25-54									
Children	93.5	81.9	11.6	97.2	82.7	14.5	95.1	83.7	11.4
No children	93.1	81.6	11.5	94.2	81.4	12.8	92.6	83.7	8.9
Age 25-35									
Children	94.0	85.8	8.2	98.2	85.4	12.8	95.4	83.4	12.0
No children	93.7	87.8	5.9	93.7	88.0	5.7	89.0	85.2	3.8
No. employed people	8,680	7,372	---	15,504	12,758	---	15,325	13,121	---

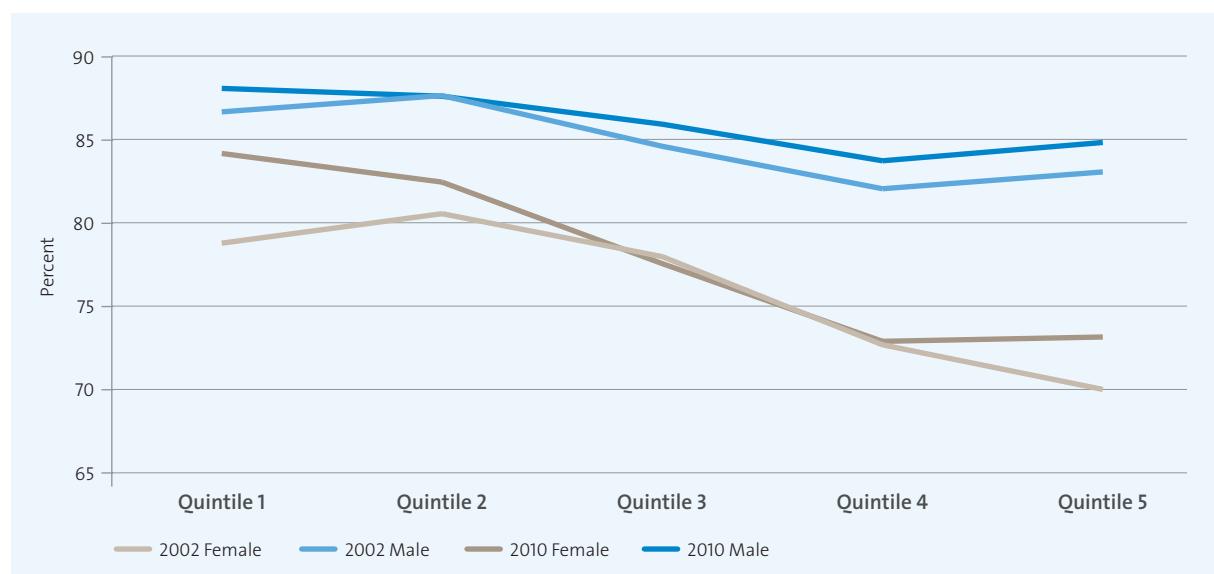
Source: 2002 CHIP and 2008 and 2010 RUMIC.

Figures 5-2 to 5-4 present LFPR, unemployment rate and employment rate by income quintile. For both women and men, the LFPR and employment rate are higher at lower quintiles. The unemployment rate is higher for the middle quintiles than the bottom and top quintiles. The LFPR and the employment rate of both women and men increased more markedly at lower quintiles than higher quintiles and the change is more pronounced for women than men.

In sum, the LFPR and the employment rates of both women and men increased whilst their unemployment rate decreased between 2002 and 2010. The economic growth during this period created more employment opportunities for women at low-income quintile, mostly female migrants and rural residents, relative to other groups. As a result, the gender gaps in all three indicators decreased. However, the unemployment rate of those with college and university education increased and the gender unemployment gap for the most educated became more pronounced.

FIGURE 5-2

Labour force participation rates in China in 2002 and 2010, by sex and income quintile

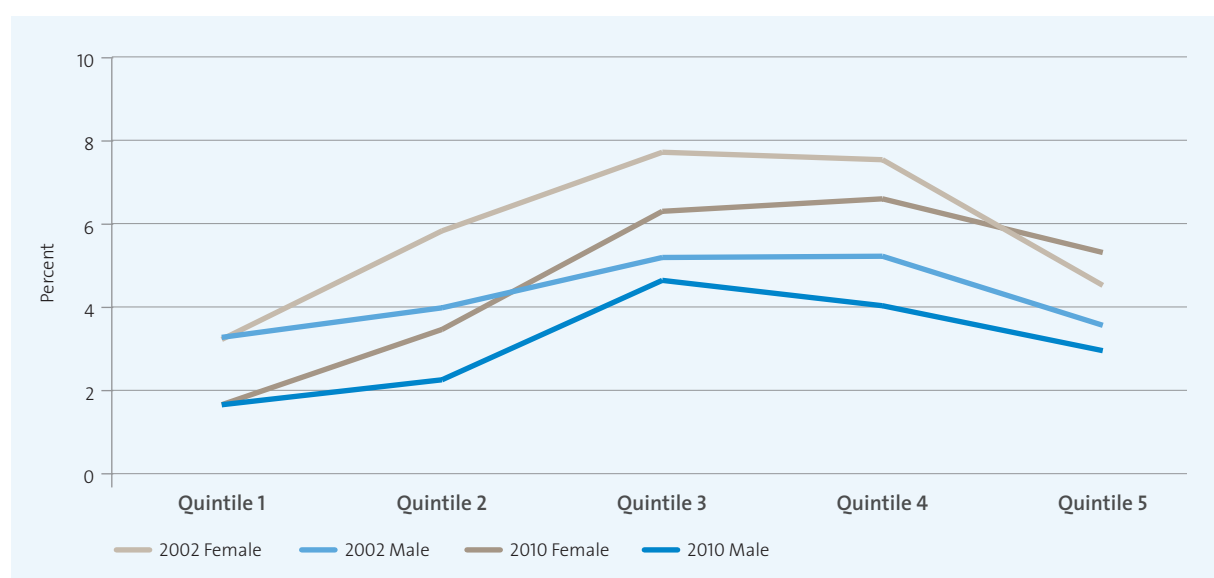


Notes: Income quintiles are defined by post-transfer household income per person.

Source: 2002 CHIP and 2010 RUMiC.

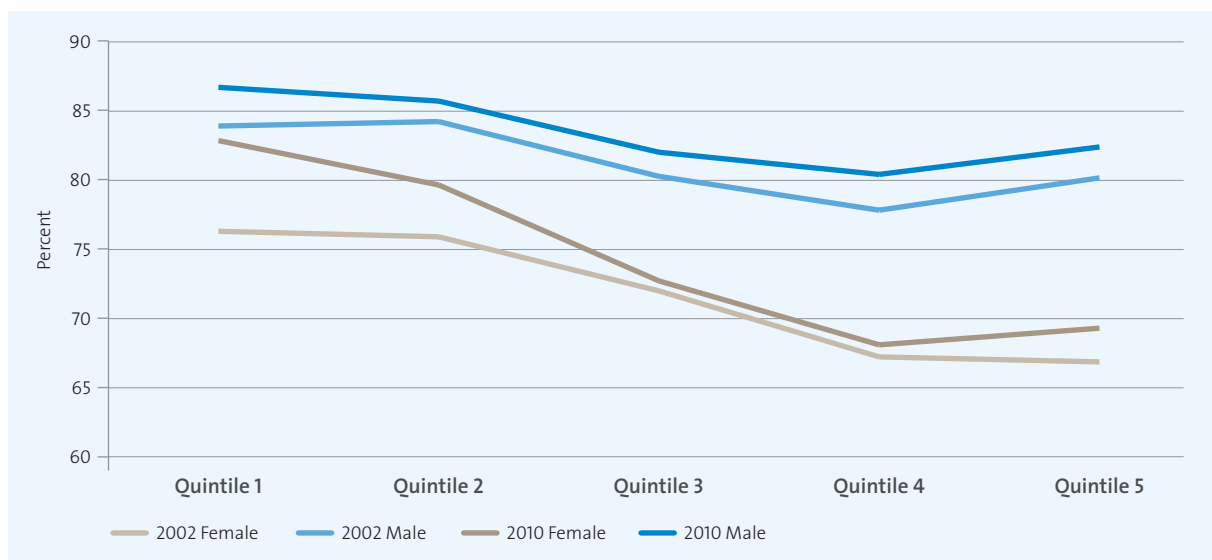
FIGURE 5-3

Unemployment rates in China in 2002 and 2010, by sex and income quintile



Source: 2002 CHIP and 2010 RUMiC.

FIGURE 5-4:
Employment rates in China in 2002 and 2010, by sex and income quintile



Source: 2002 CHIP and 2010 RUMiC.

5.2

The nature and status of employment

Table 5-4 presents the distributions of women and men in the sample by industrial sector and employment status in 2002 and 2010.⁹ As we would expect, women and men are segregated by industrial sectors,¹⁰ with men being concentrated in industry and high-end services and women in agriculture and low-end services.¹¹ Between 2002 and 2010, the proportion of people employed in agriculture sharply declined, from 35.8 to 23.2 per cent for men and from 48.5 to 34.5 per cent for women, and the gender gap decreased from -12.7 to -11.3 percentage points. The decline of men's employment in agriculture was apparently made

up entirely by a rise of employment in industry and low-end services, whereas the rise of women's non-agricultural employment was split over industry and both low- and high-end services, with the largest increase in low-end services. Thus, the gender gaps in industry and low-end services increased, while the gap in high-end services became smaller.

⁹ Here we face two data limitations. The first arises from the need to define the primary occupation of rural residents, because growing numbers of rural residents participated in both farm and off-farm activities. The 2002 CHIP and the 2010 RUMiC provide information on how many days a respondent spent on each type of activity in the survey year, while this information is unavailable in the 2008 RUMiC. Defining a rural resident as a farmer if the person spent more days working on farm than off-farm employment, we compute the statistics presented in Tables 5-4 and 5-5 only for 2002 and 2008. The second limitation is that the information on occupations (managers, professionals, clerks, etc.) is not available for rural residents, so we are unable to compute occupational distributions of the sample workers. Statistics from *China Population Census Information in 2000 and 2010* show that women's employment share as officials and managers, clerks, sales/service workers and agricultural workers increased between 2000 and 2010, while their share as professionals and non-agricultural workers declined.

¹⁰ The industrial-sector classification is defined as follows: agriculture includes farm production, forestry and fishing; industry includes mining, manufacturing, electricity, gas and water, and construction; low-end services include wholesale and retail trade, accommodation and food services and domestic and residential services; and high-end services include transportation, information and communication, financial and insurance services, real estate, leasing and business services, professional, scientific and technical activities, water conservancy, environment and public facility management, education, health, social security and social welfare, culture, sports and entertainment, public administration and activity of international organizations. We aggregate 19 industrial sectors into four groups because we are unable to define disaggregate industrial sectors consistently across the three types of workers and three cross-sections.

¹¹ To shed light on the earnings differentials across industrial sectors in China, we present in Table A2 average wages of 19 industrial sectors in 2003 and 2011 and women's employment share in these sectors in 2011 for urban workers in the formal sector. The wage information is from *China Statistical Yearbook 2012* and employment information is from *The 2011 China Wage Statistics Annual Report*. Aggregate wage information by industrial sector for the informal sector is unavailable.

TABLE 5-4

Distribution of employment in China in 2002 and 2010, by sex

	2002				2010			
	Men	Women	M-W	W-share ¹	Men	Women	M-W	W-share
By sector (%)²								
Agriculture ³	35.8	48.5	-12.7	53.9	23.2	34.5	-11.3	55.5
Industry	26.4	18.4	8.0	37.6	30.2	20.0	10.2	35.8
Low-end services	14.0	18.1	-4.1	52.8	23.1	28.8	-5.7	51.2
High-end services	23.8	14.9	8.9	35.0	23.5	16.7	6.8	37.5
No. employed	8,499	7,225		45.9	15,025	12,790		46.0
By employment status (%)								
Employers	0.70	0.27	0.43	24.7	5.2	3.5	1.7	36.4
Employees	55.2	43.6	11.6	40.4	66.4	56.6	9.8	41.8
Own-account workers in agriculture	34.3	47.6	-13.3	54.4	21.8	33.7	-11.9	56.6
Own-account workers in non-agricultural activities	9.1	7.6	1.5	41.8	5.7	4.8	0.9	41.4
Contributing family workers	0.00	0.03	-0.03	100.0	0.3	0.9	-0.6	71.5
Others	0.83	0.88	-0.05	47.7	0.54	0.48	0.1	43.0
% vulnerable employment⁴								
<i>Overall</i>	43.3	55.2	-11.9	52.2	27.8	39.4	-11.6	54.4
By residential status								
Urban <i>hukou</i> holders	4.9	4.7	0.2	43.6	5.2	5.7	-0.5	46.3
Migrant workers	65.4	67.9	-2.5	45.4	22.8	29.2	-6.4	48.3
Rural residents	61.6	78.9	-17.3	53.3	47.7	65.5	-17.8	55.6
Women's share in wage employment in non-agricultural activities (%) (16–64)				40.1				42.1
Rural women's share in wage employment in non-agricultural activities (%)	All	Married			All	Married		
	33.8	25.2			38.1	37.1		
No. employed	8,552	7,242		45.9	15,073	12,858		46.0

Notes:

1. W-share stands for women's share in total non-agricultural employment of a given category.
2. Agriculture includes agriculture, forestry and fishing; industry includes mining, manufacturing, electricity, gas and water, and construction; low-end services include wholesale and retail trade, accommodation and food services, and domestic and residential services; and high-end services include transportation, information and communication, financial and insurance services, real estate, leasing and business services, professional, scientific and technical activities, water conservancy, environment and public facility management, education, health, social security and social welfare, culture, sports and entertainment, public administration and activity of international organizations.
3. An agricultural worker is one who spent more time on agricultural activities than non-agricultural activities in a given year. The statistics of employment distribution are not computed for 2008 because the 2008 RUMiC does not provide information on time spent on agricultural production.
4. Vulnerable employment is the sum of own-account workers in agricultural and non-agricultural activities and unpaid contributing family workers.

Source: CHIP 2002 and 2010 RUMiC.

The distributions of men and women also differ by employment status as men are more likely than women to be employers, employees and own-account workers in non-agricultural activities and less likely to be own-account workers in agricultural production.¹² Both women and men have shifted from own-account workers toward employers and employees. This pattern of change is in contrast to the situation in many developing countries where a rise of women's employment has coincided with an increase in vulnerable employment (own-account workers and unpaid contributing family workers) (UNIFEM 2005). Indeed, the proportion of vulnerable employment decreased from 43.3 to 27.8 per cent for men and from 55.2 to 39.4 per cent for women between 2002 and 2010, and the gender gap slightly narrowed. Disaggregating the indicator by residential status, we find that urban *hukou* workers of both sexes had much lower rates of vulnerable employment than migrant workers and rural residents and that the decline of vulnerable employment occurred, for the most part, among migrant and rural workers. Overall, women's share in wage employment in non-agricultural activities increased from 40.1 to 42.1 per cent between 2002 and 2010. For rural residents aged between 25 and 54, the share of women in wage employment in non-agricultural activities increased from 33.8 to 38.1 per cent for all women and from 25.2 to 37.1 per cent for married women between 2002 and 2010. These statistics suggest that the participation gap in wage employment between single and married women in rural areas has closed up.

¹² Very few women and men in the sample identify themselves as unpaid contributing family workers.

Table 5-5 presents the proportion of women and men engaging in informal employment in non-agricultural activities and part-time rates in 2002 and 2010. Based on the data availability, we consider two types of informal employment: informal self-employment (own-account workers and unpaid contributing family workers) and informal wage employment (wage workers without labour contract and casual workers).¹³ For both women and men, informal wage employment was the dominant form of informality, with its share exceeding the share of informal self-employment by a large margin. Both types of informal employment declined; as a result, the share of total informal employment decreased from 57.2 to 40.8 per cent for men and 54.8 to 41.9 per cent for women between 2002 and 2010. The gender gap in informal employment was small relative to the gap in industrial-sector distribution.¹⁴

¹³ We are unable to determine whether an informal wage worker is employed in a registered or a non-registered entity to disaggregate informal wage employment by sector. From the 2010 *China Urban Labour Survey (CULS)* based on six cities, workers in informal employment account for 32.6 per cent of total non-agricultural employment in the sample, with 21.9 per cent in the informal sector and 12.5 in the formal sector (ILO 2012, Table I).

¹⁴ Statistics from the 2010 CULS show that informal employment accounted for 35.7 and 30.1 per cent of women and men in non-agricultural employment, respectively (ILO 2012, Table II). These results are in line with our finding that the informality of female urban *hukou* holders and migrant workers is higher than that of their male counterparts.

TABLE 5-5

Informal employment in total non-agricultural employment in China in 2002 and 2010, by sex

	2002				2010			
	Men	Women	M-W	W-share ¹	Men	Women	M-W	W-share
Overall								
% informal self-employment ²	12.8	13.4	-0.6	39.7	6.7	6.9	-0.2	41.6
% informal wage employment ³	44.4	41.4	3.0	36.9	34.1	34.9	-0.8	41.3
% total informal employment	57.2	54.8	2.4	37.6	40.8	41.9	-1.1	41.3
No. workers in non-agricultural employment	6,048	4,364		41.9	10,671	7,320		40.7
By residential status (%)								
<i>Urban hukou holders</i>								
% informal self-employment	4.9	4.7	0.2	43.9	5.1	5.4	-0.3	45.6
% informal wage employment	25.8	33.4	-7.6	51.1	13.5	17.4	-3.9	50.5
% total informal employment	30.7	38.1	-7.4	50.1	18.6	22.8	-4.2	49.3
No. workers in non-agricultural employment	3,212	2,594		44.7	2,811	2,227		44.2
<i>Migrants</i>								
% informal self-employment	65.0	67.7	-2.2	45.3	21.7	27.7	-6.0	48.0
% informal wage employment	26.6	26.7	-0.1	44.4	32.2	36.4	-4.2	45.0
% total informal employment	91.6	94.5	-2.9	45.1	53.8	64.1	-10.3	46.2
No. workers in non-agricultural employment	1,180	939		44.3	3,069	2,217		41.9
<i>Rural residents⁴</i>								
% informal self-employment	10.5	10.1	0.4	32.6	4.5	2.9	1.6	27.7
% informal wage employment	57.6	52.0	5.6	31.2	49.5	51.3	-1.8	38.4
% total informal employment	68.1	62.1	6.0	31.3	54.0	54.2	-0.2	37.6
No. workers in non-agricultural employment	1,656	831		33.4	4,791	2,876		37.5
<i>Urban and migrant workers</i>								
<i>Part-time rate</i>								
Work ≤ 30 hours/week	2.2	2.9	-0.7	51.1	2.7	4.1	-1.4	54.5

Work<40 hours/week	10.7	13.5	-2.8	50.4	5.9	9.3	-3.4	54.7
No. employed	4,392	3,533		44.6	5,880	5,093		46.6

Notes:

1. W-share stands for women's share in total non-agricultural employment of a given category.
2. Informal self-employment is the sum of own-account workers and unpaid contributing family workers.
3. Informal wage employment is the sum of employees without labour contracts and casual workers.
4. Rural workers in non-agricultural employment are those who spent more time on off-farm work than farm work. The statistics of employment distribution are not computed for 2008 because the 2008 RUMiC does not provide information on time spent on agricultural production.

Source: CHIP 2002 and 2010 RUMiC.

Of the three types of workers, informality was the lowest among urban *hukou* workers and the highest among rural workers. The total informal employment of both women and men declined for all three types of workers, although the patterns of change are different. For urban *hukou* workers, informal self-employment increased, while informal wage employment decreased; the opposite patterns are observed for migrant workers. The pattern of change for migrant workers may be due to the difference in sample frame between the 2002 CHIP and the 2010 RUMiC, as migrant workers in the former were selected from residential communities and migrant workers in the latter are from workplaces. From the 2008 RUMiC, informal self-employment accounted for 20.3 per cent of male migrant workers and 27.1 per cent of female migrant workers; and the respective share of informal wage employment was 42.3 and 40.0 per cent. Compared with the statistics of 2008, informal self-employment for migrant workers of both sexes remained more or less unchanged, while, like their urban *hukou* counterparts, informal wage employment of both male and female migrant workers decreased. The decline of informal wage employment among urban *hukou* and migrant workers is consistent with the finding that the number of workers with written contracts went up following the enactment of the 2008 Labour Contract Law (Gao et al. 2012). For rural workers, informal self-employment fell by a noticeable margin for both women and men; however, informal wage employment decreased noticeably from 57.6 to 49.5 per cent for men but only marginally from 52.0 to 51.3 per cent for women. If the 2008 Labour Contract Law has had any effect on rural

workers, it appears to have only benefited men and not women.

Part-time rates – another common indicator of employment quality – are presented at the bottom of Table 5-5. These are computed only for urban *hukou* workers and migrant workers because a large number of rural non-agricultural workers did not report working hours. The statistics show that a majority of women and men worked full-time, with less than 5 per cent working 30 hours per week or fewer in both periods. The gender differences in part-time rates are exceedingly small by international standards, and for both women and men the proportion of those who work less than 40 hours per week decreased between 2002 and 2010.

In sum, the quality of employment for both women and men has significantly improved: more women and men moved out of agriculture and into industry and services, and vulnerable employment, informal employment in non-agricultural activities and part-time rates all decreased during the period under investigation. In terms of gender segregation by industrial sector, the gender gap narrowed in agriculture and high-end services but became more pronounced in industry and low-end services. The change in the gender gap in vulnerable employment and informal employment is small. However, because more women than men were added to the labour force as well as to non-agricultural employment between 2002 and 2010, women's share in agricultural employment, vulnerable employment and informal employment in non-agricultural sectors increased.

5.3

Gender wage/earnings gaps

Table 5-6A presents average monthly wages/earnings, weekly working hours and gender wage/earnings gaps in 2002, 2008 and 2010. For the sake of consistency, we focus on those wage earners and self-employed non-agricultural workers who spent more than 30 hours per week on paid work. The gender wage/earnings gap is the wage/earnings difference between men and women relative to the wage/earnings of men.¹⁵ The wages and earnings are discounted by the consumer price index, with 2005 as the base year. We first compute average wages and earnings for wage earners and self-employed workers separately and next compute average earnings for the two groups of workers combined. Overall, self-employed workers of both sexes, on average, earned more than their wage-earner counterparts in all three years except for women in 2002. The earnings of both types of workers increased considerably, while the earnings of self-employed men and women grew faster than that of their wage earner counterparts. Between

2002 and 2010, the average monthly wage increased by 152 per cent for men and 121 per cent for women, whereas the average earnings of self-employed men and women went up, respectively, by 191 and 207 per cent. The gender gap in monthly wages increased from 0.078 to 0.191 between 2002 and 2010, whereas the gender gap in monthly earnings for self-employed workers declined from 0.303 to 0.263. Among both wage earners and self-employed workers, women worked almost as many hours as did men. More strikingly, the weekly working hours were longer for self-employed women than their male counterparts in all three periods. Given that women spent more time on unpaid care work than did men (Dong and An 2014), the similarity in their paid working hours with men implies that they had less time for self-care and leisure than did men. For wage earners and self-employed workers combined, the gender gaps in both monthly and hourly earnings increased: from 0.113 to 0.206 and from 0.151 to 0.189, respectively.

TABLE 5-6A

Gender wage gap (GWG) in China in 2002, 2008 and 2010, by sex, overall and by residential status

	2002			2008			2010		
	Men	Women	GWG	Men	Women	GWG	Men	Women	GWG
Overall									
Wage workers									
Monthly wages (yuan)	748	689	0.078	1,572	1,266	0.194	1,886	1,525	0.191
Ratio to 2002				2.10	1.83		2.52	2.21	
Weekly working hours	44.6	47.6		52.8	51.6		51.9	50.2	
Hourly wage	4.2	3.7	0.115	8.2	6.7	0.177	9.8	8.2	0.166
No. wage workers	4,409	3,129		9,010	6,026		8,395	5,668	

¹⁵ We are unable to derive the earnings of individual workers from family farms because the survey only reports total revenues

and expenditures of farm operations.

Self-employed workers									
Monthly earnings (yuan)	929	648	0.303	2,228	1,697	0.238	2,700	1,989	0.263
Ratio to 2002				2.40	2.62		2.91	3.07	
Weekly working hours	58.1	65.3		61.6	65.0		63.2	66.6	
Earnings per hour	4.2	2.5	0.397	9.6	7.1	0.266	11.7	7.9	0.323
No. self-employed workers	1,080	815		1,582	851		1,638	1,123	
Wage and self-employed workers									
Monthly earnings (yuan)	771	684	0.113	1,654	1,308	0.209	1,992	1,580	0.206
Ratio to 2002				2.15	1.91		2.58	2.31	
Weekly working hours	46.4	49.9		53.9	52.9		53.3	52.2	
Earnings per hour	4.2	3.6	0.151	8.3	6.7	0.192	10.1	8.2	0.189
No. wage and self-employed workers	5,489	3,944		10,592	6,877		10,033	6,791	
By residential status									
<i>Urban hukou holders</i>									
Monthly earnings (yuan)	1208	988	0.182	2,193	1,659	0.243	2,618	1,981	0.243
Ratio to 2002				1.82	1.68		2.17	2.01	
Weekly working hours	49.7	49.1		46.1	45.0		46.2	45.4	
Earnings per hour	6.5	5.4	0.160	12.5	9.6	0.231	14.8	11.4	0.231
No. wage and self-employed workers	3,041	2,415		2,881	2,198		2,529	1,976	
<i>Migrants</i>									
Monthly earnings (yuan)	990	686	0.307	1,476	1,175	0.204	1,949	1,629	0.164
Ratio to 2002				1.49	1.71		1.96	2.37	
Weekly working hours	70.7	71.4		63.9	61.9		64.1	64.0	
Earnings per hour	3.9	2.6	0.337			0.177			0.169
No. wage and self-employed workers	1,131	909		3,077	1,972		2,947	2,081	
<i>Rural residents</i>									
Monthly earnings (yuan)	563	464	0.176	1,356	1,054	0.223	1,568	1,208	0.230
Ratio to 2002				2.41	2.27		2.79	2.60	

Weekly working hours	42.6	46.9		56.8	57.4		55.9	55.3	
Earnings per hour	3.276	2.4	0.268	6.2	4.8	0.228	7.2	5.6	0.222
No. wage and self-employed workers	1,317	620		4,634	2,707		4,557	2,734	

Notes: Statistics in this table are computed for both wage earners and self-employed workers who spent more than 30 hours per week on paid work. Earnings are measured at the 2005 constant price. The self-employed include both employers of individual business and own-account workers in the non-agricultural sector.

Source: 2002 CHIP and 2008 and 2010 RUMiC.

The second part of Table 5-6A presents average earnings and gender earnings gaps for workers differentiated by residential status. Here, we only consider average earnings of wage earners and self-employed workers combined to streamline the presentation. Comparing average monthly earnings of the three types of workers, we note that there is a salient earnings hierarchy of urban *hukou* workers at the top, rural workers at the bottom and migrant workers in the middle. The earnings differentials between urban *hukou* workers and rural workers decreased as the earnings growth of female and male rural workers outpaced that of their urban *hukou* counterparts. Within each group, the average earnings grew faster for men than women among both urban *hukou* workers and rural workers, while the opposite gender pattern is observed among migrant workers. Thus, the gender earnings gaps in both monthly and hourly earnings increased for urban *hukou* and rural workers but decreased for migrant workers.¹⁶

Table 5-6B presents monthly earnings of women and men and gender earnings gaps by other individual characteristics. The statistics show that the gender earnings gap increased for all age groups, except for the oldest and the youngest groups, all educational categories and all groups differentiated by marital status and the presence of young children. Comparing workers by demographic characteristics, we find that the gender earnings gap was larger for married workers than unmarried workers and for workers with young children than those without. Although we do not obtain evidence that family responsibilities impeded women's employment during the period of investigation, family responsibilities do appear to have accentuated the gender earnings gap. With respect to employment status, the gender earnings gap increases as we move from formal wage workers, informal wage workers, employers to own-account workers.

¹⁶ From the CHIPS, Li and Song (2011) find that the gender wage gap for urban *hukou* workers increased sharply from 0.18 in 2002 to 0.26 in 2007. Their analysis indicates that urban female workers confront more competition from migrant workers than their male counterparts.

TABLE 5-6B

Gender wage gap (GWG) in monthly earnings in China in 2002, 2008 and 2010, by age, education, family structure and employment status

	2002			2008			2010		
	Men	Women	GWG	Men	Women	GWG	Men	Women	GWG
By age									
16–24	523	457	0.13	1179	1056	0.10	1448	1269	0.12
25–34	667	685	-0.03	1709	1428	0.16	2026	1659	0.18
35–44	842	820	0.03	1856	1391	0.25	2229	1743	0.22
45–54	957	889	0.07	1742	1338	0.23	2149	1549	0.28
55–64	873	655	0.25	1485	1087	0.27	1681	1388	0.17
By education									
Elementary or lower	551	516	0.06	1232	1020	0.17	1625	1161	0.29
Junior middle school	628	523	0.17	1381	1116	0.19	1629	1314	0.19
Senior middle school	848	803	0.05	1720	1273	0.26	2029	1608	0.21
College and university	1421	1212	0.15	2519	1996	0.21	2989	2338	0.22
By marital status (25–54)									
Married	843	787	0.07	1800	1394	0.23	2205	1672	0.24
Unmarried	598	797	-0.33	1591	1420	0.11	1804	1643	0.09
By presence of children 0–6									
Age 25–54									
Children	687	623	0.09	1745	1400	0.20	2170	1629	0.25
No children	796	783	0.02	1718	1345	0.22	2064	1622	0.21
Age 25–35									
Children	703	672	0.04	1771	1472	0.17	2188	1744	0.20
No children	689	746	-0.08	1699	1397	0.18	1995	1741	0.13
By employment status									
Formal wage earners	937	827	0.12	1872	1482	0.21	2175	1781	0.18
Informal wage earners	585	542	0.07	1237	1026	0.17	1491	1160	0.22
Employers	1127	560	0.50	3748	2700	0.28	3197	2480	0.22
Own-account workers	914	654	0.28	1616	1429	0.12	2199	1579	0.28

No. wage and self-employed workers	1,317	620		4,634	2,707		4,557	2,734	
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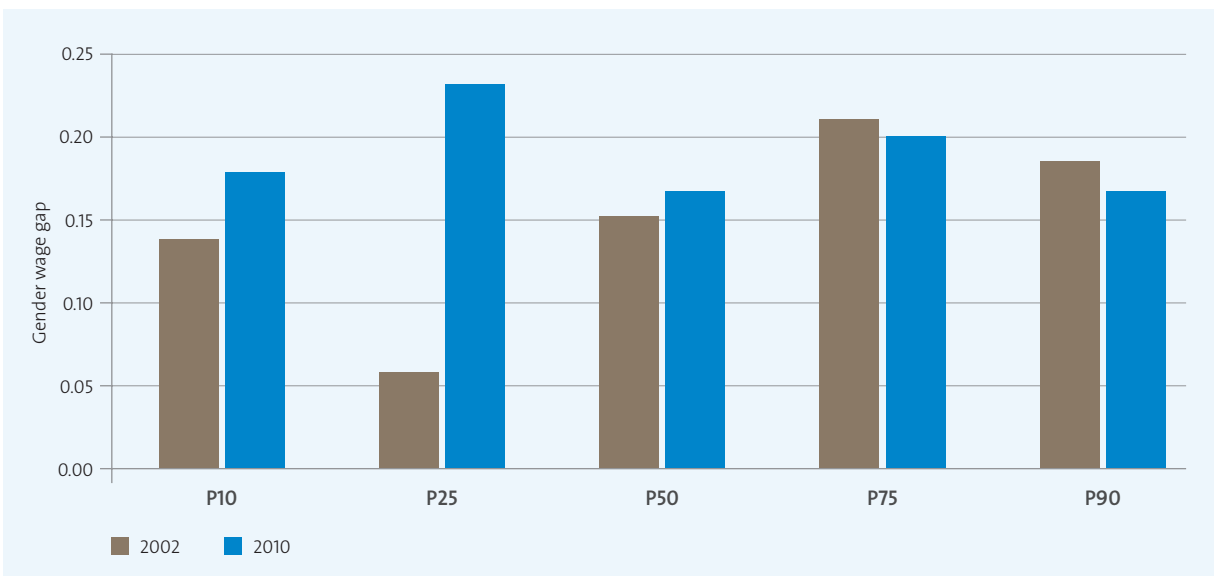
Notes: Statistics in this table are computed for both wage earners and self-employed workers who spent more than 30 hours per week on paid work in the non-agricultural sector. Earnings are measured at the 2005 constant price.

Source: 2002 CHIP and 2008 and 2010 RUMIC.

Figure 5-5 presents gender wage gaps by wage percentile for 2002 and 2010. The statistics show that the gender wage gap increased for the lower percentiles and decreased for the upper percentiles. While Figure 5-4 indicates that the employment of women at lower quintiles grew faster than that of their male counterpart, their wage growth apparently lagged behind that of their male counterparts. This may be because

women with lower earnings are less able to out-source unpaid care work; family responsibilities have greater adverse effect on productivity and earnings for women at lower percentiles. Moreover, women at lower percentiles are more likely to work in the informal sector than the formal sector and therefore they are more vulnerable to gender discrimination.

FIGURE 5-5
Gender wage gaps in China in 2002 and 2010, by wage percentile



Notes: p10 stands for the 10th percentile and p90 for the 90th percentile.

Source: 2002 CHIP and 2010 RUMIC.

5.4

Working poor and low pay rates

Tables 5-7A and 5-7B present working poor rates (WPRs) for all workers and by gender for the sample as a whole and by residential status for 2002, 2008 and 2010. The WPR is the proportion of employed individuals who live in households with income per person below the PPP\$1.25 or the PPP\$2 a day poverty threshold.¹⁷ We consider all employed individuals – both agricultural and non-agricultural workers. Household income per person is derived by dividing total disposable household income by the number of household members living at home.¹⁸ To assess the effectiveness of China's new social security programme, we compute WPRs for both pre- and post-transfer income following the approach adopted by Gornick and Jantti (2008). For urban *hukou* holders, pre-transfer income is equal to the sum of wages and bonuses, business income and property incomes minus social security expenditure and taxes, and post-transfer income is pre-transfer income plus transfer income. In the absence of income tax information, we treat the reported income as the after-tax income based on the fact that personal income taxes are deducted from the pay check by the employer in China. Transfer income includes pension income, living allowance for laid-off workers, allowance for minimum living standards (*dibao*) and living hardship subsidies from work units. For migrant workers, remittances to family members and relatives in rural areas are deducted from pre-transfer incomes.¹⁹ For rural residents, pre-transfer income is the sum of net income from agricultural and non-agricultural family operation,

wage income and property income, and post-transfer income is pre-transfer income plus other household income. Due to the data limitation, other household income is used as a proxy for transfer income, which includes income from collective welfare funds and government at various levels, allowance for minimum living standards (*dibao*), disaster relief payment, pensions or subsidies for the elderly, remittances from non-permanent family members and gift income from relatives and friends.²⁰ While the 2002 CHIP provides information on both total amount of other household income and its main components for rural households, the 2008 and 2010 RUMiC have information only on total amount of household income from other sources. Thus, for the sake of consistency, remittance incomes and gift income from relatives for rural households are included in the total amount of other household income – the proxy for transfer income.

As Table 5-7A indicates, overall, pre- and post-transfer income per person increased, respectively, by 95 and 103 per cent between 2002 and 2010. Transfer payments measured by the difference between the pre- and the post-transfer income accounted for about 16 per cent of the pre-transfer income in 2002 and the share rose to 20 per cent in 2010. The WPRs measured both by pre- and post-transfer income decreased, respectively, from 13.4 and 12.0 per cent in 2002 to 5.8 and 3.1 per cent in 2010 for the \$1.25 a day threshold and from 33.1 and 30.4 per cent to 14.1 and 10.2 per cent for the \$2 a day threshold. The impact of social transfers on poverty has increased but it is still very limited. For instance, the difference in WPRs between post- and pre-transfer income for the \$1.25 a day threshold were only 1.4 percentage point in 2002 and went up to 2.7 percentage points in 2010.

17 PPP = purchasing power parity. The annual value of the \$1.25 or the \$2 a day poverty threshold in *yuan* is derived using the formula: $\$1.25 (\$2) \times 3.448 \times 365 \times \text{CPI}$ (consumer price index) in a given year, with 2005 as the base year. To streamline the exposition, we only consider absolute income thresholds.

18 For 2002, both employment status and household income are for the same period, whereas for 2008 and 2010, employment status is for the current period but household income is lagged by one year.

19 While remittances to family members and relatives in rural areas are deducted from disposable income for migrant workers, household income per person for migrant workers can still be overstated if part of the income net of remittance is spent on supporting family members they left behind in rural areas.

20 According to the Rural Household Survey conducted by the National Bureau of Statistics (NBS), remittance and gift income account for 17 per cent of the total household income from other sources for rural households in eight provinces in 2002. From the 2009–2011 NBS Poverty Monitoring Survey, the share of remittance and gift income in total household income from other sources is 20–21 per cent for rural households in 21 central and western provinces (Rural Survey Department of NBS 2010, 2011 and 2012).

TABLE 5-7A

Working poor rates of all workers in China in 2002, 2008 and 2010, overall and by residential status

	2002		2008		2010	
	Pre-transfer income	Post-transfer income	Pre-transfer income	Post-transfer income	Pre-transfer income	Post-transfer income
Overall						
Household income per person (yuan/year)	4,429	5,129	7,376	8,804	8,642	10,437
Working poor rate (%)						
At \$1.25 PPP poverty line	13.37	11.96	6.13	4.57	5.81	3.13
At \$2.00 PPP poverty line	33.06	30.36	17.13	14.48	14.06	10.16
No. workers	16,052	16,052	28,262	28,262	26,192	26,192
By sector						
<i>Urban hukou holders</i>						
Household income per person (yuan/year)	6,167	8,225	11,382	15,035	12,253	16,475
Working poor rate (%)						
At \$1.25 PPP poverty line	3.11	0.47	2.77	0.72	4.57	0.41
At \$2.00 PPP poverty line	9.04	2.79	5.08	1.31	6.18	1.07
No. workers	6,020	6,020	5,667	5,667	4,679	4,679
<i>Migrants</i>						
Household income per person (yuan/year)	7,103	7,103	11,272	11,379	14,405	14,513
Working poor rate (%)						
At \$1.25 PPP poverty line	1.66	1.66	1.57	1.51	0.4	0.4
At \$2.00 PPP poverty line	6.62	6.62	2.45	2.4	0.76	0.76
No. workers	2,234	2,234	5,426	5,426	5,542	5,542
<i>Rural residents</i>						
Household income per person (yuan/year)	3,204	3,277	3,753	3,912	4,547	4,859
Working poor rate (%)						
At \$1.25 PPP poverty line	20.13	19.2	9.35	7.82	8.01	5.86
At \$2.00 PPP poverty line	48.77	47.6	28.34	25.94	23.17	19.3
No. workers	7,798	7,798	17,169	17,169	15,971	15,971

Notes: The working poor rate is the proportion of employed individuals who live in households with income per person below the \$1.25 PPP or the \$2 PPP a day poverty threshold. Pre-transfer income is the sum of wages and bonuses, business income (including income from household farm) and property income minus social security expenditure and taxes, and post-transfer income is pre-transfer income plus transfer income. Transfer income includes pension income, living allowance for laid-off workers, allowance for minimum living standards (*dibao*), and living hardship subsidies from work units.

Source: 2002 CHIP and 2008 and 2010 RUMIC.

Of the three types of workers differentiated by residential status, the income per person of rural residents is the lowest and so is its rate of growth. Despite the fact that the earnings from non-agricultural activities for rural residents grew faster than the earnings of the two types of urban workers during the period of investigation, as Table 5-6A shows, household incomes per person grew more slowly for the former than for the latter, partly because rural households have higher dependency ratios than urban households. Compared to urban *hukou* holders, pre-transfer income per person for migrant workers was, surprisingly, higher in 2002 and 2010 and their WPR was lower, although the average earnings of migrant workers were lower according to Table 5-6A. This discrepancy is attributable to the fact that migrant workers are younger and more likely to be single than urban *hukou* holders and that some migrants have children that were left behind in the native village and were uncaptured in the survey.²¹ Comparatively, the WPRs were much higher for rural residents than urban *hukou* holders and migrant workers, although the gap between rural residents and other types of workers substantially narrowed over time. For instance, for the \$1.25 a day threshold,

the gap in the post-transfer WPR between rural and urban *hukou* workers fell from 17 percentage points in 2002 to 3.4 percentage points in 2010. Undoubtedly, workers with different *hukou* status did not benefit equally from transfer payments. For instance, in 2010, transfer payments lowered the WPR for the \$1.25 a day threshold by 4 percentage points for urban *hukou* workers but only 2 percentage points for rural workers, whereas the pre- and post-transfer WPRs for migrant workers were virtually identical. Given that remittance and gift income accounted for one fifth of total transfer incomes (household income from other sources) for rural households (see note 20), the actual poverty alleviating effect of social transfer payment for rural workers would be even smaller. Thus, the provision of adequate social security for migrant and rural workers remains a major challenge to Chinese policy makers.²²

Table 5-7B and Figures 5-6A and 5-6B present WPRs for women and men separately. For the sample as a whole, the gender differences in both pre- and post-transfer incomes and the related WPRs are negligibly small due to the low incidence of female-headed households among the working-age population in China.

21 Using data from the 2005 CULS, Park and Wang (2010) also find that the poverty rate of migrant workers is lower than that of urban *hukou* workers.

22 Using data supplemented by the Rural and Urban Household Surveys of NBS, Gao et al. (2013) estimate that social transfer incomes accounted for 27 per cent of household income in 2002 and 20 per cent in 2007 for urban *hukou* holders; in contrast, the respective percentage was 1 and 2 per cent for rural residents.

TABLE 5-7B

Working poor rates of men and women in China in 2002, 2008 and 2010, overall and by residential status

	2002				2008				2010			
	Pre-transfer income		Post-transfer income		Pre-transfer income		Post-transfer income		Pre-transfer income		Post-transfer income	
	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men	Women
Overall												
Household income per person (yuan/year)	4,392	4,468	5,064	5,198	7,487	7,257	8,853	8,752	8,799	8,490	10,506	10,380
Working poor rate (%)												
At \$1.25 PPP poverty line (PL)	13.47	13.25	12.11	11.79	5.99	6.30	4.44	4.72	5.54	6.14	2.96	3.34
At \$2.00 PPP PL	33.26	32.83	30.44	30.27	16.60	17.78	14.01	15.05	13.45	14.78	9.67	10.73
By residential status												
<i>Urban hukou holders</i>												
Household income per person (yuan/year)	6,167	6,167	8,210	8,239	11,629	11,139	15,242	14,831	12,431	12,075	16,521	16,429
Working poor rate (%)												
At \$1.25 PPP PL	3.02	3.22	0.48	0.44	2.72	2.84	0.63	0.84	4.47	4.70	0.43	0.38
At \$2.00 PPP PL	9.65	8.28	3.11	2.40	4.90	5.32	1.17	1.48	5.95	6.45	1.05	1.09
<i>Migrants</i>												
Household income per person (yuan/year)	7,130	7,071	7,130	7,071	11,560	10,897	11,669	10,733	14,925	13,777	15,028	13,890
Working poor rate (%)												
At \$1.25 PPP PL	1.69	1.61	1.69	1.61	1.52	1.64	1.42	1.64	0.44	0.34	0.44	0.34
At \$2.00 PPP PL	7.08	6.05	7.08	6.05	2.56	2.30	2.46	2.30	0.81	0.68	0.81	0.68
<i>Rural residents</i>												
Household income per person (yuan/year)	3,182	3,226	3,255	3,301	3,782	3,722	3,939	3,882	4,584	4,513	4,902	4,816

Working poor rate (%)												
At \$1.25 PPP PL	20.65	19.55	19.75	18.57	9.32	9.39	7.83	7.80	7.68	8.37	5.64	6.10
At \$2.00 PPP PL	49.41	48.06	48.26	46.86	28.06	28.66	25.74	26.16	22.67	23.72	18.86	19.80

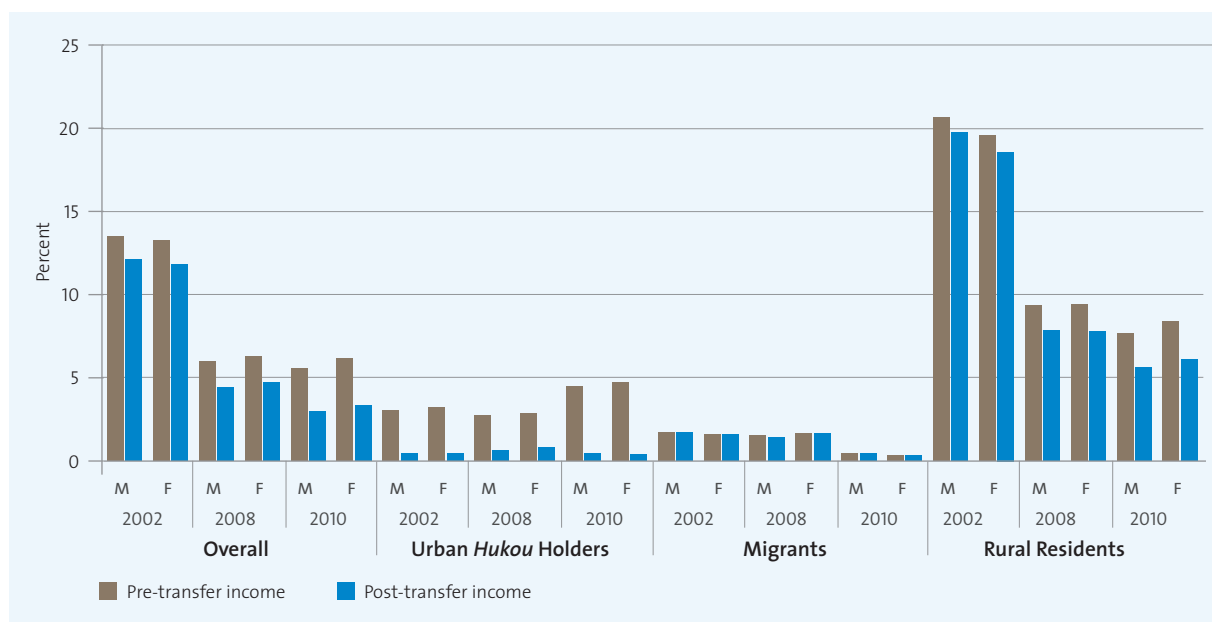
Notes: For the definition of pre- and post-transfer income, see notes to Table 5-7A.

Source: 2002 CHIP and 2008 and 2010 RUMiC.

As Figures 5-6A and 5-6B depict, the WPRs for both women and men steadily declined over the period under investigation. Specifically, based on the post-transfer income, the WPRs by the \$1.25 and \$2 a day thresholds for men fell, respectively, from 12.1 and 30.4

per cent in 2002 to 4.4 and 14.0 per cent in 2008 and to 3.0 and 9.7 per cent in 2010, whereas the WPRs for women decreased from 11.8 and 30.3 per cent in 2002 to 4.7 and 15.0 per cent in 2008 and to 3.4 and 10.7 per cent in 2010.²³

FIGURE 5-6A
Working poor rates at the \$1.25 PPP a day poverty threshold



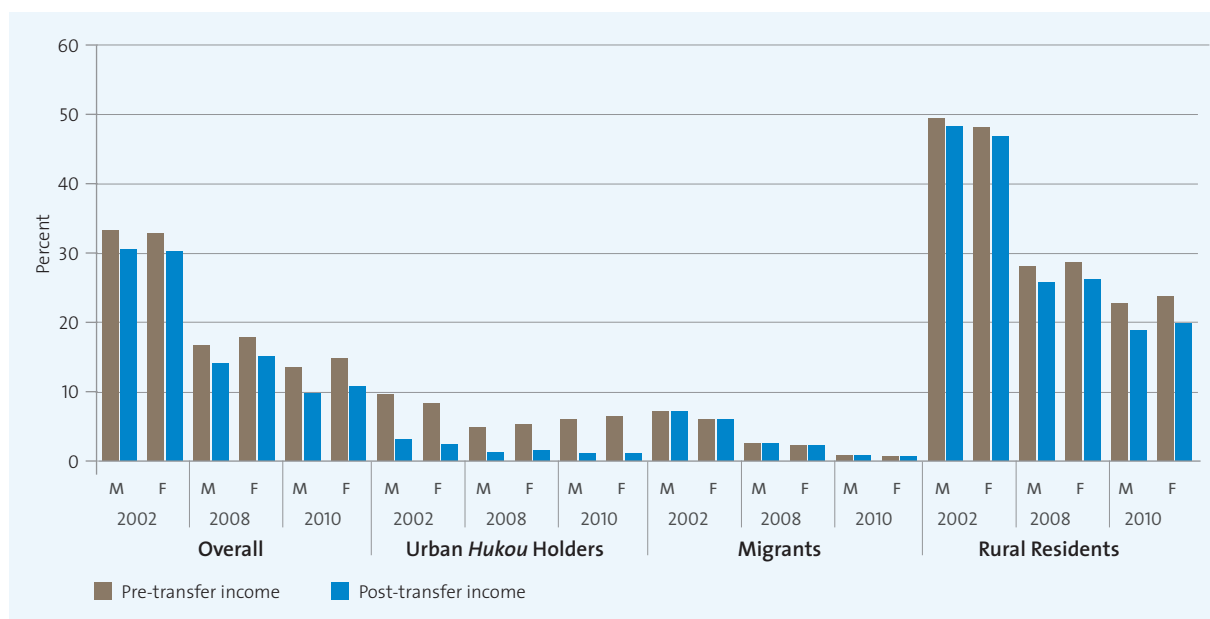
Notes: PPP stands for purchasing power parity.

Source: 2002 CHIP and 2008 and 2010 RUMiC.

²³ Chen and Ravallion (2010) estimate that the headcount rates (HCRs) for the \$1.25 a day and \$2 a day thresholds for China as a whole in 2002 were 28.6 and 51.2 per cent, respectively. Compared to these estimates, the WPRs from our analysis are lower. The discrepancy may be attributable to two reasons.

First, because low-income households typically have a high dependency ratio, there are more poor people relative to the whole population than poor workers relative to the population of workers. Second, our sample does not include the three poorest provinces in China.

FIGURE 5-6B
Working poor rates at the \$2 PPP a day poverty threshold



Notes: PPP stands for purchasing power parity.
Source: 2002 CHIP and 2008 and 2010 RUMiC.

Table 5-7C presents WPRs in 2002 and 2010 by sex and employment status. WPRs in 2008 are not reported because the 2008 RUMiC does not provide information needed to determine whether the primary occupation of a rural resident is an agricultural worker or a non-agricultural worker. Consistent with the WPRs by residential status presented in Tables 5-9A and 5-9B, the WPR was the highest for own-account workers in agriculture, and the decline of WPR for this group of workers was also the most pronounced. Compared to formal wage workers, employers and own-account workers in non-agricultural sectors, informal wage workers had higher WPRs and experienced a larger decrease of poverty. The WPRs of formal wage workers, employers and own-account non-agricultural workers were similar. Interestingly, for own-account

agricultural workers and informal wage workers – the poorest groups – the WPR was higher for men than for women by a large margin in 2002 (for example, 31.4 versus 23.4 per cent for the former and 12.6 versus 8.2 per cent for the latter based on pre-transfer income by the \$1.25 a day threshold), while these gender WPR gaps virtually disappeared in 2010. Given the social norm of ‘men marry down and women marry up’, the sharp decline of men’s WPR relative to women’s among the two poorest groups could be credited to the rise of poor women’s participation in higher-paying non-agricultural employment in rural areas. Thus, the growth of rural women’s off-farm employment played a pivotal role in the dramatic decline in poverty since China’s accession to the WTO.

TABLE 5-7C

Working poor rates of men and women in China in 2002 and 2010, by employment status

	2002						2010					
	Pre-transfer income			Post-transfer income			Pre-transfer income			Post-transfer income		
	Men	Women	Total	Men	Women	Total	Men	Women	Total	Men	Women	Total
At \$1.25 PPP poverty line												
Formal wage earners	6.6	3.7	5.5	5.5	2.6	4.4	4.0	4.0	4.0	1.6	1.1	1.4
Informal wage earners	12.6	8.2	11.0	11.1	6.0	9.2	5.5	5.6	5.6	3.3	3.4	3.3
Employers	6.3	6.4	6.3	6.3	6.4	6.3	3.2	3.8	3.5	2.8	2.7	2.7
Own account non-agriculture	4.6	3.9	4.3	3.7	3.2	3.5	4.5	3.7	4.2	2.2	1.1	1.7
Own account agriculture	31.4	23.4	26.2	30.0	22.1	25.0	8.6	9.1	8.9	6.0	6.5	6.3
At \$2.00 PPP poverty line												
Formal wage earners	19.8	12.3	16.9	16.6	8.8	13.6	8.9	7.5	8.3	5.5	3.7	4.8
Informal wage earners	36.4	23.2	31.6	33.0	18.9	27.9	14.2	13.6	14.0	10.4	10.1	10.3
Employers	16.1	17.8	16.5	14.7	13.4	14.4	9.4	10.0	9.6	8.0	7.8	7.9
Own account non-agriculture	14.8	11.0	13.3	12.9	9.6	11.5	9.7	6.1	8.2	7.6	3.4	5.9
Own account agriculture	62.0	54.6	57.2	60.9	53.4	56.1	24.4	25.9	25.3	20.2	21.7	21.1

Notes: For the definition of pre- and post-transfer income, see notes to Table 5-7A. Own-account workers in agriculture are those who spent more time on farm work than off-farm work. Working poor rates in 2008 are not presented because the 2008 RUMiC does not provide information on time spent on agricultural production.

Source: 2002 CHIP and 2010 RUMiC.

Table 5-8 presents low pay rates (LPRs) for the sample as a whole and by individual characteristics in 2002 and 2010. The LPR is the proportion of employees with wages less than two thirds of the median monthly wage for full-time workers in a sample province over total number of employees.²⁴ The benchmark for full-time employees is 40 hours per week. For rural

workers, we only consider those employees who do not participate in household farming. The LPR statistics are calculated only for 2002 and 2010 because the 2008 RUMiC does not provide information on whether or not a rural worker who participated in off-farm employment also worked on farm.

²⁴ The LPR is defined based on the median wage of a given province rather than that of all sample provinces combined to control for regional disparities. The full-time median wages by province in 2002 and 2010 are presented in Figure A1 (see Appendix).

TABLE 5-8
Low pay rates in China in 2002 and 2010, by sex

	2002			2010		
	Men	Women	W-M	Men	Women	W-M
Overall (%)	32.0	38.0	6.0	11.5	24.5	12.9
By residential status (%)						
Urban <i>hukou</i> holders	4.8	10.5	5.7	9.1	18.0	8.9
Migrants	11.2	26.3	15.1	10.7	23.5	12.8
Rural residents	48.3	54.5	6.2	13.4	30.2	16.8
By education (%)						
Elementary or lower	45.1	56.9	11.7	18.0	38.3	20.3
Junior middle school	42.1	47.0	4.9	14.6	30.0	15.4
Senior middle school	22.4	25.7	3.4	10.6	24.2	13.6
College and university	8.7	5.9	-2.8	4.0	8.3	4.3
By age						
16–24	52.2	53.0	0.8	16.4	26.7	10.3
25–34	38.8	36.6	-2.2	9.1	18.8	9.7
35–44	12.6	18.1	5.6	8.3	24.1	15.7
45–54	9.8	21.2	11.3	11.6	31.7	20.0
55–64	23.1	19.6	-3.6	21.3	46.1	24.8
By marital status (25–54)						
Married	24.3	33.2	8.9	9.3	25.1	15.8
Unmarried	23.7	32.8	9.1	10.6	16.8	6.1
By presence of children						
<i>Age 25–54</i>						
Children	40.8	40.2	-0.6	8.5	23.1	14.5
No children	26.5	31.1	4.6	9.9	24.2	14.3
<i>Age 25–35</i>						
Children	33.1	26.1	-7.0	7.4	19.3	11.9
No children	32.0	29.7	-2.4	8.7	14.8	6.1

By informality						
Formal wage workers	21.3	27.9	6.5	7.7	17.3	9.6
Informal wage workers	41.9	47.3	5.4	17.0	34.3	17.4
No. employees	3,925	3,105		6,867	4,890	

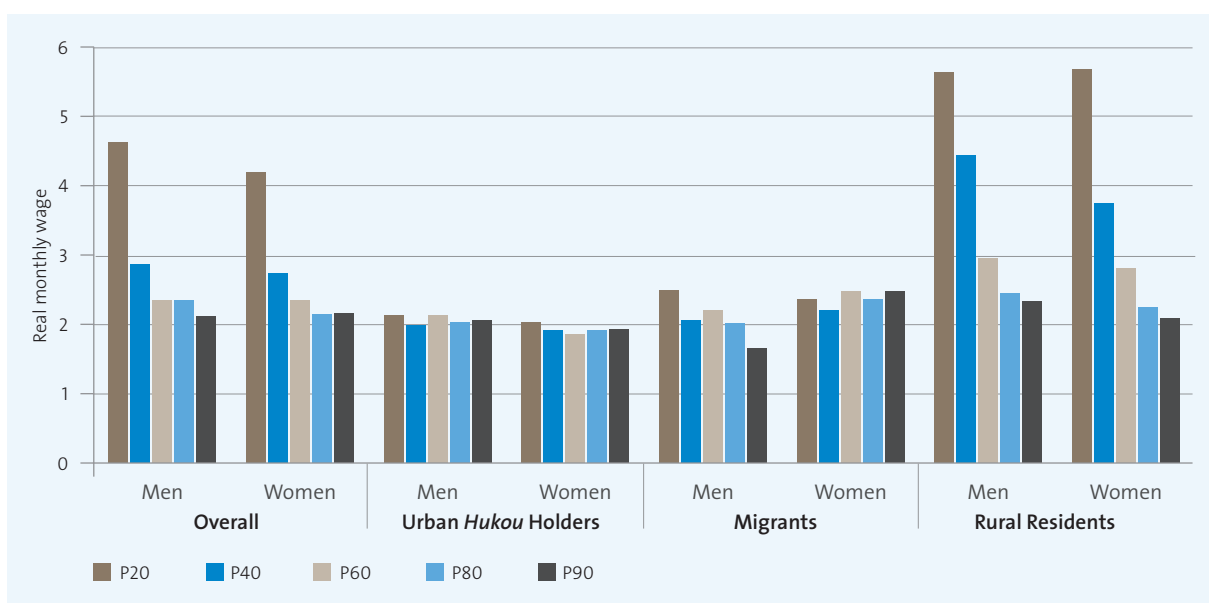
Notes: Low pay rate is the percentage of employees with pays less than two thirds of full-time median wage over total number of employees. The benchmark for full-time employees is 40 hours per week or higher. For rural workers, we only consider those who do not participate in household farming. The statistics in this table are calculated only for 2002 and 2010 because the 2008 RUMiC does not provide information for determining whether a rural worker also works on a household farm or not.

Source: 2002 CHIP and 2010 RUMiC.

Unlike the WPR, which defines the working poor by a fixed-income threshold, the LPR measures the adequacy of wages relative to the wage distribution.²⁵ Figure 5-7 presents real wage growth by percentiles between 2002 and 2010. It shows that, for the sample as a whole, the real monthly wages of both female and male workers in all percentiles went up substantially between 2002 and 2010, and the rate of growth decreased as we move from the lowest to the highest

percentile. All three types of workers experienced substantial wage increases, while the largest wage increase and the most dramatic across-quintile variations are observed among rural workers. The sharp increase of real wages at lower percentiles, together with the dramatic decline in WPRs among rural residents, is a testimony of China's remarkable success in creating productive employment for rural surplus labour and reducing rural poverty.

FIGURE 5-7
The growth of real monthly wage in China in 2002 and 2010, by sex and percentile



Notes: Wages are measured in the 2005 constant price. P20 stands for the 20th percentile and p90 for the 90th percentile.

Source: 2002 CHIP and 2010 RUMiC.

²⁵ See Howell and Diallo (2008) for the definition and interpretation of the LPR.

We now take a look at LPRs presented in Table 5-8. For the sample as a whole, while men's LPR was consistently lower than that of women, the LPR decreased for both sexes between 2002 and 2010 as a result of a substantial increase of wages at lower relative to higher quintiles. Numerically, men's LPR fell by 20 percentage points from 32 to 11.5 per cent; in contrast, women's LPR fell by 13 percentage points from 38.0 to 24.5 per cent. However, the economic expansion during the period of investigation lifted more male workers than female workers out of low-pay jobs; as a result, the gender LPR gap increased from 6 to 12.9 percentage points. With respect to the patterns of change among the three types of workers, the LPRs for migrant and rural workers of both sexes declined, whereas the LPRs of male and female urban *hukou* workers rose. The rise of LPRs for urban *hukou* workers is not surprising, given that older and less-educated urban workers confronted fierce competition from young migrant workers in the labour market. Although the gender LPR gap exists for all three types of workers, the size of the gender gap decreased among migrant workers but increased among urban *hukou* and rural workers.

With respect to other individual characteristics, as we would expect, low-pay workers are concentrated among less educated women and men. The LPRs decreased for both women and men with senior high school education or lower and for men with college education, while the LPR for women with college education increased. For all educational classes, the gender LPR gap increased between 2002 and 2010. With respect to age groups, in 2002, the LPRs were

higher among younger workers (aged between 16 and 34) for both women and men. Between 2002 and 2010, men's LPRs fell for all age groups except for those aged between 45 and 54 years. In contrast, women's LPRs declined among young workers (aged between 16 and 34) and increased among middle-aged and older workers. The LPR of married women was higher than that of married men. While the LPRs of married workers of both sexes decreased, the gender gap increased from 8.9 percentage points in 2002 to 14.5 in 2010. Comparing women aged between 25 and 35, we note that the LPR of women with no young children decreased by 14.9 percentage points, whereas the LPR of women with young children only fell by 6.8 percentage points. In contrast, the LPRs decreased more or less by the same amount for men in the age group between 25 and 35 with and without young children.²⁶ The presence of young children appears to have prevented women from benefiting equally with men from the post-WTO accession economic boom. Looking at workers differentiated by informality of employment, we find that the LPRs were lower among formal wage earners than informal wage earners. For both types of workers, however, women's LPRs were higher than men's, and the gender gap increased more for informal wage workers than formal wage workers. Given that informality is defined by whether or not a worker has a written labour contract, labour contracts seem to have played a positive role in containing gender wage discrimination.

²⁶ The result that men aged between 25 and 35 have higher LPRs than women in the same age group in 2002 is puzzling. This may be due to the small sample size.

6.

CONCLUSIONS

China's economy has undergone radical change since 1978. Accession to the WTO in 2001 pushed the reform process further and had a direct impact on Chinese workers. The rise in manufactured exports following WTO succession increased the demand for less-skilled labour, the majority of which was supplied by rural areas. At the same time, greater integration with the global economy exposed previously protected industrial sectors and land-intensive agricultural production to greater international competition, exacerbating employment insecurity and income inequalities.

While the Government has facilitated and encouraged this unleashing of the market, it has also sought to constrain deleterious social effects. Since the early 2000s, a series of policy measures have been introduced to strengthen labour market regulations, reduce inequalities and improve social security. Extensive efforts have been made to ensure that rural populations, especially those from poorer regions, enjoy the benefits of the rapid growth. However, new challenges that women face in the emerging market economy have not received adequate attention from Chinese policy makers.

To assess the changes in the decade since China's accession to the WTO, we have used data on households from seven provinces from the 2002 CHIP and the 2008 and 2010 RUMiC. As discussed, the two surveys have the advantage of enabling us to look at three types of individuals – urban *hukou* holders, migrants and rural residents – who have had markedly different labour market experiences. Between 2002 and 2010, women's LFPRs and employment rates increased, primarily as a result of more migrant and rural women entering the labour market, while unemployment rates decreased for both women and men. The rising women's LFPR has been associated with a dramatic shift in labour allocation from agricultural labour to wage employment in industry and services either locally or in the form of rural-urban migration. The incidence of vulnerable employment decreased for both women and men, and women's share in wage

employment in non-agricultural activities increased. In the non-agricultural sector, the proportion of women and men in informal employment declined as more workers signed labour contracts with the employers following the enactment of the Labour Contract Law in 2008.

The average real earnings of both women and men doubled as more workers moved out of relatively low productivity agriculture and into higher productivity non-agricultural wage employment. The earnings of migrant and rural workers grew faster than those of urban *hukou* workers. As a result, the number of working poor decreased significantly, and the WPR gap between urban *hukou* and rural workers narrowed. While income growth and social transfers both played a significant role in reducing the WPRs of urban *hukou* workers, the declining WPRs for migrant and rural workers was achieved, for the most part, through the expansion of productive employment opportunities. In contrast to the wage stagnation that workers at the bottom and middle quintiles experienced in the recent decades in some developed countries, such as the United States (CBO 2011), women and men at all quintiles in our sample enjoyed rapid wage growth, with the real wages of workers at the lower quintiles growing faster relative to those at the higher quintiles. Consequently, the low pay rates for both women and men declined significantly. The primary beneficiaries of this process were young, less educated migrant and rural workers.

However, the benefits of economic success have not been evenly distributed between women and men. Women's LFPRs and employment rates were lower than men's, and their unemployment rates were higher. While the gender gaps in LFPRs and employment rates narrowed for the sample as a whole, the gender gap in unemployment rates among individuals with higher education increased. Women's employment share in high-end services increased, but at the same time their share in agricultural employment also went up. Despite the declining incidence of vulnerable and informal employment, women still disproportionately accounted for a large share of low-pay and less-secure employment. The increased coverage of labour contracts seems not to have benefited female rural workers as much as their male counterparts. While the gender earnings gaps for self-employed workers and migrant workers decreased, the gender earnings gap for urban *hukou* and rural workers continued to grow. Among wage workers, the gender wage gap at low and middle quintiles was also on the rise. Facing competition from migrant workers, the relative position of older and less-educated urban *hukou* workers deteriorated. As a result, the LPRs of urban *hukou* workers increased, more for women than men, and the LPRs also increased among women with college education and between 35 and 64 years of the age. Overall, the gender gap in LPRs increased. Among women, the LPR declined more slowly for married women and those with young children than unmarried women and those with no young children.

Given the complexity of the processes at work, it is impossible to separate out the effects on women and men in the labour market of greater global market integration and more aggressive government intervention. We can, however, say that China has been remarkably successful in creating productive employment and reducing income poverty by actively participating in the global market while carefully managing the process. Development strategies that are oriented to create productive employment, with special attention to workers from low-income groups, are imperative to expanding economic opportunities and improving labour market outcomes for women and men. However, economic growth alone, even it is pro-poor and employment oriented, is insufficient for achieving gender equality in the labour market. More concerted efforts to reduce the constraints that women face in the labour market are needed. The economic rebalancing in the aftermath of the global financial crisis has cast doubt on the sustainability of export-led growth. As wages increase, low-end manufacturing jobs in China have begun to relocate to other countries with lower costs, and Chinese industries are increasingly moving into the capital- and technology-intensive end of the spectrum. These changes pose new challenges to expanding productive employment for unskilled and less-skilled labour and achieving greater gender equality in the Chinese labour market in the decade to come.

APPENDIX

TABLE A1
The distributions and individual characteristics of the sample

	2002		2008		2010	
	Men	Women	Men	Women	Men	Women
OVERALL						
No. Working-Age People	10,771	10,680	18,193	17,137	17,877	16,763
No. Employed People	8,680	7,372	15,504	12,758	15,325	13,121
Distribution By Sector (%)						
Urban <i>Hukou</i> Holders	38.2	36.7	20.4	19.6	19.3	18.3
Migrants	14.3	13.4	20.4	17.7	20.8	17.9
Rural Residents	47.5	49.9	59.2	62.7	59.9	63.8
Distribution By Province (%)						
Jiangsu	15.0	14.6	13.8	13.5	13.9	13.5
Anhui	13.9	13.0	14.7	14.0	14.4	14.6
Henan	16.0	15.6	14.7	14.5	15.0	15.1
Hubei	16.9	17.3	13.9	14.4	14.3	14.8
Guangdong	16.7	18.1	19.6	19.0	20.7	18.6
Chongqing	6.8	7.0	8.4	9.0	8.6	8.9
Sichuan	14.8	14.6	14.8	15.7	13.2	14.5
CHARACTERISTICS OF WORKERS						
Mean Age Of Employed People (Year)	39.7	37.7	39.5	37.9	40.2	39.2
Age Distribution (%)						
16–24	11.5	14.7	13.3	15.6	12.3	13.3
25–34	22.7	24.4	23.0	24.4	22.1	23.0
35–44	27.6	30.8	27.1	29.4	26.3	28.6
45–54	28.6	24.5	23.7	21.4	24.4	23.1
55–64	9.7	5.7	12.8	9.2	15.0	12.0

Distribution by education (%)						
Elementary or lower	16.6	32.2	13.3	24.7	12.1	24.1
Junior middle school	44.7	37.3	43.1	38.5	40.5	35.0
Senior middle school	26.4	21.6	25.9	21.1	27.7	22.7
College and university	12.4	9.0	17.7	15.8	19.7	18.3
Distribution by marital status (25–54) (%)						
Unmarried	7.5	4.3	11.6	7.5	12.5	8.0
Married	92.5	95.7	88.4	92.5	87.5	92.0
Distribution by presence of children 0–6						
<i>Age 25–54</i>						
Children	17.4	17.5	22.1	22.6	21.8	22.0
No children	82.6	82.5	77.9	77.4	78.2	78.0
<i>Age 25–35</i>						
Children	38.9	37.9	39.2	42.7	38.3	41.5
No children	61.1	62.1	60.8	57.3	61.7	58.5
URBAN HUKOU HOLDERS						
No. working-age people	4,556	4,781	4,307	4,567	4,061	4,216
No. employed people	3,316	2,704	3,165	2,502	2,956	2,404
Mean age of employed people (year)	41.7	38.6	41.2	38.3	41.7	38.8
Age distribution (%)						
16–24	4.0	6.3	4.6	5.2	4.9	6.2
25–34	19.2	26.0	23.2	31.6	21.1	28.7
35–44	33.7	40.0	32.6	35.4	31.6	34.9
45–54	35.8	25.9	29.8	23.8	30.8	25.4
55–64	7.3	1.7	9.9	4.0	11.6	4.8
Distribution by education (%)						
Elementary or lower	3.7	3.5	3.2	4.2	2.8	3.6
Junior middle school	23.6	22.5	18.8	18.5	17.3	15.7
Senior middle school	38.4	46.8	35.6	36.5	36.7	37.9
College and university	34.4	27.3	42.4	40.9	43.3	42.9

Distribution by marital status (25–54) (%)						
Unmarried	7.1	6.4	11.7	11.7	11.6	11.2
Married	92.9	93.6	88.3	88.3	88.4	88.8
Distribution by presence of children 0–6 (%)						
<i>Age 25–54</i>						
Children	13.5	13.6	18.3	18.1	17.5	17.3
No children	86.5	86.4	81.7	81.9	82.5	82.7
<i>Age 25–35</i>						
Children	41.1	40.9	39.8	42.0	35.0	39.8
No children	58.9	59.1	60.2	58.0	65.0	60.2
MIGRANTS						
No. working-age people	1,307	1,258	3,275	2,482	3,424	2,700
No. employed people	1,243	991	3,166	2,260	3,192	2,350
Mean age of employed people (year)	35.7	33.7	31.6	30.6	32.8	32.1
Age distribution (%)						
16–24	8.1	10.3	31.1	34.8	26.8	29.7
25–34	39.4	45.7	32.0	30.7	32.9	30.4
35–44	36.5	35.0	24.6	26.0	25.6	27.7
45–54	13.1	7.7	9.3	7.3	11.3	10.1
55–64	2.9	1.3	3.0	1.2	3.4	2.0
Distribution by education (%)						
Elementary or lower	19.4	32.6	11.0	17.6	11.0	18.4
Junior middle school	54.8	52.0	56.3	57.0	51.0	49.3
Senior middle school	23.4	13.6	28.1	22.3	31.5	25.8
College and university	2.4	1.8	4.6	3.2	6.5	6.5
Distribution by marital status (25–54) (%)						
Unmarried	4.0	3.2	15.9	9.1	16.5	10.4
Married	96.0	96.8	84.1	90.9	83.5	89.6
Distribution by presence of children 0–6 (%)						
<i>Age 25–54</i>						
Children	21.6	22.3	16.8	21.0	16.5	19.8

No children	78.4	77.7	83.2	79.0	83.5	80.2
<i>Age 25–35</i>						
Children	35.9	33.5	22.8	32.2	23.6	31.0
No children	64.1	66.5	77.2	67.8	76.4	69.0
RURAL RESIDENTS						
No. working-age people	4,908	4,641	10,611	10,088	10,392	9,847
No. employed people	4,121	3,677	9,173	7,996	9,177	8,367
Mean age of employed people (year)	39.0	37.8	40.0	39.0	40.9	41.0
Age distribution (%)						
16–24	16.0	19.3	15.8	19.0	14.7	15.2
25–34	22.6	21.2	20.8	18.6	20.5	17.6
35–44	23.1	25.7	23.8	26.1	22.1	24.0
45–54	26.5	25.6	22.5	22.3	22.2	23.9
55–64	11.8	8.2	17.1	14.1	20.5	19.2
Distribution by education (%)						
Elementary or lower	23.2	46.4	21.1	39.6	20.5	41.3
Junior middle school	54.9	43.0	57.8	48.4	57.8	46.9
Senior middle school	20.2	9.9	18.5	10.7	18.9	10.2
College and university	1.6	0.7	2.7	1.4	2.8	1.6
Distribution by marital status (25–54) (%)						
Unmarried	8.1	3.3	10.5	4.4	12.2	5.2
Married	91.9	96.7	89.5	95.6	87.8	94.8
Distribution by presence of children 0–6 (%)						
<i>Age 25–54</i>						
Children	20.1	19.9	25.2	25.2	25.5	25.6
No children	79.9	80.1	74.8	74.8	74.5	74.4
<i>Age 25–35</i>						
Children	39.4	39.0	46.3	49.3	45.7	47.8
No children	60.6	61.0	53.7	50.7	54.3	52.2

Notes: Statistics of individual characteristics for the sample as a whole are weighted by the population shares of urban *hukou* holders, migrants and rural residents.

Source: 2002 CHIP and 2008 and 2010 RUMiC.

TABLE A2

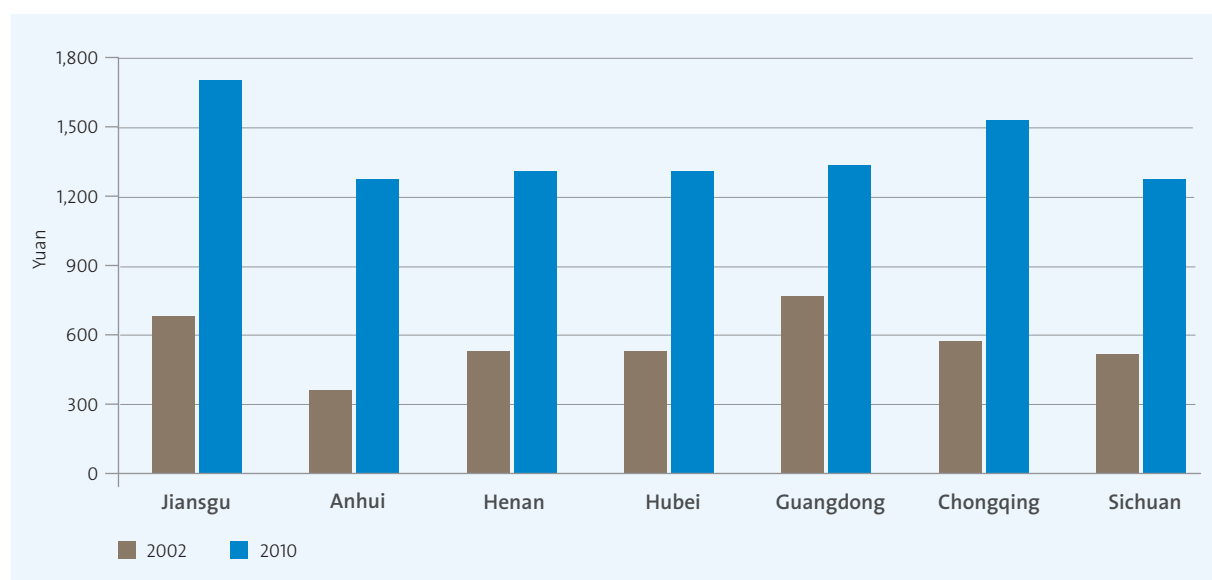
Average wages and women's share in industrial sectors in the urban sector, 2003-2011

	2003 (yuan/year)	2011 (yuan/year) (%)	Average annual rate of growth (%)
Overall	14,658	34,659 (36.3)	13.7
By sector			
Agriculture, forestry, animal husbandry and fishery	7,224	15,998 (36.9)	13.0
Mining	14,299	42,917 (19.0)	16.8
Manufacturing	13,296	30,127 (39.5)	13.3
Utility	19,490	43,322 (28.6)	13.0
Construction	11,887	26,379 (12.0)	13.0
Transportation	16,530	38,684 (26.9)	13.7
Wholesale and retail trades	11,431	33,405 (47.7)	16.5
Hotels and catering services	11,750	22,585 (54.2)	11.2
Domestic and residential services	13,290	27,255 (42.8)	12.0
Information and computer services	32,421	58,273 (39.9)	10.4
Financial services	21,805	66,647 (50.8)	17.0
Real estate	17,928	35,199 (34.6)	11.5
Leasing and business services	17,859	38,600 (31.9)	12.7
Scientific research and development	21,450	52,800 (30.2)	14.3
Water conservancy and environment	12,355	23,721 (41.0)	11.2
Education	14,889	35,492 (50.7)	13.9
Health	16,983	37,967 (60.6)	13.1
Culture, sports and entertainment	17,941	39,341 (42.5)	12.9
Public management	16,112	34,562 (29.0)	12.6

Notes: Statistics presented in this table are for urban workers employed in registered enterprises and organizations (*danweijiuyerenyuan*). Average wages are measured at the 2005 constant price. The average wages of foreign-funded companies is a weighted average of the average wages of companies owned by investors from Hong Kong, Macao and Taiwan and by investors from foreign countries. Figures in parentheses for 2011 are women's share of employment in a given industrial branch. The wage information for the industrial branch classification consistent with the classification in this table is unavailable for 2001, and gender-specific employment information for 2001 and 2003 is also unavailable. Source: Wage information is from China Statistical Yearbook 2012 (NBS 2012) and employment information is from *Women and Men in China: Facts and Figures 2012* (NBS 2013).

FIGURE A1

Median wages for full-time workers of sample provinces in 2002 and 2010 (yuan/month)



Notes: Wages are measured at the 2005 constant price.

Source: 2002 CHIP and 2010 RUMiC.

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