

Chapter 1

Introduction



1.1 Background and Aim of This Book

The level of economic development, economic policies and systems have been transformed since 1949 when the People's Republic of China was established. Economic historians usually divide the Chinese economy into the planned economy period (1949–1977), and the market-oriented economy reform period (post-1978) (also be called as “transition period”). In the period of planned economy, with the “socialism camp”, the ownership of whole firms was changed into the government owned including the state-owned enterprises (SOEs), and collectively owned enterprises (COEs). In other words, only public sector maintained in the planned economy period in China. Based on the socialism ideology, Chinese government emphasized gender equality as an important socialist ideology, and the government enforced it thoroughly by implementing equal employment policies and policies to promote women's labor participation, as demonstrated by the slogan “women can hold up half of the sky”. Therefore, the gender gap in employment, wages, and occupation was much smaller in that era (Meng 2000; Gustafsson and Li 2000; Li and Song 2013; Ma 2018a, b).

During the market-oriented economy reform period since the 1978, the influence of market mechanism has become greater which enhance the Chinese economic growth (Lin et al. 1994). As the progressive of economy transition and economic growth, the female employment and gender gap change greatly in China, the main reasons can be considered as follows.

First, with the progressive of ownership reform, the problem of administration against women in labor market has become severe (Gustafsson and Li 2000; Liu et al. 2000; Maurer-Fazio and Hughes 2002; Ma 2018a, b). China has long been known for its persistent advocacy for gradual economic reform. During the market-oriented economy reform period since 1978, reform has led to substantial growth of the private sector (i.e. privately owned enterprises: POEs; foreign owned enterprises: FOEs), while Chinese government has tried to preserve and give favorable treatment to the public sector (in particular, SOEs in key industry sectors) (Lin et al. 1994; Ma

2018b, 2019; Ma and Iwasaki 2021; Iwasaki and Ma 2020). As a result, the division between the public sector and the private sector has become one of the most prominent features in Chinese labor market (Zhang and Xue 2008; Ye et al. 2011; Ma 2018a, b, 2019). Firms in the private sector can determine wage levels and employment conditions of individual workers at their own discretion. As it is pointed out by the discrimination hypothesis (Becker 1957), the discriminations against female workers from employer, customer or colleague may occur in the private sector. In additions, with the progressive of SOEs reform, the SOEs own more decision authorities of employees' employment and wage, the discrimination against female workers may occur easily than that in the planned economy period.

Second, from labor supply perspective, as the economic growth, the household income increased greatly in China (Li et al. 2017; Sicular et al. 2020). Based on individual utility maximum model, the increased household income may decrease the female labor force participation, a part of women in high-income household may choice to exit labor market to become housewives voluntarily (Fu et al. 2016; Ma 2018b; Ma and Zhang 2018).

Third, from the labor demand side, excepting the discrimination factors in workplace, it is found that as the development of industry sectors (i.e. service industry) and AI (*artificial intelligence*) technological progressive, the demand of female workers has changed greatly for both developed and developing countries (Goldin 1990; Wamboye et al. 2015; Gupta et al. 2015). With the progressive of modernization and urbanization in China, it can be assumed that the industry structural upgradation also effects female employment and gender gap in China.

Forth, the policy and institutional reforms also affect the female employment and wage gap in China. For example, the New Rural Pension scheme (NRPS) was implemented in 2009 in rural China, it is expected that receiving public pension benefits may enhance the well-being of individuals at older age, while it might also affect the labor supply of pensioner or intra-household prime-age adults (Cheng 2014; Zhang 2015; Liu et al. 2016; Liu 2017; Ma 2020). In additions, the Higher Education Expansion Policy (HEEP) was published in 1999, it might affect the college enrollment of students, employment and wage of college graduates (He 2009; Wu and Zhao 2010; Xing and Li 2011; Yao et al. 2014). When there maintains the gender role segregation in household and workplace, the influences of these policy or institutional changes on employment and wage may differ by gender.

Fifth, the gender role consciousness may change with the economy system transition and economic development, which may also affect the female employment and gender gap in China. Because there remains gender role segregation, the hours allocation of family care (i.e. parent care, child care), housework and market work differ by gender (Becker 1985). In China the influences of Confucian culture on the consciousness (i.e. filial piety, male domination of women) and lifestyle (i.e. parent care, living arrangement) are still maintain, particularly, which may cause to the different pictures of female employment and housework by areas.

These reasons mentioned above have made the female employment and gender gap changed greatly. This book aims to investigate the situations and determinants of female employment and gender gap in labor market under the market-oriented

economy reform period in China. It provides the reader with academic evidences for understanding the mechanism of female labor force participation, the determinants of gender gap in both household and workplace, and the impact of policy transformation on women' wage and employment in China from economics perspective.

1.2 Main Contents of This Book

This book consists of three parts—Part I Women's Family Responsibilities and Employment in China (Chaps. 2 and 3), Part II The Gender Gap in China's Labor Market and Society (Chaps. 4, 5 and 6) and Part III Impact of Policy on Women's Labor Market Outcomes in China (Chap. 7). The main contents of each chapter are as follows.

Chapter 2 analyzes the impact of market wage, reservation wage, and unearned income on the probability of work participation of married women by using the longitudinal survey data (China Health and Nutrition Survey: CHNS) from 1989 to 2015 and a random effects probit model to address the heterogeneity problem. The main findings can be summarized as follows: first, in general, the market wage positively affects the probability of work participation of married women; the reservation wage negatively affects the probability of work participation of married women; but the effect of unearned income is not statistically significant, which contrasts with most studies of developed countries. Second, the effects differ by age group: the market wage has a negative effect for middle-aged married women aged 40–49, while it has a positive effect for younger married women aged 20–39. The negative effect of child care is greater for mothers aged 30–39; the effect of a husband's income is not significant in any age group. Third, the effects differ by urban/rural area: the market wage positively affects the work participation of married women in urban areas, while the influence of the market wage on married women is not significant in rural areas. The negative effect of the reservation wage is greater for married women in urban areas than for those in rural areas; the effects of a husband's income are not significant for either urban or rural areas. Fourth, for the effects by employment status, the market wage positively affects the probability of becoming a regular worker; when the market wage rises, the probability of becoming an irregular worker is lower than that of becoming a nonworker. The negative effect of the reservation wage is greater for regular work. A husband's income positively affects the probability of a woman becoming a regular worker, while it negatively affects her probability of becoming an irregular worker. These results suggest that a child care support policy can be expected to address the family-work conflict for Chinese married women.

Chapter 3 investigates the impact of parent care giving on middle-aged women' employment in China. Based on the household utility maximum mechanism, most women assume family responsibilities, while most men work in the labor market. Therefore, it can be thought that parent care may affect women's labor supply. Some previous studies for developed countries found that parent care can decrease women's labor supply. Family care work—including parent care—has been considered a kind

of unpaid work in the household. China has become an aging-population society; the Chinese government has faced the problem of decreasing working-age laborers. Does parent care influence women's participation in work? Even though some previous studies have analyzed the influence of child care on women's labor supply and discussed the unpaid work in China, empirical studies on the impact of parent care giving on middle-aged women's employment are scarce. Using the longitudinal data of the China Health and Retirement Longitudinal Survey (CHARLS) from 2011 to 2015, Chap. 3 investigates the influence of parent care giving on probability of work participation of women aged 45–69 in China. The random-effects model and the instrumental variables (IV) method are used to address the unobserved heterogeneity and endogeneity problems. The main findings are as follows. First, the number of parents living, number of siblings, and individual characteristics such as education, age, health status, family structure (number of children, household income), and labor market segmentation factors (urban or rural areas) may influence the probability of middle-aged and older women providing the caring for parents. Second, although the results in previous studies that used younger and middle-aged women (i.e., women aged 18–52) indicate that parent care negatively affects women's labor supply, this chapter focuses on middle-aged and older women aged 45–69 and finds that the probability of work participation is higher for the care-giving group. This can be explained by the fact that the positive effect (obtaining income effect) is higher than the negative effect (time-constraint effect). Third, the influences of caring for parents on women's work participation differ by group. Concretely, the influence for women aged 50–59, the well-educated, and low-income women is greater than that for their counterparts. These results indicate that, in China, most women who care for parents are likely to participate in work simultaneously; it can be considered that women who care for parents have to work to obtain money for expenditures associated with parent care. This suggests that the work-family conflict caused by parent care may remain among middle-aged and older women. An elderly care insurance policy should be considered to reduce the burden of caring for parents.

Chapter 4 investigates the influence of labor market segmentation by enterprise ownership sectors on the gender wage gap in the 2000s. Although the Chinese government has introduced a number of new policies and regulations since the 1980s to address the gender gap in labor markets, the gender wage gap has been growing during the transition period. The expansion of the gender wage gap in urban China can be explained in many ways. Although some empirical studies have investigated the determinants of the gender wage gap in urban China during the transition period, empirical studies of the detailed decomposition by different ownership sectors on the gender wage gap are scarce. Using data of the Chinese Household Income Project (CHIP) surveys conducted in 2003 and 2014 (CHIPs 2002 and CHIPs 2013), Chap. 4 explores the determinants of the gender wage gap by five kinds of ownership sectors—the government organization, state-owned enterprises (SOEs), collectively owned enterprises (COEs), privately owned enterprises (POEs), and the self-employment sector—from 2002 to 2013 in urban China. A decomposition analysis of the gender wage gap based on the Blinder-Oaxaca decomposition model is employed. Several major conclusions emerge. First, the gender wage gap exists in

the urban labor market. When all factors—including the human capital factor—and ownership dummy variables are constant, the gender wage gap remains in both 2002 and 2013. Second, both the gender difference in human capital and discrimination against female workers contribute to the gender wage gap; the influence of the unexplained component (e.g., discrimination against female workers) increased in each ownership sector from 2002 to 2013. The range of the increase in the influence of the unexplained component is greater for firms in the public sector than for those in the private sector. Third, the influence of factors on the gender wage gap differs by ownership sector. Concretely, (1) work experience years in the explained component and years of work experience in the unexplained component are the main factors for government organizations; (2) the industry sector in the explained component and ethnic and health status in the unexplained component are the main factors for SOEs; (3) the occupation in the explained component and the industry in the unexplained component are the main factors for COEs; (4) the industry in the explained component and the work experience years in the unexplained component are the main factors for FOEs; (5) the industry sector in the explained component and the occupation as well as education in the unexplained component are the main factors for the self-employment sector. Because the main factors contributing to the gender wage gap differ by ownership sector, policies to address the gender wage gap problem should be different for each ownership sector.

Chapter 5 investigates the determinants of becoming a member of Communist Party of China (CPC) and the impact of CPC membership on the wages, and compare the differences of mechanisms by gender. In China, despite the drastic transition from a planned economy to a market-oriented economy, because the government has employed a gradual reform, the de facto Communist Party of China dictatorship is strongly maintained in the political sphere. This fact creates a unique aspect of the Chinese economy. There is no doubt that the wage premium of CPC membership is an important research topic in the study of the Chinese labor market. Nevertheless, neither theoretical nor empirical studies can reach a certain conclusion on this issue. Thus, empirical studies should be employed. Chapter 5 uses an empirical study for the issue. New findings emerge. First, when the other factors are constant, the probability of becoming a CPC member is 7.3–7.7% points lower for female workers than for male workers. This indicates that a gender gap of participation in the CPC organization remains. Second, the wage premium of CPC membership is higher for female workers (around 34.7% points) than for male workers (4.8–30.8% points), and the influence of selection bias on wage levels is greater for female workers than for males. Third, for both female and male workers, when the sample selection bias is controlled, the contribution rate of the unexplained component increases from –19.0 to 232.5% (female) or 11.4 to 139.2% (male); the range of increase of the unexplained component is greater for female workers than for male workers. This indicates that the factors that influence self-selection or being selected to become a CPC member greatly affect the wage gap, and the influence is greater for female workers than for males. Fourth, the decomposition results show that excepting the selection bias, the endowment differentials such as the difference in years of schooling, distributions of occupations, and industry sectors are the main factors affecting the wage gap for

both female and male workers, and the contributions of endowment differentials are greater for female workers than for males.

Chapter 6 explores the gender gap of social participation activity in China. Research findings of the issue for the developed countries suggest that, in many developed countries, volunteer activity is an important part of social life that improves individuals' well-being and increases social capital and community development. Yet empirical studies of participation in volunteer activity for China using national longitudinal survey data are limited. Using the longitudinal data of the China Health and Retirement Longitudinal Survey (CHARLS) from 2011 to 2015, Chap. 6 investigates the determinants of participation in volunteer activity of individuals aged 45–69 in China; it also compares differences in the determinants by gender. The random effects model and instrumental variables (IV) method are used to address unobserved heterogeneity and endogeneity problems. The main findings are as follows. First, when other factors are held constant, the gender gap in the probability of participating in volunteer activity is smaller. Second, to compare differences in the determinants for participating in volunteer activity by gender, the results indicate that six factors (market work, education, income, family care, age, health status) are broadly supported for women and men, but the influence of determinant factors is different by gender. For example, the negative influence of work on participation in volunteer activity is greater for women than for men. The results indicate that participation in the labor market negatively affects participation in volunteer activity. There is a trade-off relationship between working hours and leisure time (volunteer activities), particularly for women. This may be because that the family responsibilities (e.g., child care, parent care) are greater for women than for men. Therefore, the adjustment of working hours and leisure hours is difficult for women; in other words, it is shown that work-family conflicts may be greater for women than for men. The results indicate that the enforcement of work-life balance policies—including a policy to promote men's participation in housework and the mandatory family care leave system—may increase women's participation in social activity.

Chapter 7 analyzes the impact of Higher Education Expansion Policy (HEEP) on wage of female and male college graduates and compares the effects of the policy by gender. In 1999, the HEEP was implemented by the government. Along with implementation of the policy, the number of college graduates increased from 1.08 million in 1998 to 6.381 million in 2013. According to the general market equilibrium mechanism, when the labor demand is constant, the increased college graduate labor supply in the short term may decrease the graduate wage level (negative effect), whereas, when the labor demand for college graduates increases greatly with economic growth or technological progress, the college graduate wage level may increase even after the implementation of the HEEP (positive effect). Thus, the influence of the policy is not clear, and it deserves empirical investigation. Based on the quasi-natural experiment methods (DID method and DDD method), using six waves (1997, 2000, 2004, 2006, 2009, and 2011) longitudinal survey data of the China Health and Nutrition Survey (CHNS), Chap. 7 investigates the influence of the HEEP on the wage levels of young college graduates. We also compare the different policy influences by gender. Five major conclusions emerge. First, in general, the HEEP does not affect the wage

levels of young college graduates. Second, the difference of policy impact on wages by various wage percentiles is small. Third, the HEEP decreased the wage level of new college graduates in the short term (in 2004), whereas the negative effect disappears in the long term (in 2006, 2009, and 2011). Fourth, to consider the group heterogeneities of policy impacts, the results suggest that gender differences in the impacts of the policy on the wage levels of new college graduates are small.

1.3 Significance of the Book

The main features can be summarized as follows. First, this book provides the academic evidences about these issues based on the economics theories and econometric analysis methods using many kinds of long-term Chinese national survey data including cross-section survey data—Chinese Household Income Project survey (CHIPs), Chinese national longitudinal surveys data—Chinese Health and Nutrition Survey (CHNS), and China Health and Retirement Longitudinal Survey (CHARLS). The latest survey data are used which can provide new evidences for these issues.

Second, this book investigates the consequences and causes of gender gap in both household and labor market perspectives, particularly the new issues such as the association of parent care and female employment, the gender gap of Communist Party of China, and the gender gap of volunteer activity are estimated which are not analyzed in the previous studies.

Third, this book also aims to provide academic evidence for policy-maker, therefore the book conducts the empirical study about the influences of policies such as the New Rural Pension Scheme (NRPS) and Higher Education Expansion Policy (HEEP) on female employment and wage. This book can generate interests for various groups such as scholars with econometric analysis backgrounds, policy makers, and readers who are interested in Chinese economy.

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