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## **RELATIVE PAY AND ITS UNDERLYING DETERMINANTS FOR DOMESTIC**

## **ELDERCARE WORKERS: EVIDENCE FROM SHANGHAI CHINA**

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## ABSTRACT

Domestic services represent a growing sector of the economy in many high- and upper-middle income countries. Demand for domestic workers for eldercare is especially high as a result of the rapid aging of the population in these countries. However, domestic eldercare work is characterized as a low-pay, low-status occupation worldwide. This article examines the relative pay of domestic eldercare workers in urban China and its underlying determinants. The estimates show that when holding observable individual characteristics constant, domestic eldercare workers earn 28 percent less than other types of workers in the service sector in Shanghai. The analysis attributes the low wages of eldercare workers to the fact that domestic work is culturally devalued, eldercare is performed by workers from the most marginalized segments of Shanghai's labor force, and the users of eldercare are relatively poor among the users of domestic services.

KEY WORDS: Domestic workers, relative wage, elder care, China

JEL codes: J31, J70, J18

## **INTRODUCTION**

Domestic services have become a growing sector of the economy in many high- and uppermiddle income countries as a result of women's increasing participation in the paid labor force (ILO 2011a). Demand for domestic eldercare services is especially high in countries where the population is rapidly aging (Alessio Cangiano 2014; Annamaria Simonazzi 2009). Domestic services, in turn, employ many women, and most of them are from socially disadvantaged groups, such as guest workers from foreign countries, migrants from poorer regions within a country, or women of color (Nicola Yeates 2009; Rhacel Parrenas 2001; Evelyn Nakano Glenn 1992). As a result, domestic workers are vulnerable to labor market discrimination, and domestic work is characterized by low wages, poor working conditions, and high turnover (ILO 2011a, b; Fiona Williams 2010). The precarious employment status of domestic workers has drawn wide attention from feminists and labor activists in recent years. The present article adds to the growing literature on domestic workers with an in-depth analysis of the relative pay of domestic eldercare workers and its underlying determinants in urban China.

The market for domestic services in China has grown rapidly since the country embarked on the transition from a centrally planned to a market-oriented economy three decades ago. Analysts estimate that in 2010, approximately 15 to 20 million Chinese workers (approximately 1.9 to 2.5 percent of the total labor force) earned a living by cleaning, cooking, and/or caring for the children, the elderly, and the infirm of urban families (Xinying Hu 2010), and approximately one-third of China's domestic workers engaged in eldercare services.<sup>1</sup> Most Chinese domestic workers are female migrants from rural areas. In China, as elsewhere, domestic work is typically a low-pay, low-status job (Birte Klemm, Wolfgang Daubler, Beimin Wang, April Lai, Hynjoo Min and Shalini Sinha 2011). The precarious employment status has made domestic eldercare work unattractive, thereby creating severe labor shortages in eldercare services. A recent survey by China's National Commission on Population Ageing indicates that over 80 percent of the families that need eldercare services are unable to find domestic workers to provide those services.<sup>2</sup> Thus, a better understanding of the relative pay of Chinese domestic eldercare workers and its underlying causes is of critical importance for the design of effective public policies to promote gender equality and improve the well-being of both domestic workers and frail elderly citizens.

Feminists have long expressed concern that in some high-income countries, care workers face a wage penalty in that their wages are lower compared with workers with the same human capital and demographic characteristics in other occupations (Francesca Cancian 2000; Paula England, Michelle J. Budig and Nancy Folbre 2002; Michelle J. Budig and Joya Misra 2010). The term "care workers" refers to individuals who earn a living by providing a face-to-face service or performing housework such as cooking and cleaning for other people (England, Budig and Folbre 2002; Valeria Esquivel 2010). A large body of literature has emerged to explain why care workers face a pay penalty. However, much of the literature on the subject has been based on qualitative case studies, and rigorous empirical studies on the wage determinants of domestic workers are sparse.

The present article expands on the scant empirical studies on the wage determination of domestic workers using data on Chinese workers. We test the hypothesis that domestic workers face a wage penalty, with special attention to domestic eldercare workers. The hypothesis is tested using data drawn from two surveys: the 2007 Shanghai Domestic Services Survey (SDSS) and the 2007 China Household Income Project (CHIP). The SDSS provides detailed information on domestic workers and their employers in Shanghai, while the 2007 CHIP contains

information on a random sample of non-domestic workers in Shanghai. The test results show that domestic workers as a whole earn 20 percent less than non-domestic workers with the same observable personal characteristics, and domestic eldercare workers endure a larger wage penalty of 28 percent. We then investigate the causes of the low wages for domestic eldercare workers using data from the SDSS and information gathered through in-depth interviews with domestic workers, domestic service agencies and community leaders. Our analysis identifies three main factors that contribute to the low wages of domestic workers for eldercare. First, domestic services are culturally devalued in society. Second, the users of eldercare are poorer than the users of other types of domestic services. Finally, eldercare workers are the most marginalized workers in the urban labor market, and they endure multiple sources of market discrimination.

#### LITERATURE REVIEW

Our analysis contributes to two strands of literature. This article adds to the thin empirical literature on wage determination of domestic workers. Three main theories have been advanced to explain the low wages of domestic workers. The first explanation is derived from the cultural devaluation thesis (England, Budig and Folbre 2002; ILO 2013). According to this thesis, domestic work is culturally undervalued because it largely involves tasks that have traditionally been performed by women in the home without pay. The skills required for these tasks are widely perceived as being of an innate nature and therefore as not requiring as much training as the skills required for other occupations. In addition, domestic work that is performed in a private home is not viewed as a real job. Such perceptions and attitudes tend to lower the wages for domestic workers relative to workers in other occupations because social norms and perceptions play an important role in shaping the wage structure of a society.

A second explanation stems from the inherent economic dependence of care recipients – young children, the elderly, and the disabled. As England, Budig and Folbre (2002) note, these care recipients need care services the most but are the least able to pay for them. The prices of care services that the users can afford, in turn, determine the wages of care workers. The economic dependency theory is particularly relevant to eldercare. Elderly people typically need care services the most when they are no longer working. Their ability to pay for care services is determined by their access to pensions and other forms of social security as well as support from family members. Economically dependent elderly people are likely to be more vulnerable than young children as it is observed in developed countries that people tend to be more altruistic toward their own children than they are toward their elderly parents in regard to intergenerational resource allocation (Dan Anderberg 2007). Thus, other things being equal, the pay for eldercare workers is expected to be lower than that for childcare workers if people are more willing to support their children than their elderly parents.

The third explanation attributes domestic workers' low wages to the fact that domestic workers are typically from marginalized segments of the population, and their ability to bargain for higher wages is constrained by a variety of institutional factors. For instance, as has been documented in the literature, domestic services in high-income countries are disproportionately performed by migrant workers from the poorer regions of the world (Fiona Williams 2012a; Paul Callister, Lisa Tortell, and Jessie William 2009). Many high-income countries have used migration policies as "a regulatory labor tool" to facilitate access to low-cost domestic care workers from foreign countries (Judy Fudge 2012; Meryl Altman and Kerry Pannell, 2012). Programs such as "guest worker schemes" increase the control of employers over migrant domestic workers by tying their right to work in the hosting country to a particular employer,

while policies that make it difficult for migrant workers to acquire formal documentation often result in a large flow of undocumented migrant workers who have no choice but to engage in informal and unregulated work. Moreover, unlike workers in other occupations whose work takes place in the public sphere, the workplace of domestic workers is in a private home (ILO 2013). As a result, trade unions among domestic workers are rare, and domestic services are often exempted from minimum wage regulations and other worker protections (Altman and Pannell 2012). The limited job options and the lack of access to social protections place domestic workers in a weaker position to bargain for higher wages compared with workers in other occupations.<sup>3</sup>

While the low wages of domestic workers have drawn wide attention, few studies have empirically investigated the underlying causes of this phenomenon. England, Budig and Folbre (2002) provide the first econometric analysis of the relative pay of care workers as a broadly defined category using panel data from the United States. The analysis shows that the care workers in the sample generally experience a wage decrease when they enter a care occupation and a wage increase when they leave. Quantitatively, performing care work entails a wage penalty of 5 to 6 percent when education, individual background, and job characteristics are held constant. Budig and Misra (2010) examine the determinants of wages for care workers using data from twelve high-income countries. They find that the wages of care workers are higher in those countries where income inequality is lower, union density is higher, the public sector is larger, and public spending on care services is more generous. Similar to England, Budig and Folbre (2002), Budig and Misa treat care workers as a broad category and do not directly analyze domestic workers. Esquivel (2010) examines the relative pay of care workers in Argentina and explores the differences between domestic workers and other care workers using data from a household survey. The analysis attributes much of the wage disadvantage of domestic workers to the informality of domestic workers and their lack of professional training. Taryn Dinkelman and Vimal Ranchhod (2012) show that the wages of domestic workers increased by 20 percent after the enactment of minimum wage regulation in South Africa. The present paper adds to the literature by providing a direct test on the three main theories regarding the low wages of domestic workers.

This article further contributes to the literature on gender inequalities in the labor market and China's economic transition. Studies document that while women as well as men have gained much from the new opportunities created by the reforms, gender inequalities in the labor market have gone up sharply.<sup>4</sup> Women have been laid off at rates much higher than men, have more difficulty finding re-employment, and swell the ranks of precarious informal employment (Simon Appleton, John Knight, Lina Song, and Qingjie Xia 2002; John Giles, Albert Park, and Fang Cai 2006; Fenglian Du and Xiao-yuan Dong 2009; Fand Lee Cooke 2006). The gender wage gap has also widened markedly in the transition process (Bojorn Gustafsson and Shi Li 2000; Junsen Zhang, Jun Han, Pak-wai Liu and Yaohui Zhao 2008; Wei Chi and Bo Li 2008). Most of the studies focus on the public sphere and pay little attention to those who provide paid services in a private home. This paper broadens the scope of our understanding of the impacts of economic reforms on women by taking a close look at the plight of domestic workers.

#### **OVERVIEW OF PAID DOMESTIC WORK IN CHINA**

The utilization of domestic servants was common among wealthy families prior to the founding of the People's Republic of China. During Mao's era (1949-1976), paid domestic services, which were deemed a form of class exploitation, largely disappeared (Hu, 2010). The

Chinese government encouraged women to enter the labor market and supported working women with publicly subsidized services such as daycare, healthcare, and elderly services (Sarah Cook and Xiao-yuan Dong 2011). Paid domestic work re-emerged in post-reform China as a result of changing ideologies, public policies, and demographic and economic structures. The rejection of the notion of class struggle by the Chinese communist leadership removed the ideological constraint on hiring domestic workers, and the cutbacks on public support for daycare, healthcare, and elderly services increased the demand for commercialized services. The demand for paid domestic services was further fueled by the aging population and a changing family structure. Due to the effect of the one-child policy on family demographics, growing numbers of married couples have sole responsibility for four parents and one child.

The rapid growth of middle- and high-income families enabled women from these families to outsource domestic work for paid services. Although an increasing number of urban women have withdrawn from the labor market in the post-reform period (Xin Meng, 2012), the labor force participation of women who are better educated or who married to husbands with high earnings remains high (Sai Ding, Xiao-yuan Dong, and Shi Li 2009). The professional women tend to be income rich but time poor, and they therefore have high demand for paid domestic services (Judith Banister, David Bloom, and Larry Rosenberg 2010).

Despite the increasing demand for paid domestic services, domestic workers remain at the bottom of the occupational hierarchy with respect to social status. Nan Lin and Wen Xie (1998) find that service workers such as waiters, attendants, barbers, cleaners, and housemaids are the least prestigious occupations among 50 types of occupations in Chinese society. From the Contemporary Chinese Social Structure Evolution Survey conducted by the China Academy of Social Sciences in 2001, in which 6,193 individuals from 12 provinces were asked to rank the

social prestige of 81 three-digit occupations, Chuning Li (2005) finds that domestic workers, recycling drivers, and porters have the lowest prestige scores.

Given the low social status of domestic workers, it is not surprising that the main source of domestic workers is rural migrants who do not have equal access to employment, social services, or social security of the cities under the household registration system (*hukou*). In 2010, there were 220 million migrant workers in the cities, 34 percent of whom were female.<sup>5</sup> The occupational choices for migrant workers are limited to those jobs that urban residents are unwilling to accept (Shi Li, 2008). Domestic workers accounted for seven to nine percent of rural migrant workers in China in 2010. According to the 2007 SDSS, 81 percent of the domestic workers in Shanghai were migrant workers.

There are two main channels through which Chinese domestic workers find employment. One is through referrals of relatives, friends, ex-employers, or residential community leaders. Most domestic workers find their jobs through this channel, and they negotiate their wages and work schedule directly with their employers. Another channel is labor service agencies. There were approximately 3,000 service agencies in Beijing in 2010 and 8,000 in Shanghai in 2011 (Qunmin Chen, Xianbo Li, and Ruijie Wang 2011; Dan Ma 2011). A majority of service agencies act as intermediaries between domestic workers and service users. The agency charges a placement fee and does not bear any responsibility for the services. A small number of service agencies directly employ domestic workers to provide services to households. In this case, the agency charges the user for the services and pays the worker based on the hours worked.<sup>6</sup>

Most of the employment of domestic workers is informal in that it is not covered by the labor market regulations that are stipulated in the Labor Laws, under which "workers" (*laodongzhe*) refer to those who are employed by registered economic entities, not private

households (Jufen Wang, Min Si and Yuexin Chen 2010). For this reason, the membership of China's official trade union does not include domestic workers. When disputes with an employer arise, the only place that domestic workers can go to for help is the Domestic Work Association (DWA), which is a non-profit organization that is affiliated with the All China Women's Federation (ACWF). However, the DWA is also an association of domestic service agencies, and many of its council members are from those agencies. Thus, when handling a labor dispute, the DWA tends to pay more attention to the interests of service agencies than to the interests of domestic workers. In principle, domestic workers can file a grievance against employers with the ACWF and its local branches. In reality, as a quasi-non-governmental organization, the ability of the ACWF to address the concerns of domestic workers regarding wages and working conditions is constrained by a lack of adequate resources and regulatory power.

The wages of domestic workers are differentiated by the types of services they provide. Domestic workers who care for infants and children earn much more than those who care for the elderly. For example, the reference wages set by the Shanghai Municipal Bureau of Labor in 2012 were 2,200 *yuan* per month for eldercare workers, 4,600 *yuan* for child care workers and 2,400 *yuan* for other domestic workers.<sup>7</sup> The relatively low reference wage for eldercare workers reflects the government's concern about the weak economic position of eldercare recipients.

While the average income of urban households has grown dramatically, at an annual rate of eight percent from 1990 to 2010, the income growth for most retirees has lagged behind that of the working-age population. The main source of income for urban retirees is pensions. Approximately 96 percent of retirees are enterprise workers, and the remaining 4 percent are from the public sector.<sup>8</sup> On average, pension payments for retirees from the private sector amount to 47 percent of the local average wage, while public-sector retirees receive pensions that

are, on average, two to three times higher than those of private-sector employees.<sup>9</sup> In addition, people in the poorest families can apply for a living allowance (*dibao*) under the Minimum Living Guarantees Program.

Family transfer has traditionally been a main source of income for the Chinese elderly. While social and economic transformations over the past three decades have eroded the role of family support, the practice of providing support for elderly parents is still prevalent among Chinese families (Fang Cai, John Giles, and Xin Meng 2006; Rongjun Sun, 2004). However, support from adult children does not change the low-income status of the elderly population relative to the working-age population (Cai, et.al 2006). The economic situations of the elderly from low-income families and elderly women are even more precarious (Xinxin Chen and Xiao-yuan Dong, 2011).<sup>10</sup>

As a developing country, public health insurance in China does not cover eldercare services, and there is no insurance available for long-term care. In recent years, some local governments began to provide subsidies for eldercare services and nursing services to those with severe disabilities, but with tiny amount.

## DATA

The primary obstacle to estimating the relative pay of domestic workers in China is that domestic workers are practically uncounted in standard Chinese household surveys. To overcome this obstacle, the empirical analysis conducted in the present paper uses data from two sources: the 2007 SDSS, which provides information on domestic workers, and the 2007 CHIP, which provide information on non-domestic workers for comparison purposes.

The SDSS was implemented jointly by the Shanghai Bureau of Labor & Social Security and Fudan University. Through a multi-stage, random-cluster process, the survey first selected a random sample of 5,000 households from nineteen districts in Shanghai. Of the 5,000 households, 694 employed a domestic worker. The households and the domestic workers in the sample were asked to respond separately to the questionnaires. The SDSS offers valuable information about domestic workers and their employers in Shanghai. Omitting questionnaires with missing values, we obtain a sample of 525 domestic workers for analysis. Of these workers, 169 (32 percent) care for the elderly, and 356 (68 percent) either care for children or provide cooking and cleaning services.<sup>11</sup>

The CHIP surveys were carried out by a research team from the Chinese Academy of Social Sciences in collaboration with the National Bureau of Statistics of China, the Asian Development Bank and the Ford Foundation in 1988, 1995, 2002, and 2007. The 2007 CHIP covers 12 provinces and province-equivalent municipalities. Our analysis used data on workers in Shanghai from the 2007 CHIP. For purposes of comparison, we focus on workers with positive earnings, including both urban and rural *hukou* holders in Shanghai. The sample from the CHIP consists of 1,116 workers, 245 of whom are employed in the manufacturing sector and 871 of whom are employed in the services sector. All of the service workers in the CHIP sample work in the public sphere, and most are in wholesale and retail trades or restaurant, hotel, and residential services. As a standard household survey, the CHIP captures virtually no domestic workers.

### <*Insert table 1 here (full page)*>

Table 1 presents summary statistics of the characteristics of workers from the two samples. Compared with manufacturing workers and workers engaging in other types of services, domestic workers are older, less educated and are more likely to be women and rural migrants.<sup>12</sup> Specifically, the average age of domestic workers is 44 years, which is four years older than manufacturing workers and nine years older than other service workers. Nearly 50 percent of the domestic workers are either illiterate or have only a primary school education, while the respective percentages for manufacturing workers and other types of service workers are only 5 percent and 8 percent. Eighty-one percent of the domestic workers are rural migrants, and almost all (98.5 percent) are women. In comparison, rural migrants account for only 34 percent of the manufacturing workers and 51 percent of the other types of service workers, and the proportion of women in the respective groups are 25 percent and 42 percent. The characteristics of domestic workers for eldercare are even more disadvantageous. Compared with other types of domestic workers, eldercare workers are older, less educated, and are more likely to be women and migrants from less-developed provinces.

As we would expect, the monthly wages of domestic workers are lower than those of other types of workers, although domestic workers work more hours per week. In terms of hourly wages, eldercare domestic workers in SDSS appear to be at the bottom of the wage hierarchy, earning 5.2 *yuan* per hour, which is 18 percent less than other domestic workers, 53 percent less than the wage for non-domestic service workers, and 61 percent less than that for manufacturing workers in CHIP.<sup>13</sup> While 84 percent of manufacturing workers and 70 percent of other types of service workers have social insurance (for health care, a pension, and unemployment), none of the domestic workers are covered by any social insurance program. There are also noticeably large gaps in job training rates between domestic and non-domestic workers and between eldercare and non-eldercare domestic workers.

## <*Insert table 2 here (half page)*>

Table 2 presents summary statistics regarding the economic status of the employers of eldercare workers and non-eldercare workers in the SDSS sample. As shown in the table, compared with households that employ domestic workers to care for infants and children or to

prepare meals and clean the home, the average annual income per person for eldercare users is 30 percent less, their annual consumption is 16 percent lower, and the size of their apartments per person is 29 percent smaller. Clearly, the users of eldercare services are poorer than the users of other types of domestic workers.

To deepen our understanding of the wage determinants of domestic workers, we gathered supplementary information through in-depth interviews with domestic workers, district community leaders, and managers of service agencies in Shanghai in 2012 and 2013. To select the districts for the interviews, we first contacted the Shanghai Women's Federation (SWF) to collect information on the wages and working conditions of domestic workers in Shanghai, their distribution over the districts, and policy documents issued by the municipal government. Based on the information from the SWF, we chose two districts for interviews with domestic workers, including one district where the population is older and the demand for eldercare is therefore higher, and another where the population is younger and the use of domestic workers for childcare is more prevalent. With the help of district leaders, we selected 20 eldercare workers and 20 non-eldercare domestic workers for interviews. All of the interviewees are female rural migrants from other provinces. We also interviewed the leaders of the two districts and the managers of the two largest domestic service agencies in Shanghai.

#### **RELATIVE PAY FOR DOMESTIC WORKERS**

In this section, we test the hypothesis concerning the relative pay of domestic workers in Shanghai: Domestic workers face a relative wage penalty compared with non-domestic workers; and the relative wage penalty for domestic workers is greater for eldercare workers than noneldercare workers.

#### Methods

We test the hypothesis using a two-step approach. We first apply OLS to estimate a standard Mincer wage equation using the CHIP sample.<sup>14</sup> In this equation, the dependent variable is the logarithm of hourly wages, and the explanatory variables include education, age, gender, marital status, residential status, and region of original residence. For the sake of comparison, we estimate the wage equation for the sample as a whole, for a sub-sample of service workers, and for a sub-sample of female service workers.<sup>15</sup> We next use the estimates from the wage equation to predict the wages of domestic workers in the SDSS sample, and we compare the predicted wages with the actual wages. Because nearly 99 percent of the domestic workers in the SDSS sample are women, we use the estimates of the wage regression for female service workers to compute the predicted wages for domestic workers to minimize the potential influence of unobserved heterogeneity. The predicted wages for domestic workers reveal what they would earn had they been employed as non-domestic service workers in the Shanghai labor market. The gap between the mean values of the predicted and actual wages represents the wage penalty for domestic workers, which indicates that domestic workers are undervalued in that they receive lower rewards than non-domestic service workers with the same human capital characteristics.

Because the comparison involves two random samples, we must take into account the prediction error for the predicted wages as well as the sampling error for the actual wages of domestic workers. Therefore, we compute the 95 percent confidence intervals for the mean values of the predicted and actual wages. A comparison of the two confidence intervals offers a robustness check for the test of the equality between the mean values of the predicted and actual wages.

## Results

The estimates of the wage equations for the CHIP sample are presented in Table 3. The results show that, holding all else constant, service workers earn 11.7 percent less than manufacturing workers, and female workers earn 13.7 percent less than their male counterparts for the full sample as well as for the service sector. The wage gap between urban and rural *hukou* workers is much larger, ranging from -43.1 percent to -48.1 percent. These estimates suggest that even for non-domestic workers, gender and residential (*hukou*) status are important sources of wage differentials, and female migrant workers in the service sector are situated at the bottom of the wage hierarchy. The predicted wages for domestic workers in the SDSS sample that are computed using the estimates of the wage equations for female workers in the service sector.

## <*Insert table 3 here (full page)*>

Table 4 presents the mean values of the actual wages and predicted wages and the respective 95 percent confidence intervals for domestic workers in the SDSS sample. We note that the mean value of the actual wages for domestic workers as a whole is lower than that of their predicted wages by 20 percent, and this difference is statistically significant at the one percent level. Comparing the predicted and the actual wages for eldercare workers and other domestic workers separately, we find a larger gap of 28.5 percent for eldercare workers and a smaller gap of 16.1 percent for other domestic workers, and both wage gaps are statistically significant at the one percent level. Consistent with the test results for the mean values, the upper bound of the 95 percent confidence interval for the mean actual wage is lower than the lower bound of the interval for the mean predicted wage by a noticeable margin for all three cases, as indicated by the figures presented at the bottom of Table 4. Thus, it is evident that domestic workers face a wage penalty, and eldercare workers fare the worst.

## DETERMINANTS OF WAGES OF DOMESTIC WORKERS FOR ELDERCARE

In this section, we investigate the reasons why domestic eldercare workers earn less than other domestic workers.

## **Findings from regressions**

We first estimate three probit models to discern the main characteristics of female domestic eldercare workers in the SDSS sample. The dependent variable of the probit models is a dummy for being an eldercare worker, and the explanatory variables include age, education, marital status, and *hukou* status for the first model. We then incrementally add the variables for household income of the employer in log form and the province of original residence to the second and third models. For province of original residence, we compare migrants from Anhui and other central and western provinces and from Zhejiang and Jiangsu with Shanghai residents – the reference group. Because Zhejiang and Jiangsu are more developed and geographically closer to Shanghai than Anhui and other central and western provinces, local residents and migrants from Zhejiang and Jiangsu tend to have higher reservation wages and better access to information networks than migrants from Anhui and other central and western provinces. Therefore, the wages of migrants from the latter are expected to be lower than the former, other things being equal.

## <Insert table 5 here>

Table 5 presents the estimated marginal effects of the probit model. The estimates show that compared with other domestic workers, eldercare workers are older, less educated, and more likely to be migrants from Anhui or other central and western provinces and to work for employers whose household income is lower.

We next apply OLS to estimate a Mincer wage equation for domestic workers in the SDSS sample and assess how these unfavorable characteristics of eldercare workers affect their wages. The dependent variable of the wage equation is the logarithm of hourly wages. We add a dummy for eldercare workers, the interactive variables of hukou status with provinces of original residence and household income of the employer in log form to the list of explanatory variables involved in the wage regression presented in Table 3. The estimates of the wage equation for domestic workers are presented in Table 6. As the estimates show, eldercare workers earn less than other types of domestic workers by 26.2 to 28.7 percent, other things being equal. Moreover, migrant workers from Anhui and other provinces where eldercare workers account for a disproportionate share earn significantly less than rural Shanghai hukou holders. Quantitatively, compared with rural Shanghai *hukou* holders,<sup>16</sup> the wages of rural migrants from Anhui and other central and western provinces are lower by 40.9 percent. Thus, the fact that eldercare services are disproportionately performed by migrants from Anhui and other less developed regions appears to be a driving force for the low relative pay of eldercare workers compared with non-eldercare domestic workers.

Furthermore, we note that the income of the employer has a significant, positive effect on the wages of domestic workers. The estimates show that a one percent increase in the income of the employer raises the wage of domestic workers by 0.066 percent. With this estimate, the income gap of 30 percent between eldercare users and other domestic service users (presented in Table 2) lowers the wages of eldercare workers by 2 percent, which is approximately 11 percent of the raw wage gap between eldercare and other domestic workers in the SDSS sample. This result provides empirical support to the economic dependency theory for the low wages of care workers. With respect to age, the estimates for the two age intervals have a negative sign, indicating that the wages are 3 percent lower for those older than 40 years of age. However, the two age variables are statistically insignificant. As shown in Tables 1 and 5, eldercare workers are, on average, older than other domestic workers. Because the variable for eldercare workers is highly correlated with the age variables, the age variables are insignificant. This result means that after the correlation with the variable for eldercare is controlled for, the remaining variations in the age variables are insufficient to generate precise estimates of the pure age effect.<sup>17</sup> Hence, despite being statistically insignificant, the estimates for the age variables can still be viewed as evidence supporting the contention that the age disadvantage is a cause of the low relative pay of eldercare workers.

Turning to the other variables, we note that the variables for education and training have no significant effect on the wages of domestic workers, whereas married workers receive a wage premium of 18.8 percent (significant at the five percent level). These results appear to be consistent with the interpretation based on the cultural devaluation theory that the labor market for domestic workers does not recognize skills acquired through education, while rewarding the perceived domestic skills associated with married women.

#### **Findings from interviews**

To explore the driving forces for the low relative wages of domestic eldercare workers, we undertook in-depth interviews with 20 eldercare workers, 20 other domestic workers, community leaders from two districts, and the managers of two service agencies in Shanghai. We asked the interviewees to assess the relative pay for domestic workers in general and eldercare workers in particular. For domestic workers, we also asked how satisfied they were with their wages and working conditions. The interviews were unstructured and open ended.

The interviews reveal a widespread perception that domestic work is a low-paying job because it does not require any skills. Most domestic workers we interviewed considered their wages to be fine. They complained more about long working hours and the treatment they received from the households they served. Some workers blamed themselves for their low wages as a domestic worker because they were less educated and could not find a job in other occupations.

The information obtained from the interviews with domestic workers confirms that eldercare is the least pleasant among the various domestic services and that the pay for eldercare workers is the lowest. We asked the domestic workers who care for children or who cook and clean why they did not take care of the elderly. Some of the responses included the following:

- "I would not care for the elderly, even if they paid me more than 5,000 *yuan* a month (higher than the average wage in Shanghai). Caring for the elderly, you need to accompany them all the time, and you would not have time with your own family".
- "Elderly people cause lots of trouble. It is a tough job to take care of them. I like to take care of children more than the elderly".
- "I am still young and I can find a job of taking care of children. Only those older than 50 years of age care for the elderly because they have no other choices".

Indeed, the eldercare workers we interviewed were, on average, older than other domestic workers by nine years.<sup>18</sup> Most of the eldercare workers came from the rural areas of central and western provinces, similar to the domestic workers in the SDSS sample. Most of them found their jobs through the recommendations of friends or community offices. Some of them worked from 6 am to 11 pm every day. Although they expressed a desire to find a better job, many of the interviewees said that because their education attainment was low, it was difficult to find a job in

other sectors. Some interviewees did not know whether there were any proper positions for them in other sectors. For these workers, caring for the elderly was the only job they felt they were qualified for. One interviewee expressed sympathy for the elderly woman she served and stated that she had taken care of this woman for five years and was reluctant to leave her for a higher wage offer.<sup>19</sup>

Most domestic workers did not think that labor regulations, such as the minimum wage, holiday pay, or overtime pay, had anything to do with domestic workers. Furthermore, they did not feel that they were eligible for or had the right to ask for social insurance. While they were worried about illness and old age security, their solutions were to purchase commercial insurance themselves or return to their home village when they are old and seek a rural pension. The domestic workers appear to have internalized the social devaluation of domestic work and therefore do not have the same sense of entitlement to social protections and social security as workers in other occupations.

A local community leader we interviewed acted a bit surprised when we asked him for comments about the low wages of domestic workers. He stated that he did not think that the wages of domestic workers were low. He was more concerned that the wages of domestic workers had increased noticeably in recent years and that, as a result, many elderly people in the community could not afford to hire caregivers. His responsibility was to provide services for local residents, not domestic workers, who were mostly migrants. When disputes arose, community leaders were responsible for negotiating with domestic workers on behalf of the employers. As a community leader, he acted as a representative of the employers (local residents) and did not consider the improvement of wages and working conditions for domestic workers to be his responsibility. This response of the community leader reveals a striking resemblance between Chinese migrant domestic workers and their counterparts in developed countries, where the governments are more concerned about the accessibility and affordability of domestic care services for their citizens than the rights and economic well-being of migrant workers from foreign countries.

The managers of the domestic service agencies we interviewed had a high regard for domestic work. All of the interviewees predicted that the wages of domestic workers would continue to increase as a result of the aging of the population and the declining labor supply. However, they also claimed that it is difficult to increase the wages and benefits of domestic workers at the present time because their profit-making strategy is primarily price competition. As a result, they must keep labor costs as low as possible. Given the fierce competition among service agencies, formalizing domestic work would drive their companies out of the business. Many service agencies as well as employers in the formal sector also claimed that they are unable to bear the burden of paying insurance premiums for domestic workers.

With respect to eldercare, the managers of the service agencies acknowledged that eldercare is a difficult job and that eldercare workers should be compensated for taking on a more difficult task. However, because it is difficult to raise wages to make eldercare more attractive, only those workers who have no other options are willing to work as domestic eldercare providers. Most households that are looking for domestic workers prefer younger workers to older ones. Appearance is also an important factor for some households when seeking a domestic childcare provider, while some households in Shanghai are prejudiced against people from the rural areas of less-developed regions. When hiring domestic workers to take care of a child, they openly rejected applicants from Anhui or Henan provinces, due to the perception that people from these regions are "backward" and not trustworthy. Moreover, once a migrant female enters into eldercare, it is very difficult for her to change to another type of service because of her lack of experience, and her employment opportunities in other sectors continue to diminish as she gets older. Accordingly, faced with multiple disadvantages in the labor market, domestic eldercare workers have lower wage expectations than other domestic workers.

From the interviews, it becomes clear that the low relative wages for domestic eldercare workers are a result of the interaction of multiple forces. The entrenched cultural devaluation of domestic work, the lack of representation in labor disputes, and fierce price competition in the domestic services market all exert downward pressure on the wages of domestic workers. These downward pressures affect the wages of eldercare workers more than those of other domestic workers because eldercare workers are more marginalized and are more likely to be the victims of cultural prejudice, regional antagonisms, and social discrimination.

#### CONCLUSIONS

In this article, we estimate the relative pay of domestic eldercare workers in Shanghai using data from the 2007 SDSS and the 2007 CHIP. The estimates show that compared with non-domestic workers with the same observable characteristics in the service sector, the wages of domestic workers are significantly lower, and the relative wage gap is greater for eldercare workers than other domestic workers. We investigate the causes of the low wages of domestic eldercare workers through a mixed qualitative and quantitative analysis. The analysis identifies three main causes. First, domestic work is culturally devalued in Chinese society. Second, the users of eldercare are poorer than the users of other domestic services. The income gap between the two types of domestic workers. Third, eldercare workers constitute the most marginalized segment of the labor force in Shanghai, and they endure multiple sources of discrimination in the

labor market. The interaction of these forces places domestic eldercare workers at the bottom of the wage hierarchy.

The article makes two important contributions to the feminist literature. First, the analysis expands the literature on gender and economic transition in China. While the increased gender inequalities in the labor market in post-transition China have been studied extensively, much of the research has focused on men and women who work in the public sphere. To our knowledge, the present article is the first rigorous empirical study that addresses gender inequalities in China from the vantage point of domestic workers. These workers are invisible in the standard labor force and household surveys, and their rights and concerns have largely been neglected by mainstream analysts and policy makers in China. Through an in-depth analysis, the present article brings to light the economic vulnerability of women domestic workers who stand at the intersection of care work exploitation with gender, class, residential status, and regional-based disadvantages in the context of China's market reforms.

Second, the article provides empirical support for feminist theories of the wage penalty for domestic workers using evidence from China. Our analysis is the first to test the economic dependency theory and to empirically validate the contention that serving "clients with no or little ability to pay" is a main cause of the relatively low wages of domestic workers – a subgroup of care workers (England, Budig and Folbre 2002). Moreover, our analysis reveals some commonalities in state policies and the plight of domestic workers between China and many developed countries in the west. In China, as in many developed countries in the west, the commodification of care has emerged as a solution to the growing demand for care services as a result of women's increased participation in the paid labor force, the rapid aging of the population, and the restructuring of welfare programs. To access low-cost care services, the market provision approach relies heavily on women migrant domestic workers who experience discrimination and marginalization resulting from a combination of migration policies, a lack of protection in the labor market, and limited access to welfare benefits. This low-wage strategy has created a vicious circle of increased social exclusion, economic vulnerability, and a persistent shortage of paid care services (Nancy Folbre 2006).

By documenting the plight of Chinese domestic workers, the present article echoes the call for an integrated approach to the provision of care that recognizes the rights of domestic workers to decent pay and equal social protections as well as recognizing the rights of children, the elderly, and the disabled to equal access to care services (Fiona Williams 2012b). This approach involves recognition of the value of care work and a redistribution of care-giving responsibilities from families and toward the state, from socially marginalized groups toward more privileged groups, and from women toward men. Policies promoting such recognition should make migrant domestic workers visible and grant them equal rights to employment, social protections, and skills training (ILO 2013). The state should play an active role in providing, funding and subsidizing care services to make care services more affordable and accessible to low-income users (Jone Creighton Campbell and Naoki Ikegami 2000). To ensure the provision of adequate care and more equitable distribution of care responsibilities, the redistributive agenda should also demand family-friendly workplace regulations, such as flexible working hours and paid leave, to encourage working men and women to take on unpaid care responsibilities.

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## NOTES

<sup>1</sup> This figure is estimated based on the 2007 Shanghai Domestic Services Survey, which we will introduce later in the paper.

<sup>2</sup> Source: People's Daily, September 3, 2009. <u>http://www.chinanews.com/gn/news/2009/09-</u>03/1847369.shtml.

<sup>3</sup> To protect domestic workers, the 189 ILO Convention was adopted in 2013. As of 2015, the Convention has been ratified by 22 countries.

https://en.wikipedia.org/wiki/Convention\_on\_Domestic\_Workers

<sup>4</sup> See Gunseli Berik, Xiao-yuan Dong and Gale Summerfield (2007) for a literature review on gender and economic transition in China.

<sup>5</sup> These data are derived from the Surveillance Study on Migrant Workers, National Bureau of Statistics, 2012.

<sup>6</sup> http://www.ilo.org/wcmsp5/groups/public/---asia/---ro-

bangkok/documents/publication/wcms\_114261.pdf.

<sup>7</sup> http://www.12333sh.gov.cn/2009wza/gkxx/201104/t20110418\_1129326.shtml.

<sup>8</sup> Based on data from the China Statistical Yearbook (2011). The number of participants in pension programs for enterprise workers was approximately 260 million, while the number of participants in pension programs for public employees was less than 10 million in 2010.

<sup>9</sup> Based on data from *China Statistical Yearbook* (2009).

<sup>10</sup> Xinxin Chen and Xiao-yuan Dong (2011) find that elderly people with a lower socioeconomic status receive less income transfers from adult children, all other things being equal. In the sample analyzed by Chen and Dong, women account for 73 percent of the elderly in need of care because women tend to outlive men. Gender gaps in life expectancy and access to employment-related provisions such as pensions and health insurance exacerbate the economic vulnerability of elderly women and reduce their ability to pay for care services.

<sup>11</sup> All domestic workers are hourly workers. The use of hourly workers is more prevalent than that of live-in workers in Shanghai because most domestic service users do not have a large apartment to accommodate live-in domestic workers.

<sup>12</sup> Rural migrants are those who hold rural *hukou*, and urban residents are those who hold urban *hukou*. We use "rural migrants and "rural *hukou* holders" interchangeably when presenting the empirical results.

<sup>13</sup> Because a majority of domestic workers in the SDSS sample are not live-in workers, the in-kind compensation such as accommodations and food that these workers received is small.

<sup>14</sup> We adopt a human capital approach to wage determination, with all the well-known limitations this approach brings about.

<sup>15</sup> The CHIP sample for the wage regressions excludes observations for workers whose education is above the level of high school because there are no domestic workers with an educational attainment beyond this level in the SDSS sample.

<sup>16</sup> Rural Shanghai *hukou* holders are rural migrants from the counties under the jurisdiction of the Shanghai municipal government.

<sup>17</sup> When the variable for eldercare is excluded from the wage equation (1) presented in Table 6, the coefficient of the variable for the 50-70 age interval becomes statistically significant at the 10 percent level. To streamline the presentation, this wage regression is not presented.

<sup>18</sup> Specifically, the average age of eldercare workers and other domestic workers is 49 and 39.8 years respectively. The eldercare workers are less educated than other domestic workers and worked longer hours.

<sup>19</sup> Interestingly, feminist scholars have contended that the altruistic nature of the work has made care workers such as school teachers and nurses reluctant to take job actions to seek better earnings for their work in western, developed countries (Cameron Lynne MacDonald and David A. Merrill 2002).