Jobs, Working Hours, and Remuneration Packages for Migrants and Urban Residents

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Abstract

In this chapter we look at the working conditions and remuneration of migrants versus incumbent urban residents in China in the 2008 wave of the RUMiCI project. We find that the average hourly compensation for an urban worker is more than double that of migrants. Inequality of non-wage compensation is higher than that of hourly wages, mainly because urban workers are much more likely to benefit from various insurance schemes than migrants. Nearly three-quarters of the hourly compensation differences can be explained by observable characteristics. Returns to education and experience are lower for the migrants. They also have less education and accumulate less experience, perchance due to the temporary nature of the migration. We find strong differences between cities. For example, total compensation in Wuxi, Hefei, Ningbo and Chengdu is roughly the same for migrants as for the equivalent urban city dweller with the same characteristics. This equal treatment is also reflected in non-wage remuneration components. Yet in Chongqing and several other cities, a migrant is paid less than half the equivalent urban city dweller. This suggests that some cities 'compete' for migrants whilst others do not, and it also suggests that there are many city dwellers who would be better off if they move to other cities.

Keywords: China, migration, human capital, remuneration, regions.

We would like to thank all commentators on this chapter.

1. Introduction

China is currently transforming rapidly from an agricultural society to a modern society dominated by industry and services. Of the about 900 million workers originating from the countryside, roughly 130 million shifted from rural agricultural sector to cities by 2006 (NBS 2007). This is expected to grow rapidly in the coming years. In some urban cities, rural-urban migrant workers already account for more than half, or even two-thirds, of the total labour force and it is possible that this domination will arise in other cities in the near future. How do these migrant workers fare in city labour markets relative to their urban counterparts? Are they competing in the same labour market? These are important policy issues, as well as of academic interest.

In the past, migrant workers have been discriminated against with regard to the type of jobs they were allowed to take and the compensation package they received (Meng and Zhang, 2001). The Chinese government has moved towards eliminating such discrimination in the past few years. These attempts, however, might have faced obstacles from those who gain from the status quo - for example, local governments, and employers. From the local governments' perspective, their first priority is to reduce the local unemployment rate and increase the earnings of local people, not migrants. To achieve this goal, they may try to reduce the competition from migrant workers or at least put them into a position where they have limited power to bargain for better conditions with their local employers. From the employers' point of view, minimizing labour costs is the first priority. To this end, they may treat migrants differently by not paying migrants welfare insurance or increase the hours migrants work if they can avoid serious scrutiny from the local governments.

This chapter documents the employment, jobs, and remuneration packages of Chinese migrants, with particular attention to the comparison of their labour market outcomes with those of the resident urban hukou holders (those with official permission to live in the city). The main distinguishing feature of our analysis versus other writings in the literature is that we have made an attempt to systematically measure and price the importance of non-wage components to total remuneration, including the value of pensions, unemployment insurance, and health insurance. Our focus on cross-city differences is also a new aspect of our study, which is only possible due to the wide coverage of the data.

The next section provides background information on labour market institutions for migrants, as well the insurance schemes and direct subsidies. Section 3 describes the important

aspects of the Rural Urban Migration in China and Indonesia (RUMiCI) data and presents descriptive statistics of the labour market performance of migrants and that of their urban counterparts. The fourth section examines the issue of how migrants perform in urban labour markets in a more in depth analysis. Conclusions are given in Section 5.

2. Background

The historical segregation of rural and urban labour markets has had a long lasting effect on rural-urban migration. Because rural people were prohibited from moving to cities, and were never provided social welfare from the state, it was "natural" to treat them as "guest workers". Because city governments only represented city hukou holders, their objectives were to ensure the cities' economic growth and to protect the jobs and earnings of city people. As a result, rural migrants were restricted in the type of jobs they could take and their working conditions were less scrutinised by the central government. Public service and state owned enterprise jobs were, and often still are, restricted to urban hukou holders. Consequently, migrant workers took the lower paid jobs, worked longer hours, and received less attractive compensation packages than urban workers.

There was previously open discrimination against rural migrants in terms of job access, wages, and welfare access. Since the early 2000s, the Chinese government has passed various laws and regulations to provide migrant workers with equal employment opportunities and basic labour market protections. Employers are required to pay minimum wages and are prohibited from making workers work unreasonably long hours. With regard to other welfare, employers are supposed to contribute to both urban workers and migrants.

The process of legislating towards an embryonic welfare system is still ongoing in China. A large set of reforms was approved by the National People's Congress (NPC) in 1995, including a host of regulations on discrimination, working hours, wages, labor safety, social insurance, labor disputes and labor contracts. These changes have only been slowly enforced. In 2007 the NPC passed the Labor Contract Law to be implemented in January 2008. Though similar in scope to the 1995 law, the 2008 Labor Contract Law expanded the types of allowable labor contracts from one to three, mandated written contracts for full time workers and stipulated further requirements on the contents of a contract. Importantly, the 2008 Labor Contract Law requires social insurance information to be included in all written contracts.

Despite the apparent importance of such legislation, it must be stressed that local authorities retain much power. For example, the Ministry of Labour and Social Security (MOLSS)[1] announced China's first minimum wage in 2004. However, Order 21 'Provisions on Minimum Wages' was more akin to an outline of criteria provinces,[2] municipalities and autonomous regions should consider when determining minimum wages, rather than an actual minimum wage pronouncement. China is no different to many nations where regional variation in work standards, wages and benefits are allowed to operate within a national framework, though perhaps the central government is not as strong as it is elsewhere. This is particularly apparent in the enforcement of centrally directed mandates such as the provision of social insurance where our data indicates many migrants are not receiving insurance contributions from their employers.

The recently reformed Chinese welfare system takes a form of combined employer and employee contributions, whereby unemployment, health, pension, and work injury insurances, and housing subsidies, which is known as "Five insurance, one fund", are all saved in individual accounts and both employers and employees are supposed to contribute to these accounts. The level of contribution may differ from region to region, but they do account for a large proportion of labour costs.

Whether employers follow these labour protective laws and regulations, however, to a large extent, depends on the level of scrutiny city governments impose on them. Given that these protections are very costly to employers and that economic growth is one of the most important objectives of the city governments, very often migrant rights are sacrificed because of lack of legal/regulatory enforcement by the city government.[3] Our chapter provides recent information on this.

Migrants, as "guest workers", on the other hand, have little incentives to care about welfare insurance, because they will often not be in a position to claim the insurance: they will simply not be allowed to stay in the cities to enjoy any pensions or unemployment benefits connected to their

[1] Recently Minister of Labour and Social Security (MOLSS) is changed to Minister of Human Resources and Social Security (MOHRSS).

[2] Provisions on Minimum Wages, Order 21, Ministry of Labor and Social Services, January 20, 2004. Accessed on 31 March, 2009. <http://www.fdi.gov.cn/pub/FDI_EN/Laws/labourmanagement/P020060620378448281759.pdf>

[3] Of course, not all employers are slack in following labour protection laws. Large firms and any firms which regard these protections as part of the efficiency wage package may voluntarily pay welfare payments for their migrant workers. We do not examine this issue in detail later on in the chapter, but can mention that total compensation packages are indeed higher in large firms.

working life. The Ministry of Human Resource and Social Security has in recent times discussed reforming this system to allow itinerant workers to transfer their pensions, but nothing concrete has so far eventuated.[4] It is to be expected that migrants at present mainly care the most about the total amount of cash income they earn, and hence, can bring home.

In addition to cash and welfare insurance payments, in-kind benefits are also included in the compensation package for both urban employees and migrant workers. The types of in-kind benefits, however, differ considerably for the two groups. For migrants, this often takes the form of meals and accommodation, whereas for urban workers it may range from eggs, rice, or tea to shopping gift vouchers. The reason for paying migrants and urban workers different in-kind benefits may be related to their residential status. As temporary residents, migrants are more attracted to benefits such as meals and accommodations, while for urban workers, except urban singles, these benefits are less attractive.

In summary, the total compensation package in the Chinese urban labour market generally comprises of three components: the wage/salary, various kinds of insurance payments, and in-kind payments. In the next section we will examine the unconditional differences in type of jobs, working hours, and remuneration packages for migrant workers and their urban counterparts.

3. Data and summary statistics

We use the 2008 RUMiCI survey of the migrants and urban hukou holders. The RUMiCI data has been succinctly described in chapter x of this book, and all the questionnaires and background material can be found at http://rumici.anu.edu.au.

In this chapter, we use data from the Urban Migrant Survey and Urban Household Survey. Table 1 present summary statistics of important individual characteristics and work related variables for the sample of total labour force (i.e. aged 16 to 65, not currently at school or disabled) and the sample of wage and salary earners who are aged 16 to 50[5] and reported non-zero earnings. The latter

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[4] 人力资源社会保障部负责人就农民工参加基本养老保险等两个办法答问, Xinhua News, 5th February, 2009. Accessed 31 March, 2009.
< http://news.xinhuanet.com/politics/2009-02/05/content_10769408.htm>

[5] The reason we restrict our sample to 16 to 50 years old is two-fold. First, there is only a very small sample of migrants (4.3%) who are older than 50 years of age, while for urban workers this group accounts for 20% of the total sample. Second, the retirement age for urban workers varies between 50 to 65. Those who are older than 50 but still working is a selected group. The exclusion of above 50 years old can increase the comparability between the two groups and reduce possible selection bias for the urban workers.

sample is used in this chapter to examine working condition and remuneration packages for migrants and urban workers.

The urban labour force contains individuals on average 11 or more years older than their migrant counterparts. There are less male workers and more married workers in the urban sample. In addition, urban workers have 1 to 1.5 more years of education, are 18 per cent more likely to sat the university entry exam, and for the subsample of those who took the entry exam, the average score is 30 to 60 per cent higher.

There is a large difference in the employment rate between the urban and migrant labour force. On average, 69 per cent of urban workers and 91 per cent of migrant workers are currently employed. This difference may be mainly related to the fact that migrants are not guaranteed any welfare benefit. If they cannot work, they have limited means of supporting themselves. Hence, those who cannot work will not migrate and as a result the current migrants are a selected group. Among the labour force, 22 per cent of the migrants and 5 per cent of the urban workers are self employed.

The bottom panel of Table 1 reports information for the wage and salary earners who are aged 16 to 50. In terms of individual characteristics, this age restriction reduces the age gap of migrants and urban workers from 12 to 8 years, increases the difference in their probability of having sat the university entry exam from 18 to 30 per cent, while not affecting the differences in other characteristics by much.

The second half of the bottom panel of Table 1 describes urban workers and migrants' working hours, occupational distributions, and job tenure. On average, migrant wage/salary earners work 35% more hours per week than their urban counterparts; they mainly work in either trade/service or labouring jobs while the majority of urban workers are managers, professionals or clerks. Migrants also have shorter lengths of job tenure than urban workers. On average they have only worked in their current job for 3 years while urban workers have been in the job for 11 or more years.

Table 2 reports summary statistics related to remuneration packages. There are three panels in the table. The first panel presents information on the take-up rate of insurance packages. It shows that only around 20 or less per cent of migrant workers have these insurances while the proportions for urban workers are as high as 50 to 70 per cent. This stark contrast indicates that in most cases migrants do not receive their welfare entitlement. Obviously, the inclusion of these remuneration aspects will increase the differences between migrants and urban residents. It is important to note

that these stark differences do not hold in all cities. In Wuxi for instance, the take-up rate of unemployment, pension, and health insurance for migrants are 60, 61, and 58 per cent, respectively, which are almost the same as that of urban hukou holders (72, 78, and 81 per cent, respectively). However, in Shanghai, a mere 120 kilometers from Wuxi, 4, 6, and 7 per cent of migrants and 85, 90, and 71 per cent of urban workers receive the three type of insurances, respectively. These differences suggest that large differences in city enforcement practices exist.

To compute the value of these in-kind wage contributions, we combine self-reported information by the respondent as to whether their employer contributes to each of the six funds with the information disseminated by each city as to the level of compulsory employer contributions. Employers are supposed to contribute a base level for each employee, plus a certain percentage of the wages. These levels and percentages are determined independently by each city government. They usually stipulate an upper and lower limit of the base, thereby creating a maximum and minimum amount that firms must contribute.

Although the rules for calculating employer contributions differ between cities, most cities tend to adopt similar approaches. One approach is to require firms to pay a city-mandated proportion of their total wage bill for a particular insurance, and each worker 'receives' that total amount divided by the number of workers in the firm. For the five insurance schemes, the overwhelming majority of cities adopt this method. The alternative model is that each firm must pay some percentage of each worker's average wage from the previous year. Nearly every city uses this method for determining employer contribution towards the housing fund, and Dongguan, Ningbo and Shanghai also favor this approach for the five insurance schemes.

As rules of thumb, pension contributions are 20% of wages, injury insurance is around 1% of wages, medical insurance is around 8%, unemployment insurance is usually 2%, maternity insurance is less than 1%, and housing funds are around 5%. Hence the average worker who is fully insured would obtain non-wage monetary rights worth around 35% additional wages, mainly in the form of pensions.

For each city we collected information on the levels of mandatory contributions.[6] Where there were a range of contribution rates that employers could pay and no means of determining which range they would opt for, we assumed the minimum level applied to our sample. With regards to the workplace injury insurance where there are a range of industry-specific contribution rates, we were able to determine the appropriate rate because we had information on each worker's industry.

[6] The detailed information on the rules for each of the 15 cities are available upon request from the authors.

The basic wages upon which the value of the insurances are calculated are bounded between 1000 to 10000 yuan monthly.

We valued these employer contributions on a 1-to-1 basis with actual wages, presuming that the costs employers made towards the insurance of their employees translated into an equivalent expected benefit to these employees. We did not count the contributions that employees make out of their wages because an employee contribution is simply a shift between their take-home wages and their future drawing rights when they retire, become unemployed, or sick. In totality, our calculation method gives a conservative estimate of the amount of additional remuneration each Chinese worker receives.

The next few rows in the first panel of Table 2 reports our calculated mean value of each insurance benefit for urban and migrant workers, while the total value is summarized in the last row of the second panel. On average, urban workers receive 7531 yuan annually from their employers in the form of various insurance funds, while the value for migrant workers is merely 1235 yuan, or 16% of that received by their urban counterparts.

The second panel of Table 2 shows the annual and hourly earnings for urban workers and migrants.[7] On average, urban workers earn 27,309 annually, while migrant workers earn 17,198 per year, which is 40 per cent below the earnings of the urban workers. If we look at hourly earnings, the pay differential between urban workers and migrants is even larger. The hourly earnings of migrants are only 45% of those for urban workers. This differential is almost the same as that observed 12 years ago in Shanghai, where migrant hourly earnings were 48% of those for their urban counterparts (Meng and Zhang, 2001).

We then present our best measure of total compensation, including non-wage remuneration and wages. The difference in hourly compensation between migrants and urban residents is larger for total compensation than it is for wages: migrants earn about 38% per hourly in terms of total compensation compared to urban hukou holders. Male migrants get only 36% of what urban men get whilst female migrants get 45% of what urban females get.

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[7] The question on migrant and urban worker's earnings asks "From all paid jobs, how much are you normally paid per month? (including wage, bonus, subsidies, and estimated in-kind payments)". However, as the main part of the question asks monthly payment and estimating in-kind payment in money term is a complicated process (most in-kind payment is paid annually or irregularly and it is very hard to estimate it in money term and convert it into average monthly payment), we therefore suspect that most respondents did not include the in-kind payment. Hence, in this chapter we consider this question to only include cash payment. In the next wave, this question will be modified.

The last panel of Table 2 examines the levels of meal and accommodation directly provided, as well as the monetary subsidy implied. These are part of the reported wages, unlike the insurance contributions. The data show that around 70 and 64 per cent of migrants receive some kind of in-kind or money subsidies for meals and accommodation, respectively. The total estimated meal subsidy on average is worth 1847 yuan and 728 yuan for migrants and urban workers respectively, representing 11 and 2.5 per cent of their respective annual wages. Housing subsidies are much lower than the meal subsidies, accounting for 4.5 and 0.3 per cent of migrant and urban workers' annual earnings.

The relationship between earnings and insurance payments are presented in Figure 1, which shows an almost linear relationship. Surprisingly, despite the large discrepancy in take-up rates, the relationship between earnings and insurance payments is almost the same for the migrant and urban samples.

To examine the unconditional relationship between hourly total compensation and various human capital related variables, we present the following figures. Figure 2 shows the relation between age and hourly total compensation for urban workers and migrants. The profiles for males and females are quite similar, showing sharper age profiles amongst the urban workers, and earnings peaks around the age of 35 for women and 40 for men. This profile is in line with what one would expect from human capital theory - experience in a particular field makes individuals more productive and gives them time to show the value of their education. For migrant workers, however, the relationship is very flat. It is also interesting to note that the starting wage at age 15-18 is only marginally higher for urban workers, which probably reflects the fact that the few urban workers who start to work at such a young age were school-dropouts.

Figures 3 show the relation between job tenure and total hourly compensation. The tenure profiles for urban workers looks similar as the age-profile, except that the benefits of longer tenure tailing off after 10 years. For migrants, the tenure-earnings profile is also very flat.

Figures 4a and 4b show the relation between education levels and average hourly earnings by gender for urban and migrant workers, respectively. For both groups, there are positive returns to education, but the rate appears much higher for urban workers (Figure 4a) than for their migrant counterparts (Figure 4b). We also plot the distribution of education amongst the migrants and the urban sample in these figures, showing that the urban sample is dominated by those with at least senior high school qualification whilst the migrants predominantly have only junior high school. If

the returns to higher education are increasing (which they indeed are), then this means that the rates of return to education will be higher for the urban workers than for the migrants.

The above summary statistics seem to lead to the following general findings. Migrant workers are more likely working in blue collar jobs, they work around 35% more hours per week than urban workers, and yet they get paid much less than their urban counterparts. When comparing hourly earnings, migrant workers only get paid 50 per cent of that for their urban counterparts. Not only do they get paid less, employers are more than 70 to 80% less likely to pay for their various welfare insurances. We now turn to the question of how much observed differences in education, tenure, age, and other characteristics, can explain of the wage and total compensation differences.

4. A more in-depth look at remuneration

In order to gain more in-depth understanding, we now estimate the standard Mincerian compensation regressions for the migrants and the urban hukou holders separately as follows:

$$\begin{aligned} Y_i^M &= X_i^M \beta^M + u_i \\ Y_i^U &= X_i^U \beta^U + v_i \end{aligned} \qquad (1)$$

where superscripts *M* and *U* indicate migrant and urban workers, respectively; subscript *i* represents individuals. *Y* is the outcome variable which takes the form of either log-hourly earnings or log-hourly (total compensation) ; *X* is a vector of observable individual and firm characteristics, including age and its square, current job tenure and its squared term, gender, marital status, individuals' health condition and height, years of education, individuals' university entry exam score if the individual sat in the exam (for those who did not sit the exam, the score is set to zero), a group of city dummy variables, and firm size; u_i and v_j are error terms. [8]

The main criterion for variables to be included in this type of regression is that they can reasonably be argued to measure productive characteristics: if all productive characteristics are

[8] Usually in wage regressions, the problem of selectivity arises: not all who can work, work, and those that do work have some unobserved characteristics not equal to those that do not work. For migrants this issue does not seem to be serious as more than 90 per cent of those in the labour force works, though the decision to migrate also poses an important selection issue. However, it might be reasonable to assume that the unobserved characteristics determining who works (migrate) and who does not, is the same for migrants and city dwellers. The rationale for this is that whatever reasons we can think of for selection amongst the urban workers also seems likely to apply to the migration selection: those who are currently at school, the elderly, the sick, those looking after children, are not in a position to work/migrate whether they are in the city or in the countryside. In the case of this chapter, neither instrumental variable approach nor inclusion of preference variables is realistic given the cross-sectional nature of the data. Hence we will rely on the plausibility argument that whatever selectivity applies to the migrants also applies to the urban community.

included and are equally rewarded across groups, one would expect to find the same coefficients on all variables in (1). Education and experience are obviously important human capital characteristics that are quite likely to influence productivity. Similar productivity arguments can be made for all the variables included. The variables firm-size and city-intercepts need more careful interpretation. Larger firms can reap economies of scale and thus pay more, attract better workers but also train its workforce better and are more likely to implement minimum labour standards. Hence coefficients on firm-size partly reflect unobserved individual differences in productivity and rent-sharing (=selectivity), but also pick up the true productivity increasing effect of workers being in large firms.

Table 3 presents the results from estimated equation (1), while Table 4 shows the same results for separate regressions for male and female samples. Columns 1 to 3 in Table 3 show the results for the migrant sample while columns 4 to 6 are for urban workers. The first column for each sample (columns 1 and 4) reports the results from using log(total compensation) as the dependent variable and the other columns use log(hourly earnings). Column 3 estimates the same model as column 2 but adds in whether an individual has housing subsidy and various welfare insurance dummy variables to examine the conditional correlation between non-monetary components and monetary components within the remuneration package. When separately estimating the earnings equation for men and women in Table 4, we did not include the variables presented in Columns 3 and 6 in Table 3. Below we mainly discuss columns 1 and 4 of Table 3 for simplicity unless significant differences in findings are observed.

We find that most of the variables which proxy human capital are statistically significant and have the right sign for both samples. In particular, age and current job tenure have nonlinear relationship with log hourly earnings for both samples. While urban workers have a much higher age-earnings profile than migrant workers, the two groups have almost exactly the same current job tenure profile. The difference in age-earnings profiles between urban and migrant workers is mainly driven by the difference among male urban and migrant workers (male migrant workers have the steeper profile) while the difference in tenure-earnings profiles is driven by the difference of the female workers (female migrants have the steeper profile).

The returns to years of schooling are more than double for urban workers than for migrant workers. If we use dummy variables indicating different education levels (See Figure 5 for the

estimated coefficients for the two groups)[9] we find that they are slightly higher for migrants at junior and senior high school level, while higher for urban workers at above senior high school level. Over 85 per cent of migrant workers have senior or below as their level of education, whereas more than 53 per cent of urban workers have above senior high school level education (see Figure 4). This means that whereas urban workers do get the returns of the higher levels of education, migrant workers do not and as such, on average, have lower average returns to education.

Ability sorting does of course slightly bias these findings on returns. As the majority of urban workers have above senior high school qualifications, those who only have junior or even senior high school qualifications may be at the relatively low end of the ability distribution. For migrant workers, however, only very small proportion has post senior qualifications, which means the estimated returns will be relatively higher for the low levels of education amongst migrant workers.

Note that while the estimated results with years of schooling reflects the average increments in wages across the education levels relevant for that group, the estimated returns to each level of education are relative to the omitted category (primary) within the group. Thus, for our purpose, estimated return to years of schooling is more relevant and reflects the average difference in returns to education for between the two groups.

Another interesting finding is that university entry scores have a positive and significant impact on earnings for both migrant and urban workers, suggesting that it may, to a certain extent, capture individuals' ability. However, the return for urban workers is more than double that of migrant workers. The separate regression for male and female samples shows that this effect is stronger for migrant male workers and urban female workers.

The other two human capital variables, health and height, both have positive and significant impacts on earnings for migrants and urban workers. While the effect of health is larger for the urban sample, the effect of height is much larger for the migrant sample than for urban sample. Perhaps this is related to the fact that majority of migrants are engaged in physical labouring jobs where physical strength is better rewarded.

There is a large premium for marriage amongst the urban sample (8.3%), which is similar to that find in the Western labour markets. In Western countries, a usual explanation is that marriage selects the more productive individuals, i.e. unproductive men do not marry. Another usual

[9] The full results are not reported here but available upon request from the authors.

interpretation in Western countries is that married people are better looked after and thus healthier than the unmarried (see, for example, Chun and Lee, 2001). Interestingly though, there is no marriage premium for the migrants, perchance because there is no such selectivity effects or 'caring effects' of marriage in China. Divorced male migrants receive no wage penalty, but divorced urban males suffer a wage penalty (coefficient = -0.15), perhaps because only very unproductive urban men divorce. Females earn less than males, but the gender differential in earnings is much larger among urban workers, 17%, than that among migrant workers 4%. This may also, to some extent, indicate the degree of marketization of the two labour markets. Migrant women seem to be more fairly treated in the market place than their urban counterparts, though one might read this result the other way round, i.e. urban women face some discrimination relative to their men whereas there is no such distinction between migrants.

Firm size also has a strong impact on earnings for both migrant and urban workers, though there is no unambiguous theoretical interpretation of firm size. Because we have so far interpreted these wage differences as productivity differences, we implicitly interpret the firm size effect as picking up unobserved heterogeneity of workers (i.e. bigger firms are more selective). However, the impact is stronger for urban workers than for migrant workers. Particularly for medium firm sizes (between 55 and 99), urban workers receive a big premium relative to migrants. Interestingly, we can see that the compensation premium is about 10% higher for the largest firms (above 1000) than the wage premium, especially for migrants. This suggests that really big firms enforce labour laws and regulations better.

Finally, we find that there are significant earnings variations among different cities for both migrant and urban samples. These city earnings differentials partly reflect differences in costs of living, and may also partly reflect variations in labour demand across different cities. The lowest paid city for migrants is Luoyang, which pays about 57% (=100%*(1-$e^{-0.845}$) less than the default city: Guangzhou, all else constant. For urban individuals, the lowest-paid city (Bangbu) would pay about 61% (=100%*(1-$e^{-0.952}$) less than Guangzhou, all else constant. Interestingly, the ranking of city level pay differentials differ quite a bit between the migrant and urban samples, suggesting that there are factors over and above the cost of living differential which affect across city earnings differentials. Shanghai, for instance, pays almost the same to urban hukou holders as Guangzhou (the city dummy is small and insignificant for urban workers), but pays its migrants 10 per cent less than Guangzhou.

We now turn to the results presented in the third column for each sample, where we intend to investigate the issue of whether non-monetary components in the remuneration package play a

role of compensating differential, entitlement, or efficiency wage. We see that the conditional relationship between being paid unemployment insurance for migrant workers is negative, whereas for all the other types of insurance are positive. Given the fact that the conditional relationship 'should be neutral' (entitlements are proportional to wages), these findings can be interpreted to mean that migrants are more likely to be given their entitlements, except for the unemployment benefit, when paid higher wages. For urban workers, however, none of the coefficients are statistically significant, confirming that these are proportionally (and hence constantly) related. The housing fund for both groups has a positive relationship with log-earnings, suggesting it is mainly for the highest wage earners. For migrants, most insurance payments, including housing fund, are positively related to earnings.

We next try to answer the question of the aggregate reasons for the difference in remuneration between urban and migrant workers. We adopt a Blinder-Oaxaca-type decomposition methodology. This essentially decomposes the remuneration into parts that can be captured by differences between two groups in observed characteristics (say, different levels of education) and parts that can be captured by the differences in the coefficients of these characteristics (say, differences in the coefficient on education). Specifically:

$$\exp\{\overline{Y}_i^U\} - \exp\{\overline{Y}_i^M\} = [\exp\{\overline{X}^U \beta^U\} - \exp\{\overline{X}^M \beta^U\}] + [\exp\{\overline{X}^M \beta^U\} - \exp\{\overline{X}^M \beta^M\}] \qquad (2)$$

where the first term on the right-hand side of the equation (2) denotes the contribution of the observable characteristics in the hourly-earnings differences, and the second term denotes the difference due to differential returns to characteristics - the part which is due to 'constraints' by which we mean constraints on the equal market valuation of the same characteristics between these two groups. We will interpret the first part as arising from characteristics and the second part as arising from the various constraints on the migrants, including impediments to their ability to choosing jobs. To handle the index number problem we weight the decomposition by both urban and migrant coefficients and taking the average of the two decomposition results.

Table 5 presents result from the decomposition exercise for mean anti-log hourly earnings and compensation from the total sample regression as well as the decomposition results using separate male and female regression results.[10]

[10] Since log-wages are virtually symmetrically distributed we interpret the decomposition as a decomposition in median wages. Mean hourly wages are of course higher than the exponent of the average log wage by a factor equal to $e^{0.5*s*s}$ where s is the standard deviation of log compensation. Mean wages are roughly 30%

Using the total sample regression results, we find that the mean anti-log hourly earnings is 9.42 Yuan for urban workers and 5.02 for the migrants. Around half of this difference is explained by observable characteristics, i.e. the migrants would earn only 7.02 Yuan per hours if they were paid according to the returns enjoyed by the urban individuals. Conversely the urban workers would earn 7.45 yuan if they were paid according to the returns obtained by the migrant workers. Hence, 46% of the difference is 'unexplained' in terms of the characteristics and is driven by differential returns. The unexplained portion is in general higher for the female workers than that for the male workers,

The decomposition results for total hourly compensation show the same basic pattern as that for the hourly earnings. However, the proportion of unexplained component is higher at 51% of the compensation differentials between the two groups.

If we now look at the earnings differential between urban and migrant workers by cities (Table 6), we find some interesting differences. We will focus mainly on total compensation differences in Table 8. In some cities, migrants are paid much less than they would be predicted to be paid according to urban pay-scales. In Dongguan, for instance, migrants are only paid 5.13 Yuan per hour though the equivalent urban individual would have been paid 8.85 Yuan per hour – about 80% more. Similar large differences which cannot be explained by the endowment differentials are seen for Guangzhou, Shenzhen, Dongguan, Shanghai, Chongqing, Wuhan, and Chengdu.

Perhaps most interesting of all though, is that there are cities where the migrants are paid almost the same or even more than their urban equivalents. In Bangbu for instance, migrants are paid 3.57 Yuan per hour, whereas their urban equivalent would have been paid 3.03 Yuan per hour. Similarly, urban workers are paid 5.04 Yuan an hour and their migrant equivalent would have been paid 5.13 Yuan an hour. Taking average of the two differences, around -20% of the total earnings differentials can be attributed to unexplained component. In other words, migrant workers are treated 20% better than their equivalent urban counterparts in the labour market. If the decomposition is conducted using gender specific regression results, the wage advantage observed for migrant worker disappears. In Wuxi, migrants get paid 1.5 Yuan less per hour (9.27 versus 7.76). However, if migrant workers receive the same rates of return to their endowments as their urban counterparts, their average hourly earnings would have been 5.94 Yuan, which is 1.82 Yuan less than what they actually earned. The opposite is observed for urban workers. Had urban workers been treated as migrants, their earnings would have been 10.08 Yuan per hour, 0.81 Yuan more than what

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higher than median wages. Focussing on median wages however means we focus on the middle of the sample and means the results are less affected by outliers.

they actually earned. On average in hence Wuxi, migrant workers are doing better than urban workers with same endowments. One interpretation of this is that migrants are selective about which city they go to and that it is those migrants who are relatively more able that go to cities like Wuxi where they are rewarded on a more equal footing.

The above decomposition results show that a large difference in the how migrants fare in the urban labour markets across different cities. The majority of our sample cities pay migrants much lower earnings or compensation than their equivalent urban counterparts, but Wuxi and Bangbu seem to be different. It is perhaps important to point out here that it is not the case that all 'equal pay' cities are poor. Average compensation for urban residents in Wuxi is ranked 5th for our 15 cities, but yet pay is better there for migrants than for urban workers. What does appear true is that pay is very unequal in all the largest cities.

4. Conclusion

Summarising, we found that:

1. Migrants wage and salary earners start at much lower wages than urban workers and work some 58 hours per week on average, compared to only 43 hours per week for urban wage and salary earners. They mainly occupy the lower end of the labour market. Over 90 per cent of migrant workers have a trade/service/physical labourer job. This ratio for urban workers is only 36 per cent.
2. Migrants are not only paid less monetary wages, but their employers are less likely to make welfare insurance contributions (=non-wage remuneration). However, on average, they are paid a higher in-kind payment in the form of meals and accommodation. The inclusion of non-wage remuneration increases the difference between migrants and urban residents: the average migrant earns 6.06 Yuan in wages per hour, compared to 13.23 made by an urban resident. Total compensation for the migrant is still only 6.56 Yuan per hour, whilst it rises to 16.87 for urban residents. Hence migrants' wages are 45% of urban residents' hourly wages whilst total hourly compensation of migrants is merely 37% of that of urban residents.
3. The rates of return on job tenure are similar for migrants and urban workers, whilst return to ability, captured by university entry scores, are markedly lower for migrants. Returns to education are also lower for migrants, though perhaps this has something to do with the differential returns at different points of the education distribution (urban returns are on the

steep part of the education production function - between high-school and university, whilst migrant returns are on the flat part between junior high-school and high-school).

4. Decomposition analyses reveal that the observable characteristics of migrants (age, education, gender, marital status) explain over 50% of their basic hourly-remuneration difference with urban workers. This is due mainly to the much lower levels of experience and education of the migrants. In particular, the differences in experience may be due to restrictions on migrants staying in cities, while the differences in education level may be related to the lack of investment in education for rural population.
5. The difference in wages between cities is enormous, both in the remuneration to migrants and to urban workers. Total compensation in Wuxi and Bangbu is roughly the same for migrants as for the equivalent urban city dweller with the same characteristics. Yet in Shenzhen, Guangzhou, Shanghai, and Dongguan, a migrant is paid less than half the equivalent urban city dweller. These patterns indicate large policy differences between areas, with some cities actively competing for migrants and some keeping migrant out of the higher-paid professions and denying them insurance contributions. The difference between cities in wages paid to urban workers is also large. Guangzhou pays about 100% higher wages than Bengbu to urban workers with the same observable characteristics. The difference in pay between migrants working in different cities is less than between urban workers, suggesting perhaps that there is more mobility across cities for migrants than for urban workers.

The overall picture that emerges from these findings is that the young migrants in the city are used as cheap labour, with the migrants working some 8 years on average in a job[11] for which they work around 60 hours a week. Migrants are still often housed and fed at their workplace. Whilst they enjoy lower rates of return to education than urban individuals, the lower level of accumulated experience for migration due to the temporary nature of the migration contributes to the wage gap between the two groups as well. The potential productivity gain that would be possible if the migrants could achieve the same returns to their investments as the urban hukou holders are in the order of a 50% remuneration increase for the migrants.

[11] This figure is derived by taking the average amount of time spent in the current job and presumes a constant exit rate. Then, the average total duration is double the average observed duration.

The use of migrants as second class citizens in the cities where they work appears to be creaking at the seams however: the unequal treatment of migrants is broken in those cities where, in order to attract migrants, the migrants are relatively well-paid and are treated equally both in terms of wages and compulsory insurance contributions.

It also appears that it is not only the migrants whose position is maintained by means of strong restrictions on labour mobility. In some cities the urban workers earn so much less than in the rich cities that they actually earn less than migrants with the same quality and would surely become migrants themselves to other cities if given the chance. At present, the hukou system seems to be city-specific and hence urban residents are also prevented from moving between cities in ways of getting access to city specific welfare, such as education and childcare. Our results suggest a relaxation of the constraints on movements between cities could lead to large flows of urban residents moving from low-wage cities to high-wage cities.

In short, the current labour market in China hides major strains that would appear difficult to maintain in a more laissez-faire system: in a laisser-faire system the wage differences between migrants and urban residents would quickly disappear as employers would favour the cheaper labourers. Also, in a laisser-faire system, the large wage differences for urban residents across cities would quickly become more equal via migration.

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Figure 1: Relationship between earnings and total insurance payments

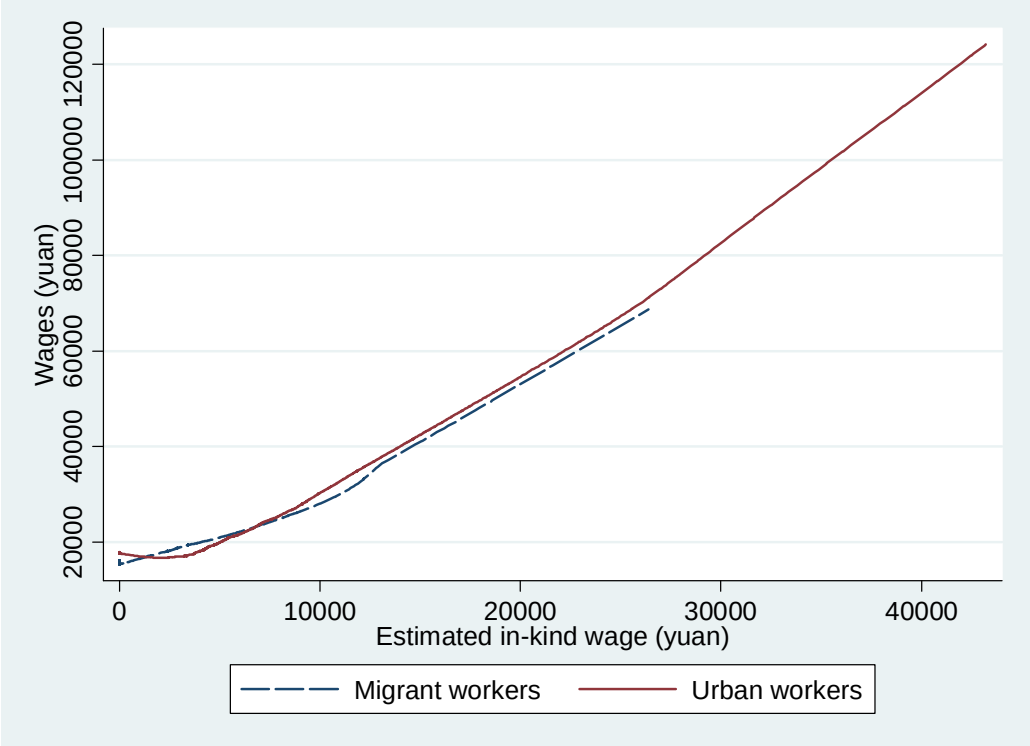


Figure 2: Relationship between age and hourly compensation for wage/salary earners

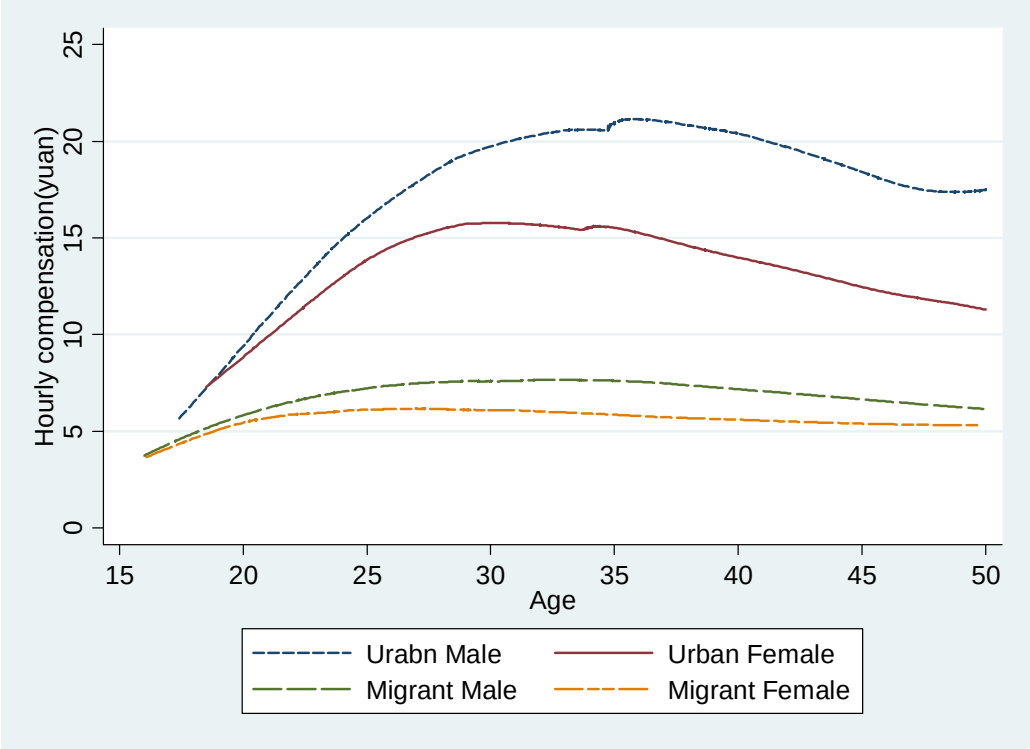


Figure 3: Relationship between current job tenure and hourly compensation for wage/salary earners

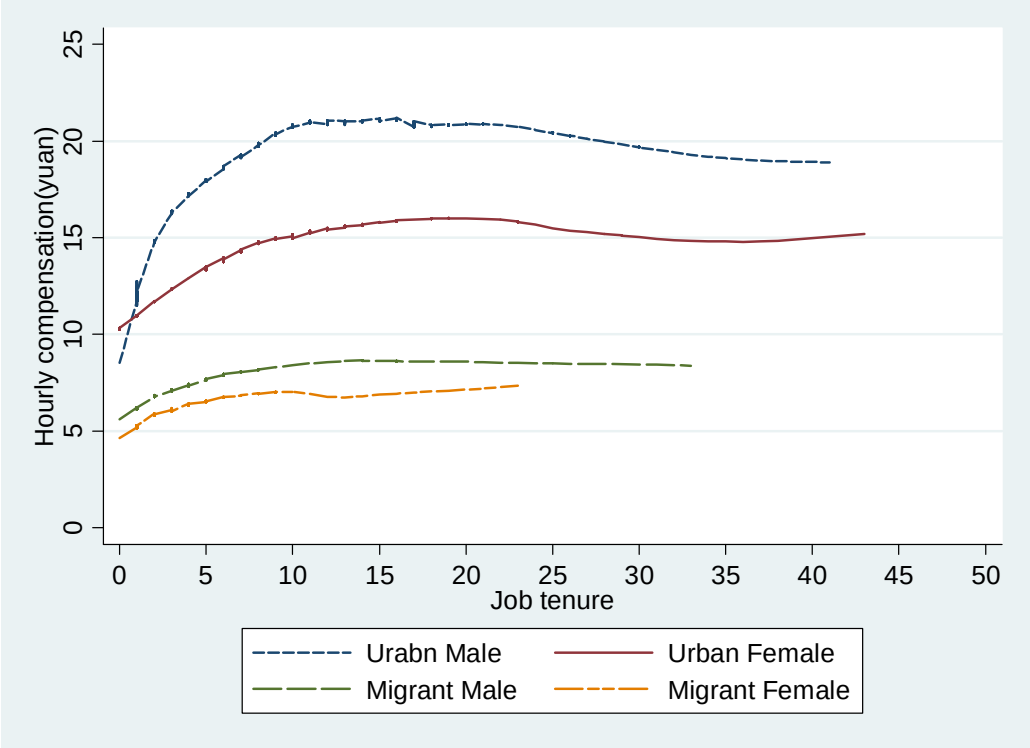
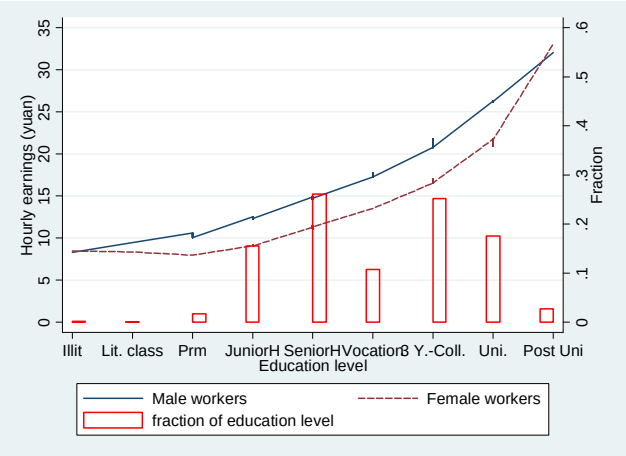


Figure 4: Relationship between education level and hourly earnings

4a: Urban workers



4b: Migrant workers

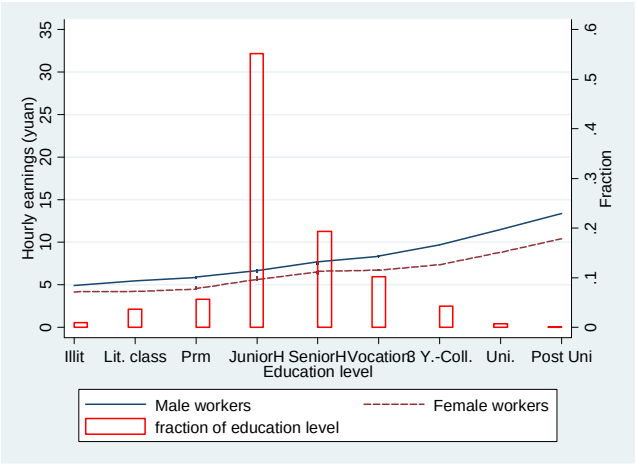


Figure 5: Conditional rates of return to education at different levels