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Implementation and Implications for China's Workers**

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ABSTRACT

China's 2008 Labor Contract Law: Implementation and Implications for China's Workers^{*}

This paper presents empirical evidence from household and firm survey data collected during 2009-2010 on the implementation of the 2008 Labor Contract Law and its effects on China's workers. The government and local labor bureaus have made substantial efforts to enforce the provisions of the new law, which has likely contributed to reversing a trend toward increasing informalization of the urban labor market. Enforcement of the law, however, varies substantially across cities. The paper analyzes the determinants of worker satisfaction with the enforcement of the law, the propensity of workers to have a labor contract, workers' awareness of the content of the law, and their likelihood of initiating disputes. The paper finds that all of these factors are highly correlated with the level of education, especially for migrants. Although higher labor costs may have had a negative impact on manufacturing employment growth, this has not led to an overall increase in aggregate unemployment or prevented the rapid growth of real wages. Less progress has been made in increasing social insurance coverage, although signing a labor contract is more likely to be associated with participation in social insurance programs than in the past, particularly for migrant workers.

JEL Classification: J08, J16, J28, J41, J52, J53, O15, O17

Keywords: social insurance, informal sector, labor regulations, migration, gender, China

NON-TECHNICAL SUMMARY

The paper suggests that China's 2008 Labor Contract Law may have played an important role in reversing a trend toward increasing informalization in China's urban labor market. The paper demonstrates significant awareness of the content of the Law among both local and migrant workers, with knowledge of the law increasing in education. While less progress has been made in increasing social insurance coverage, signing a labor contract raises the likelihood of participation in social insurance programs, particularly for migrant workers.

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China's 2008 Labor Contract Law: Implementation and Implications for Chinese Workers

1. Introduction

On January 1, 2008, China implemented a new Labor Contract Law with provisions widely considered to be highly protective of workers. The passage of the new Law reflected the government's recognition of the rising aspirations and expectations of China's workers and the political importance of ensuring fair employment practices to avoid labor unrest. Prior to the Law's passage, however, business leaders and many commentators inside and outside of China expressed concern that the Law would increase labor costs of enterprises, reduce employment, and undermine international competitiveness (Gallagher and Dong, 2011). Before its passage, heated debates occurred over the Law's merits, engaging leading public intellectuals and receiving significant media attention. In 2006, the National People's Congress opened a thirty-day period of public consultation on the draft law that attracted more than 190,000 comments, more than any other draft law in recent history (Liang 2008).

Two important aspects of the new Law are regulations on the nature of contracts that employers were obligated to provide workers and increased severance payments to fired workers. Under the new Law, after a worker completes two fixed-term contracts, or ten years of employment, employment contracts must be made open-ended. Employees with open-ended contracts must be terminated for cause. Given that many employers in China use the fixed-term contract system as a way to terminate employment without cause, this restriction was significant. The probationary period for new contracts is limited to one to six months depending on the contract length. New regulations also were passed on the use of temporary work agencies, or labor service companies. Use of labor subcontracting has expanded rapidly in China since the 1990s as employers have sought out new ways to increase employment flexibility and avoid some of the legal obligations due to regular employees. With respect to

severance conditions, the new Law requires 30-day written notice when terminating workers through non-extension of a fixed-term contract, severance pay equal to one month's pay for each year of service (a half month's pay if less than 6 months), and double severance pay for unfair dismissal. The Law also provides significant penalties for failure to sign written contracts, pay wages on time, or provide required social insurance benefits; increases the power of workers to participate in decision-making regarding rules and regulations that bear on employee welfare; and enhances the power of the enterprise-level trade union to ensure compliance with labor regulations (Article 78).

Given all of these provisions of the new Law, China's labor regulations have become very strict relative to those of other countries. Using the measure of Employment Protection Legislation (EPL) strictness applied to OECD countries (OECD, 2004), China would rank third in EPL strictness among OECD countries after implementation of the new Law. Using a similar methodology, Chen and Funke (2008) find that the Labor Contract Law mandates firing costs that are greater than in many other developing countries.

The onset of the global economic crisis, which hit China in force in October of 2008, exacerbated concerns over high labor costs, and led to speculation that China would relax enforcement of the new Law in order to support firms in a time of crisis.¹ To date there remains considerable disagreement on the role of Labor Contract Law in the Chinese labor market. In response to a large expansion of labor subcontracting after the Law's passage, the National People's Congress revised the law in late 2012, restricting the use of labor subcontracting and providing more detailed instructions on the employment of subcontracted workers (Wu, 2012; discussed further below).

Despite the large potential impact of the new labor regulations on China's workers and the overall economy, there exists little systematic empirical evidence on how well the

¹Zhang Weiyong, an economist, called publicly for the Labor Contract Law to be suspended during the financial crisis. See Phoenix Financial News, February 8, 2009.

new Labor Law was implemented and on how it has affected the employment opportunities and welfare of China's workers. Businesses clamored loudly that the Law would reduce employment and competitiveness. This view is supported by a majority of previous microeconomic studies on the impact of labor regulations on employment in developing countries which find that labor regulations reduce employment and increase unemployment (Besley and Burgess, 2004; Ahsan and Pages, 2009; Fledmann, 2009; Djankov and Ramalho, 2009; Kaplan, 2009; Amin, 2007; Fallon and Lucas, 1993). Other authors have found that strict enforcement of labor regulations raises the costs of formal employment, and thus leads to greater informal employment (Almeido and Carneiro, 2005).

However, labor economists also point out that stronger labor market institutions are associated with lower inequality and can carry important benefits for firm performance by increasing communication of information within firms, improving resolution of worker grievances and reducing turnover costs, and even strengthen market outcomes when markets are not functioning well (Freeman, 2007). In its most recent World Development Report (2013), the World Bank suggests that there is little consensus on what labor policies are optimal but advises that countries avoid "the two cliffs"—one of excessive regulation that slows job creation and growth, the other of excessive lack of recognition that fails to provide voice or protection to vulnerable workers. It is of considerable interest and consequence to better understand how well China has struck this balance. Only a few studies to date have provided empirical evidence on the implementation of China's new Labor Contract Law. Analyzing data from repeated cross-sectional surveys of workers in the Pearl River Delta conducted in 2006, 2008, and 2009, Li (2012) presents evidence that the new Law increased the percentage of workers with written contracts, raised social insurance coverage, reduced violations of workers' rights and wage arrears, and increased the probability that firms

became unionized.² According to a survey of almost 600 human resources managers, Cheng and Yang (2010) find that the new Law significantly raises the likelihood of signing contracts, extends the term of contracts, increases the number of open-ended labor contracts, and leads to more cautious recruitment and dismissal decisions. This increases labor costs and restricts labor flexibility to some extent, but the impacts vary among enterprises with different size and ownership. Based on interviews with enterprise managers, Li et al. (2009) investigate the competitiveness of China's labor-intensive industries after the implementation of the Labor Contract Law. They find that the new Law does not increase the costs of law-abiding enterprises, helps to maintain an orderly employment system, and should not reduce labor demand.

This paper first introduces the two data sources used for analyses of the paper, and then proceeds to a discussion of the implementation of the Law. Next, in section 3, descriptive evidence from both surveys suggests that the Law likely contributed to reversing a trend toward informality in employment relationships, and that this is supported by strong awareness of the Law's provisions among workers and the sharp increases in labor disputes. Section 4 reviews the implications of the Law's implementation for both employment and social insurance coverage of China's urban workers, and a final section concludes.

2. Data

In this paper, we analyze newly collected data from household and firm surveys designed by the authors. The first is urban household survey data from the third wave of the China Urban Labor Survey (CULS) collected in early 2010 by the Institute of Population and Labor Economics (IPLE) of the Chinese Academy of Social Sciences (CASS). Surveys also were conducted in the same five large cities for the first two waves of the CULS conducted in

²A main concern about the survey is its use of an unconventional sampling strategy: workers were intercepted on streets outside work areas and the number of workers sampled per firm was restricted to three or fewer.

2001 and 2005, enabling us to make comparisons over time using the repeated cross-sectional data. The five surveyed cities are located in different regions of the country: Shanghai is in the Yangtze River Delta near the coast; Wuhan is in Hubei Province in central China, Shenyang in Liaoning Province in the northeast, Fuzhou in Fujian in the southeast, and Xian in Shaanxi Province in the northwest.

In each city, representative samples of local residents and migrants were independently selected in a two-stage procedure. Using previous year data on the local resident population of each neighborhood, a fixed number of neighborhoods were selected in each city using probability-proportionate-to-size (PPS) sampling. As the cities had limited information on the number of migrants living in each neighborhood, neighborhoods were first selected based on local resident populations, and weights are used to correct for differences in the relative sizes of migrant and local resident populations based on population estimates provided by neighborhood office staff. These staff helped to construct an updated list of households in sampled neighborhoods to serve as a sampling frame. Neighborhood office staff assisted with documenting unregistered migrants living in the neighborhood, especially those operating small businesses, so as to include them in the sampling frame. A fixed number of households were then randomly sampled in each neighborhood, with 500 local resident and 500 migrant households sampled in each city. The same procedure (but with different sample sizes) was followed in 2000 and 2005.

In the 2010 survey, a number of questions were asked about implementation of the Labor Contract Law, awareness of the Law's provisions, initiation of labor disputes, and participation in social insurance programs. Detailed work history and other information were collected for all adult members of each household surveyed. One strength of the CULS is that it surveyed migrants (including those from both rural and urban areas) and local residents in an identical fashion, and it collected enough observations per city to calculate city-level

aggregates. One disadvantage is that migrants were sampled through neighborhood committees, so that unregistered migrants and those living in collective forms of housing (e.g., on construction sites or in dormitories) may be underrepresented. Thus, workers in the construction and manufacturing sectors (as well as some service sector jobs) are likely to be under-sampled.

We also analyze data from a nationally representative survey of over 1,600 manufacturing firms in China conducted by the Research Department of the People's Bank of China in the fall of 2009 (hereafter People's Bank Manufacturing Firm Survey (PBMFS)). The authors contributed an employment module that included questions on employment changes and the implementation of the new Labor Law. The surveys were conducted in 25 cities located in eight provinces, including 4 coastal provinces (Shandong, Jiangsu, Zhejiang, and Guangdong), one northeast province (Jilin), one central province (Hubei), one northwest province (Shaanxi), and one southwest province (Sichuan). The sampling frame for the PBC national firm survey includes all firms who have ever had credit relationship with any financial institution, which is likely to under-sample very small firms. The firm survey collected information on managers' views of the impact of the Labor Contract Law on labor costs, training activity and costs associated with introduction of the new Law, and the number of employees and strictness of enforcement of labor regulations at four points in time which span the implementation of the new Law and the onset of the global economic crisis: December 2007, June 2008, December 2008, and June 2009.

3. How well was the law implemented?

Assessments of Enforcement Strictness. We start by describing subjective assessments of enforcement of the Labor Law by workers and managers from the household and firm surveys. In the 2010 CULS, workers were asked whether implementation of the

Labor Law was very good, good, so-so, bad, or very bad. They were also asked the same question retrospectively for the period before September 2008 (before the global financial crisis) to enable assessment of whether concerns about the crisis weakened implementation of the new Law. Responses are summarized separately for local residents and migrants in Table 1. While very few respondents felt that implementation of the law was “bad” or “very bad” (3% of local residents and 6% of migrants), about 40% expressed ambivalence (“so-so”). The majority of respondents (56% for both groups) felt that implementation of the new Law was “good” or “very good”. Although slightly more migrants are dissatisfied compared to local residents, the difference is small. Also, there is no evidence from the retrospective assessments that enforcement was better before the financial crisis; if anything slightly fewer people report good enforcement prior to September 2008.

What about firm managers? In the PBMFS conducted in 2009, managers were asked “How strictly have labor regulations been enforced?” Respondents were asked to answer this question for different points in time, with the possible responses being *very strict*, *strict*, and *not strict*. Results are presented in Table 2. The vast majority of respondents found enforcement to be very strict (24.6%) or strict (71.3%) during the most recent period (January to June, 2009), with only 4.0% reporting “not strict”. Managers reported that strictness has increased steadily over time; in 2007 21.6% of respondents answered “very strict” and 7.3% answered “not strict”. Thus, just as for the worker surveys, there is no evidence of less strict enforcement in late 2008 or early 2009 when China was hit hard by the global financial crisis. Results reported in the bottom panel of Table 2 also reveal that larger firms report stricter enforcement than smaller firms.³

³Multivariate analysis of the determinants of the strictness of firm enforcement, using the same firm survey data, confirms that larger firms face stricter enforcement even after controlling for other variables, and also that enforcement is stricter for state-owned enterprises (compared to private and especially foreign enterprises), for firms in Sichuan, Shaanxi, and Jiangsu (in declining order, relative to Zhejiang), and in cities with higher GDP per capita, lower 2007 economic growth rates, lower wages, smaller industrial sectors, and smaller populations (Park, Giles, and Du, 2012).

Are there differences among different types of workers in their perception of how well the new Law was enforced? To answer this question, we estimate an ordered logit model of workers' assessment of how well the Law was enforced, with results presented in Table 3. We conduct separate estimations for local residents and migrants. For each group, we first report estimates that do not include employer characteristics, since jobs are choices that may reflect differences in perception of the Labor Contract Law and other omitted worker characteristics. We then add in employer characteristics (ownership type, sector, firm size) since we are interested in understanding what types of employers do a better job enforcing the new regulations. Because employer characteristics are missing for some workers, we also report results of regressions without job characteristics for the same sample as that used in the regressions with job characteristics to assess whether changes in the coefficients on individual characteristics are due to sample size changes (column 3 for both local residents and migrants). We find no evidence that selection, associated with non-response to questions on employer characteristics, is driving results.

Table 3 reports odds ratios based on the estimation results. Because our enforcement measure is greater when enforcement is poorer, odds ratios less than one indicate that the variable increases satisfaction with enforcement and odds ratios greater than one indicate the variable decreases satisfaction with enforcement. More education is strongly associated with perception of better enforcement, especially graduating from college. A college graduate is half as likely to report poorer enforcement than a worker with less than college education. For both local residents and migrants, odds ratios decrease with education level, but the lower levels of education matter much more for local residents than migrants. Age is a relatively unimportant factor, with the exception of local residents over 50 years of age, who report better enforcement of the law.

Not surprisingly, for both local residents and migrants, those without labor contracts are much less satisfied with enforcement than those with contracts; and their likelihood of reporting poorer enforcement is twice as great as those with labor contracts.

Turning to the employer characteristics, we find that compared to those working for government units, perceived enforcement is slightly higher in foreign firms and slightly lower in private, collective, and state-owned enterprises. However, most of the coefficients are statistically insignificant, with the exception that private firms for local residents and collective firms for migrants have weaker enforcement of the Law than government employers. In contrast to reporting by firm managers, after controlling for individual differences, workers do not perceive that SOEs and private enterprises have different levels of enforcement, and this is true for both local residents and migrants. Differences in enforcement among sectors are much more salient for migrants than for local residents. Compared to migrants working in manufacturing, migrants working in the construction and social service sectors are much more likely to report poor enforcement, whereas these differences are not statistically significant for local residents. None of employer size variables are statistically significant.⁴

In interpreting these findings it is worth noting that the survey does not inquire about what specific kind of enforcement measures workers or managers witnessed. Chinese labor inspection teams are generally understaffed and underfunded. Labor inspection is the responsibility of local labor bureaus that are under the jurisdiction of the local government and party. Local governments are generally more concerned with local economic performance and growth than they are with strict implementation of protective labor legislation. For these reasons, labor inspection and enforcement of labor laws are generally reactive to employee-driven anonymous complaints and formal filings of labor disputes. In

⁴There also are large city differences in perception of Labor Law enforcement. Perception of enforcement is best in Shenyang, followed by Shanghai (especially for migrants), with the other three cities lagging behind. Local residents in Fuzhou are also relatively satisfied.

the wake of the debate over the Labor Contract Law, many employers also proactively began to change practices to comply with some aspects of the new law in order to reduce the risk of worker-initiated complaints or lawsuits. The survey of manufacturing firms revealed that on average firms spent 6.5 days and over 12,000 RMB on training managers about the new Law's provisions. After China began to recover from the financial crisis in 2009, the central government also began to monitor local compliance with the new law by sending out research teams to measure local enforcement efforts (Wang 2008).

While the survey cannot distinguish between the types of enforcement that may have affected the respondents' perception of enforcement levels, the importance of education may indicate that employees with high levels of education are more aware about their options for resolving disputes and/or more capable of pressing for enforcement of new protections in the Labor Contract Law. For example, a knowledgeable employee with a second short-term contract about to end may request that his employer now enter into an open-ended contract. The employer may comply, perhaps in order to retain a highly educated employee. In this case, the employee may feel positive about the level of enforcement or compliance, but his high level of education partly determines why enforcement was possible.

Reversing the trend toward greater informality. Although previous labor regulations already mandated that workers sign labor contracts, passage of the 2008 Labor Contract Law was accompanied by a renewed emphasis on formalizing the employment relationship with workers by signing written contracts, made credible by explicit, costly penalties for non-compliance. As noted above, the new Law also required that workers completing two fixed-term contracts are issued open-ended labor contracts to provide greater job security. In the late 1990s and early 2000s, the number of "missing" urban workers, defined as the difference in total urban employment estimated from labor force surveys and from reports by employers increased significantly, reaching a peak of 39% in 2002 and 2003 before declining to 36% by

2005 (Park and Cai, 2011) and 29% by 2011.⁵ Presumably the missing workers lacked labor contracts (they were not reported by their employers or were unregistered self-employed workers) as did the 10% registered self-employed. One Ministry of Labor survey, conducted in 66 cities in 2002, and primarily sampled local resident workers, estimated that 45% of urban workers in China were informally employed.⁶ According to the 2005 China mini-census, 52% of urban workers lacked contracts, including 50% of local residents, 69% of rural migrants, and 38% of urban migrants. Park and Cai (2011) provide evidence suggesting that many informal workers are rural migrants, or are working in the private sector or service sector jobs – three groups that have grown rapidly as a share of the urban labor force.

Did the 2008 Labor Law help reverse these trends? Using multiple waves of the China Urban Labor Survey, we make consistent comparisons of the prevalence of labor contracts over time. Figure 1 summarizes the main findings. The share of local resident and migrant workers with a labor contract actually fell from 2001 to 2005, declining from 67% to 65% for local resident workers and from 15% to 12% for migrant workers. But this trend toward greater informality reversed by 2010, when 71% of local resident workers and 34% of migrant workers had labor contracts. The increase by more than 20 percentage points for migrant workers is notable. Thus, the data suggest that the trend towards greater informalization in China reversed itself between 2005 and 2010, and quite sharply for migrant workers.

A more detailed breakdown of these trends is provided in Table 4, which also reports results separately for wage employees (excluding the self-employed), and breaks down the

⁵ Author's calculations from employment figures published in the *China Statistical Yearbook 2012* (National Bureau of Statistics 2012).

⁶The following types of workers were categorized as informal: 1) hired workers without formal contract not listed as formal employees; 2) domestic workers, temporary agency workers, and casual laborers; 3) community service workers without formal contract; 4) workers hired on the basis of hourly pay, daily pay, weekly pay, and uncertain pay (in terms of time and/or account); 5) paid helpers in family and self-employed businesses; 6) workers hired by individual entrepreneurs; 7) individual business owners (*getihu*), note that the ILO recommends that small business of less than 10 workers be considered informal, in China individual businesses are those with 7 or fewer workers. Workers in the agricultural sector are excluded in the analysis.

prevalence of labor contracts by gender and by urban versus rural origin for migrants. A few interesting findings emerge from this disaggregation. First, the improvement in labor contract prevalence is even more impressive for those migrants who are wage employees. For all migrant wage workers, the share with labor contracts increased from 37% in 2005 to 60% in 2010. Even if we restrict attention to rural migrants, the majority (51%) of wage employees had labor contracts by 2010.⁷ Second, by 2010 there do not appear to be substantial gender differences in the likelihood of having a labor contract, whether for local residents or migrants. This represents clear progress from the situation in 2001 and 2005 when women were 6-7 percent less likely to have labor contracts. Finally, the gains are even more dramatic for urban-to-urban migrants, of which 75% of wage employees had labor contracts in 2010, compared to 51% of rural migrant workers and 80% of local resident workers. Urban-to-urban migrants had a much lower prevalence of labor contracts in 2005.

Next, we estimate probit models to provide evidence on the factors predicting that a worker will have a labor contract, and present report using the 2010 CULS data in Table 5. As before, results are reported separately for migrants and local resident workers. For migrant workers, there is no significant gender difference and younger workers (below age 30) are 8-12% more likely to have a labor contract than older workers. However, age differences disappear and lose statistical significance if we restrict the sample to wage workers, suggesting that younger workers are much more likely to be engaged in wage employment compared to older workers. Education strongly predicts whether or not a migrant will have a labor contract: compared to those with less than middle school education, middle school graduates are 14% more likely to have a labor contract, senior high graduates are 28% more likely, and college graduates are 55% more likely. These effects are slightly diminished when restricting the sample to wage workers. Finally, migrants are 16-28% more

⁷ It is also worth noting that among wage workers, the share of migrants with contracts was greater in 2005 than in 2001, suggesting a longer period of reduced informalization. But the increase in migrant wage workers with contracts was very small between 2001 and 2005 and very large between 2005 and 2010.

likely to have a labor contract in Shanghai relative to other cities, with the coverage by contracts next highest in Fuzhou, followed by Xian, Shenyang, and finally Wuhan. Thus, migrants in richer, coastal cities, a main destination since the mid-1990s, are more likely to have signed contracts with their employers. Finally, migrant wage workers in manufacturing are much more likely to have labor contracts than those working in other sectors (by 13 to 36%); the worst sector is wholesale, retail, and restaurants, which is 36% less likely to provide a labor contract than employers in the manufacturing sector. Also, migrants working in government units are over 20% less likely to have a labor contract; there are no other statistically significant differences by ownership type.

Turning to the results for local residents, we find no significant gender difference in the likelihood of having a labor contract when the sample includes all workers, but when we restrict to wage workers, we find that women are 3% less likely to have a labor contract. However, when we control for sector and ownership type, the difference is no longer statistically significant, suggesting that the gender difference can be explained by the types of job women take rather than differential treatment within sector and ownership type. In contrast to the results for migrants, we find that younger workers are less likely to have a labor contract than all older groups; those from 31 to 40 are most likely to have a labor contract. When we restrict the sample to wage workers, the differences narrow and only the 31-40 age group is more likely to have a labor contract relative to other age groups. Perhaps this is because they are the most desired workers when considering both experience and skill level, while younger and older workers are more likely to be hired informally. Education level matters, in particular being a high school or college graduate; however, the differences are not as great as for migrants. Those working in Shanghai are much more likely to have a labor contract, with Shanghai's advantage being even greater than for migrants. Among other cities, Shenyang is particularly poor in providing local residents with labor contracts in

contrast to the results for migrant workers, perhaps due to the large number of layoffs of state-sector workers during economic restructuring in the late 1990s and early 2000s. Finally, we find that sector differences are far less important predictors of having a labor contract than for migrants; those in the social service sector are 7% less likely to have a labor contract, but other differences are not significant, even between manufacturing and wholesale/retail/restaurants. In contrast to migrants, local resident workers are much less likely to have a labor contract in the private sector (by 29%) as well as in the collective sector (by 16%) than if they work for a government organization.

Overall, we find that treatment of migrants differs much more with different individual or job characteristics than treatment of local residents (with the possible exception of ownership type). This suggests the need to better understand migrant employment practices in different sectors and toward different types of workers.

We also compare the determinants of having a labor contract in 2010 with those of having a labor contract in 2001 and 2005, before implementation of the Labor Law (results for 2001 and 2005 are reported in Appendix Tables 1 and 2). The sample includes the same five cities in each year. For migrants, wage employees in private firms were significantly less likely to have a labor contract than those employees of state-owned or foreign companies. This difference is not apparent in 2010. Education and youth were equally important predictors of having a labor contract in previous years, with estimated differences being of similar magnitudes to those found for 2010. For local residents, in earlier years, gender differences were greater (still explained mainly by job type), younger workers were more likely to have a labor contract (compared to those age 31-40 in 2010), education differences were greater, and the difference between Shanghai and other cities was not as prominent. Changes over time in how different individual observable factors influence the probability of

having a labor contract seem greater for local residents than migrants, even though the increase in contract prevalence was greater for migrants overall.

While formal employment relations, as evidenced by a written labor contract, are more common after the implementation of the Labor Contract Law, the Chinese government and many other observers have noted that labor subcontracting has expanded rapidly as an employment form since the Law's passage.⁸ As a form of employment through a middleman agency, a labor service company, labor subcontracting allows employers to hire employees for shorter terms, with more flexibility, and often at lower wages and with lower social insurance contributions. Overuse or "abuse" of labor subcontracting, such as hiring long-term employees as subcontracted workers, is one of the major reasons that the National People's Congress revised the Law in 2012.

No official statistics are kept on the extent of labor subcontracting. Based on surveys of 1000 enterprises and 10,000 employees in 25 cities conducted in 2010 and 2011, the All-China Federation of Trade Unions estimated that 37 million workers (13.1% of all urban workers) are subcontracted labor (All-China Federation of Trade Unions, 2012). This includes 16.2% of workers in state-owned enterprises and 14% of workers in foreign enterprises. The Ministry of Human Resources and Social Security estimates a range between 10 million and 27 million subcontracted workers. Labor subcontracting is in widespread use by state-owned enterprises, government organizations, quasi-government organizations such as hospitals and universities as well as some foreign-invested companies (Wang 2012; Wu and Zhu 2012).

This expansion in labor subcontracting after the Labor Contract Law may indicate that higher levels of formality (more workers have written labor contracts) mask a decline in

⁸ A survey of 133 Chinese enterprises found that 18% of firms experienced a sharp increase in subcontracted labor while another 27% experienced a modest increase following implementation of the new Law (Jiang and Yang, 2011). Another study estimated that in Beijing, the number of subcontracted workers increased by 58% from 2007 to 2008 (Lin and Fan, 2011).

employment security and increasing inequality between formal workers and temporary workers. Subcontracted workers share characteristics with informal workers, such as lower wages, lower social insurance, less security, but in fact typically are embedded in quite formalistic labor relationships, including written labor contracts (Wu and Zhu, 2012). Despite these reports of widespread use of labor service companies, in the CULS the number of respondents reporting that they are employed via a labor service company was exceedingly low.⁹

Awareness of Labor Contract Law provisions. One aspect of implementation involves raising public awareness of new Law's provisions. As noted above, the drafting process of the Labor Contract Law drew significant public attention. Academics and business association leaders participated in particularly open and transparent debates about the potential consequences of the new Law. The Labor Contract Law was widely discussed and debated in media outlets, particularly as the 2008 financial crisis heightened attention to China's employment situation (Gallagher and Dong, 2010; Liang, 2008). It is likely that all of these factors increased awareness of and interest in the law among employers and employees alike.

As part of the CULS, respondents were quizzed about their awareness of specific principles and provisions of the Labor Law. A summary of the percent of respondents answering each question correctly is found in Table 6. For convenience, we have listed questions in order of the percentage of correct answers.

Generally speaking, we find that most workers are aware of the key principles of the Labor Law, but are not familiar with specific details of the Law. Nearly all workers (95% of

⁹ This could have reflected poor design of questions related to employment through labor service companies. Survey respondents may have not been fully aware of the difference between direct employment and indirect employment via a labor service company. That is, they may identify the place at which they work every day as their formal employer even though the formal legal relationship is with a third party. This problem is particularly true for employees of state enterprises or government units, as the labor service company is often affiliated with the company or office.

local resident workers and 89% of migrant workers) know that they have a right to a labor contract. The vast majority of workers know that they should be paid double wages for each month worked beyond the period within which a labor contract should have been signed (81% of local residents and 77% of migrants), that employers have the right to terminate workers who violate rules set by the employer (70% of local residents and 74% of migrants), and that employers must provide open-ended contracts to workers meeting the required conditions set forth by the Law (70% of local residents and 68% of migrants). However, most workers are not aware that a labor contract should be signed within one month of being hired (40% of local residents and 46% of migrants) or that the maximum probationary period is 2 months for a one-year contract (22% of local residents and 24% of migrants).¹⁰ Interestingly, the percentage of correct answers by local residents and migrants is nearly identical.

In Table 7, we present the results of multivariate regressions of the determinants of Labor Law awareness, defined as the mean score on the six questions described above normalized by the standard deviation of test scores. Results are reported separately for local residents and migrants. We report results for the sample of workers, both with and without employer and job characteristics. Interestingly, we find that women are more aware of the Law's provisions than men; they score higher by 0.137 standard deviations for both local residents and migrants. Awareness also increases with age and education, with the magnitude of these effects differing for local residents and migrants. The age-awareness gradient is steeper for local residents, with the score for workers aged 31 to 40 more than 0.7 standard deviations higher than the youngest workers, and the score for workers over age 40 more than 1.2 standard deviations greater. For migrants, those aged 31 to 50 score 0.15 to 0.18 standard deviations greater than the youngest workers, and older workers above 40 do not score any

¹⁰The latter two questions also are harder because they require a specific answer rather than a yes-no response.

better. With regards to education, there is a statistically significant higher score (by 0.4 standard deviations) for college-educated migrants compared to those with less education, and a smaller advantage for college-educated local residents (and not statistically significant). For migrants, differences in awareness across cities are substantial; awareness is greatest in Wuhan, followed by Shanghai, Xian, Fuzhou, Guangzhou, and Shenyang. For local residents, awareness is greatest in Fuzhou and Wuhan, and worst in Shenyang. For local residents, awareness declines with firm size.

Finally, with respect to job characteristics, we find that those with labor contracts are more likely to be aware of the Law's provisions, especially for local residents. Ownership differences are not statistically significant. For migrants, those in the construction sector and those in small firms (less than 7 workers) are less aware of the Law's provisions (compared to the self-employed or those in larger firms) and for local residents those in the retail sector and those in the largest firms are less informed.

Labor disputes. Grievances at the workplace in China are normally handled through a labor dispute resolution system that begins with voluntary mediation, then proceeds to compulsory arbitration, and, finally, ends with appeals of the arbitration decision in civil courts. This system was implemented at the national level for all enterprises in the 1994 Labor Law, the most important labor law to be implemented in the PRC before the Labor Contract Law. Between 1995 and 2007, labor disputes increased, on average, by about 25% annually. In 2008, arbitrated labor disputes increased dramatically, almost doubling nationally (Figure 2). In seven provinces, labor disputes increased by more than 100%; for example, in Guangdong, disputes rose 170%, in Yunnan by 188%. In civil courts, labor disputes nearly doubled in 2008 compared to 2007, then increased modestly in 2009 and held steady through the first eight months of 2010 (Figure 3). Since 2008, the national government has intensively pushed for greater efforts at non-adversarial modes of dispute resolution, in

particular the use of enterprise or local level mediation to reduce the number of disputes at the formal resolution stages of arbitration and litigation (Minzner 2011). These efforts have had some effect in reducing the rate of increase since 2008. However, disputes remain at an all-time high with little sign of abatement. In 2010, for example, there were nearly 1.3 million formal labor disputes. National data show that nearly 70% of these disputes were mediated (2010 Labor Dispute Report).

These figures suggest that the new Labor Contract Law has led to a large increase in the propensity of workers to initiate disputes with their employers, either because workers feel more empowered by the new Law or due to disagreements between employers and employees over how to interpret the new Law's provisions. Unfortunately, it is difficult to distinguish between these different explanations.

Local labor bureaus and court systems have struggled to find the resources to process the large number of complaints and to resolve disputes efficiently. In interviews with the authors in 2009, Shanghai district-level labor bureau officials reported that the local labor bureaus felt understaffed to deal with all of the complaints, and were authorized to recruit staff temporarily from other government bureaus to help deal with the surge in cases. They noted that some of the Law's provisions were vague and subject to different interpretations, and so local officials frequently appealed to officials in the Ministry of Labor and Social Security in Beijing for guidance, and that this process was time-consuming. The problems were compounded by the onset of the global economic crisis started in the fall of 2008, which led to the firing of 20 million migrant workers (Giles et al., 2013), providing many opportunities for disputes over severance payments or unpaid wages of workers. Labor bureaus also struggled to meet the large rise in cases, a problem exacerbated by a shortage of arbitrators. China had established only 946 arbitration centers by the end of 2010 (Xinhua, 2011), a year when there were over 600,000 arbitrated disputes (Figure 2). The high tide of

disputes since 2008 has left most arbitration committees overwhelmed with cases such that most disputes take 3-6 months between filing and the first hearing; resolution can take one to two years. Local courts encountered similar problems of capacity and caseload. In Dongguan, Guangdong Province, a local court reported extremely heavy caseloads on judges, the majority of which were labor disputes (Zhao, 2008). The recent push toward more basic level mediation, at the firm, at the district and county levels, is one government strategy to reduce the number of cases proceeding to arbitration and litigation.

The China Urban Labor Survey asked a set of questions about labor disputes initiated by respondents. Summary statistics are provided in Table 8. Just less than one percent of both local resident and migrant workers have initiated a dispute, a frequency that is similar to those derived from aggregate data. Because of the small sample size (data on only 75 disputes), the results should be interpreted as being suggestive rather than definitive. Disputes by local residents are concentrated in the period after the Labor Law was implemented, but this is not the case for migrants. Most disputes are over wages (43% for local resident workers, 49% for migrants). Local residents appear much more likely than migrants to initiate disputes about changing or ending a labor contract. Most local residents are dissatisfied with the resolution of their dispute, while most migrants are satisfied. Some of the patterns for migrants may reflect the fact that migrants often initiate disputes because of unpaid wages, which may be more straightforward to resolve.

Using the CULS data, we also estimated probit models of the determinants of initiating a labor dispute (Table 9). The only significant determinant is level of education, especially for migrants. For migrants, relative to having primary education or less, having a junior high school education increases the likelihood of initiating a dispute by 27%, having a senior high education by 59%, and having a college degree by 78%. For local residents, middle school graduates are the most likely to initiate disputes, followed by those with more

education, and then those with only primary education. It could be that local residents with college degrees are treated well and have fewer reasons to initiate a grievance. Employees with skills and education also may quickly find new employment and may not bother with the time and expense required to pursue a dispute to its final resolution.

4. Implications for China's workers

Employment. One of the main concerns about the Labor Contract Law was that it would raise labor costs, which would reduce employment. The 2009 firm survey asked managers direct questions about whether the new Law had increased labor costs, and whether the Law had affected hiring and firing decisions. Only 20.6% said there was no increase in labor costs, while 68.2% said there had been some increase and 11.2% said that there had been a significant increase. Table 10 summarizes the responses to the questions about actual hiring and firing decisions. Just over one third (34.5%) of managers reported that the new Labor Contract Law had made it more difficult for their firms to hire and fire workers. Interestingly, more managers reported that the Law had reduced firing (30.8%) than hiring (15.8%). Table 10 also shows that share of firms reporting that the new Law had an impact on hiring and firing decisions that varied considerably among different ownership types and across different regions. The impacts were greatest for foreign-invested enterprises (38.3%), followed by joint ownership firms (35.4%), private firms (31.6%), and state-owned or collective firms (28.1%). With respect to provinces, the impacts were greatest in Zhejiang (46.5%) and Guangdong (45.5%) and least for Shandong (21.5%), Hubei (21.4%), and Sichuan (20.4%).

Analyzing the same firm data, an econometric study of the impact of the new Labor Law on employment by manufacturing firms finds that cities with lax prior enforcement of labor regulations experienced a greater increase in enforcement after 2008 and slower

employment growth (Park, Giles, and Du, 2012). The study also finds that employment in exporting firms exposed to adverse export demand shocks caused by the global financial crisis was less sensitive to enforcement of labor regulations. These results confirm that strict enforcement of the new Labor Law led to lower employment in the manufacturing sector, a finding consistent with many studies of the employment impact of labor regulations in other developing countries cited earlier.

It is less clear, however, that the Labor Contract Law reduced aggregate employment or increase overall unemployment in the country as a whole? Even if cities with stricter enforcement of the Labor Law saw lower rates of manufacturing employment growth, this does not mean that aggregate employment was strongly affected. Workers may have moved from cities with greater strictness to cities with less strictness, or from the manufacturing sector to self-employment or jobs in the service sector where enforcement of the Law may have been more lax, as evident in the lower prevalence of labor contracts among migrants. One complication in examining how the new Labor Contract Law affected aggregate employment is that the global economic crisis also hit China in 2008, the same year the new Law was in force. Thus, looking at aggregate employment statistics, it may be hard to separately identify the potential negative impact of the Labor Law on employment in China from the negative impact of the global economic crisis.

However, this turns out not to be a major issue, because all of the available data suggests that Chinese employment growth has been remarkably robust to both of these major events. Evidence from various micro-data sources confirms that although the global economic crisis, which hit China in force in October 2008, led to over 20 million migrant workers losing their jobs, most migrant workers had found new jobs by the summer of 2009 (Giles et al, 2012). Rural household surveys by China's National Bureau of Statistics found that the total employment of rural migrant workers in China was 2.4% greater in 2009 than in

2008, even as the share of such workers employed in manufacturing fell from 42.0% in 2008 to 39.1% in 2009 (NBS, 2010; Sheng, 2009). According to the 2010 CULS data, the unemployment rate in the five surveyed cities was only 2.4% for local residents and 0.7% for migrants, both lower than 2005 unemployment rates of 5.3% and 1.4% calculated from the second wave of the China Urban Labor Survey. Job vacancy rates measured by the Ministry of Labor also recovered very quickly to pre-crisis levels by the end of 2009 (Giles et al, 2012). And this robust growth in employment was not facilitated by downward adjustments in wages. Several national surveys convincingly document that real wages of rural migrant workers continued to increase steadily through 2008 and 2009, with even faster wage increases in 2010 and 2011 (Giles et al, 2012).

Thus, despite evidence that the Labor Contract Law was enforced and affected the employment decisions of manufacturing firms, there is no evidence that the higher costs of labor associated with implementation of the new Law has slowed the robust growth in labor demand that has led to rising wages and lower unemployment rates, both of which are symptomatic of increasing labor scarcity.

Social insurance. One important potential benefit of establishing a formal employment relationship is that it is generally a necessary condition for gaining access to government-run social insurance programs, such as pensions, health insurance, and unemployment insurance. Such coverage provides workers with valuable protection against major life risks, such as poverty in old age, unexpected health care expenditures, and the financial shock of unemployment. In fact, the ILO treats coverage by social insurance programs as the key criteria for defining formal versus informal employment. Strictly enforcing the new Labor Contract Law thus could help further the government's announced goal of achieving full social insurance coverage of the population by 2020.

It is important to consider the institutional context for expanding social insurance for migrant workers. Central government policy on this issue changed dramatically in the early part of this century, particularly after the Hu-Wen administration began to publicly pursue policies that sought to reduce inequality, including inequality between permanent residents of urban areas and migrant residents with temporary residence permits. Previously, migrant workers were not permitted to participate in urban social insurance schemes and public goods provision, such as pension insurance, health insurance, occupational injury insurance, and subsidized public education for children of migrant workers. Under pressure from the central government to reduce inequality between migrants and legal residents and also, at times, in order to attract younger people to cities with aging populations, provincial and municipal governments undertook varied reforms to enhance migrant workers' access to social insurance and public goods. These reforms included the creation of social insurance programs specifically for migrants (Shanghai), inclusion of migrants into the existing social insurance programs (Beijing), and reductions in barriers to permanent legal migration (Guangdong, Chongqing, Chengdu). Recent efforts have been made to scale up these programs nationally. These changes indicate the degree of institutional flux that existed and continues to exist as urbanization in China occurs rapidly but in varied contexts across different cities and provinces.

If signing a labor contract automatically led to enrolment in the major social insurance programs, then the increase in the share of workers with labor contracts documented earlier would imply a commensurate improvement in social insurance coverage. However, the relationship between having a labor contract and social insurance coverage is not deterministic. Both employers and employees may have incentives to forego social insurance coverage, because participation in most schemes requires contributions by both sides that are a large share of wages. Employers are required to contribute roughly 30% of wages and

employees 10% (Giles et al, 2013). Workers may be skeptical about whether the benefits from such schemes are equal to the contribution value, especially migrant workers who are young, healthy, may get health insurance coverage in their home counties. Further, migrants may have well-founded fears that benefits will not be portable if they move to other cities in the future, and may doubt the value of future pension benefits. In such cases, both sides may agree that paying higher wages is more desirable than enrolling in social insurance programs.

Regression analysis provides some evidence that rural migrant workers did sacrifice pension benefits for higher pay. Using the 2005 and 2010 survey data, we regress the log of rural migrant workers' monthly wages (for wage employees only) on indicator variables for whether the worker received pension benefits from their employer and whether the worker signed a labor contract, as well as controls for age, age squared, years of education, whether the worker completed higher education, marital status, gender, and city dummy variables. On the one hand, one might expect that better working conditions and higher wages are both positively associated with higher quality jobs; on the other hand, workers could negotiate higher wages in return for sacrificing non-wage benefits (such as having a labor contract or receiving pension benefits).

We find that in 2005, having pensions is associated with wages that are nearly 16% lower while having a labor contract increases wages by nearly 17%. However, in 2010, having a labor contract is associated with wages that are 11% lower, while receiving pension benefits is not significantly associated with wage levels (the coefficient is close to zero) after controlling for whether one has a labor contract (full results available from the authors upon request).¹¹ These results suggest that employers shifted from rewarding higher wages to rural migrants who gave up pension benefits to those who gave up having a labor contract. This could be due to the increased costs to employers of signing labor contracts, reduced

¹¹ For local residents and urban migrants, both pension benefits and having a labor contract are positively associated with wages, suggesting that these workers demand these benefits for better jobs.

flexibility in providing pensions to workers who have signed contracts, rising demands of workers to receive pension benefits. The results do suggest that employers and rural migrants may perceive an incentive to evade the Labor Law's requirement that all workers sign contracts.

In Table 11, we present cross-tabulations for employed workers between having a labor contract and being covered by pension and health insurance programs, using data from the 2005 and 2010 waves of the CULS. Most strikingly, social insurance coverage rates are much higher for employees who are local residents than for those who are migrants. In 2005, 77.5% of local resident employees enjoyed pension coverage and 68.9% had health insurance provided by their employers (top panel, Table 11). These coverage rates increased to 88.5% for pensions and 85.8% for health insurance by 2010 (bottom panel, Table 11). For migrant employees, coverage rates for pensions and health insurance increased more modestly, from 22.2% and 20.4% in 2005 to 23.8% and 21.8% in 2010 (Table 11).

How do coverage rates differ with respect to labor contract status? Coverage rates for both local residents and migrants are significantly higher among those employees who have labor contracts, but there is a difference between the two groups in how coverage is associated with labor contracts over time. For migrant employees, the share of those with pension or health care insurance is about twice as great for those with labor contracts compared to those without contracts in 2005, and nearly three times as great in 2010. In other words, the difference in coverage rates for those with and without contracts is more pronounced in 2010 than 2005. However, for local residents, the relative gap in coverage rates for those with and without labor contracts appears to narrow from 2005 to 2010. For both groups, a larger share of those with labor contracts have social insurance coverage in 2010 than 2005, but for local residents the share of those without labor contracts who have coverage also increases, in contrast to a declining share for migrants.

In Table 12, we present regression estimates for probit models of the determinants of pension coverage, where we are interested in the coefficient on the dummy variable for whether the employee has a labor contract. In these models, we also control for age, education, gender, and in some specifications job characteristics. There is an interesting difference in the pattern of results for local residents and migrants. The impact of having a labor contract on the likelihood of being part of a pension program is greater for local residents than migrants in 2005, but is significantly greater for migrants than local residents in 2010. For migrant employees, having a labor contract increases the likelihood of pension coverage by 28.2 percentage points in 2010 compared to 15.9 percentage points in 2005, and this difference does not dissipate when we control for job characteristics. It is consistent with findings by Li (2012) that the impact of having a labor contract on having four different types of social insurance was stronger in 2009 than in 2006. This pattern is basically reversed for local residents, with labor contracts mattering much more for pension coverage in 2005 than in 2010. We observe a similar pattern for health insurance coverage, although the increase in the impact of having a labor contract on obtaining health insurance is smaller.¹²

Thus, for migrants the labor contract is a stronger predictor of having social insurance coverage in 2010 than in 2005, but the opposite is true for local residents. A natural question that arises in thinking about the results presented in Tables 11 and 12 is, why are some workers provided with social insurance program benefits even though they lack labor contracts? It is possible that some workers, especially long-time employees, enjoy open-ended employment relationships that include social insurance benefits, but were never asked to sign a written contract. It is also possible for an employer to register workers for local public social insurance schemes without formally presenting a signed contract.

¹² Results available from the authors upon request.

The difference in social insurance coverage for migrants between the 2005 and 2010 CULS is probably in part explained by the newness of social insurance coverage for these workers, low levels of knowledge and trust in nascent programs, and variation across cities and sectors in providing insurance options. Also, local governments only recently began to enforce social insurance participation for migrant workers as a means of boosting social insurance revenue. Migrant worker participation in local social insurance programs tends to benefit the urban population overwhelmingly because only the smaller individual contribution is portable. The enterprise contribution for migrant workers goes into a local city pool, which is then used to pay current retirees. As China's workforce ages rapidly, increasing demographic pressure creates an incentive for local governments to bring young migrant workers into local social insurance programs. The Social Insurance Law of 2010 states as a general principle that social insurance should be fully portable in order to increase labor flows across geographic boundaries, however, local and national agencies have lagged in implementing institutions and mechanisms to support portability.

5. Conclusions

In this paper, we have presented new empirical evidence on the implementation of China's new Labor Contract Law, which took effect on January 1, 2008, and on the implications for the employment opportunities and social insurance benefits of China's workers. We find considerable evidence of progress in successful implementation of the new Law. The subjective assessments of workers and firm managers suggest that the government has made a serious effort to implement the New Law. The increasing share of workers with labor contracts provides further evidence of a reversal in the trend toward greater informalization of China's urban labor market. Finally, tests of knowledge about Labor Law provisions suggest that most workers are aware of the Law's key principles. These

achievements so soon after the Law came into effect were far from inevitable and thus merit recognition.

We document considerable heterogeneity in satisfaction with Labor Law enforcement, having a labor contract, awareness of Labor Law provisions, and propensity to initiate a labor dispute, especially for migrant workers. Education is a strong predictor of differences in all of these outcomes for migrant workers, and there are substantial differences across cities in enforcement strictness and likelihood of having a labor contract. For migrant workers, the prevalence of labor contracts is much lower for workers in the service sector relative to the manufacturing sector, and surprisingly low in government units (which provides a poor example for the private sector). Given the projected increases in the share of employment in services (42% in 2011-15, 47.6% in 2016-20, 52.9% in 2021-25, and 59% in 2026-30), this could pose challenges for maintaining the gains in establishing formal employment relationships.

The Law's implementation may have had a significant impact on the welfare of China's workers. Most directly, the Law provides greater voice and security to employed workers nationwide, especially rural migrant workers. We cite evidence that strict enforcement of labor regulations is associated with less employment by manufacturing firms, but present other evidence that despite the new Law and the negative shock of the global economic crisis, China's urban labor market has witnessed robust employment expansion, low unemployment, and rising real wages. This suggests that China has been able to implement protective labor legislation without a rise in aggregate unemployment.

In considering what lessons to draw from these outcomes, the first is that robust labor demand growth in China has facilitated the implementation of new labor regulations. First, in an environment of labor scarcity, employers already were resigned to the reality that they would have to improve remuneration and working conditions in order to attract and retain

good workers. Second, the lack of unemployment meant that the government could aggressively enforce the new Law without facing a significant unemployment problem. A second, less optimistic, conclusion to draw is that many of the most constraining aspects of the new Labor Law have not yet become binding constraints for employers. In particular, once employers are required under the Law to provide open-ended contracts to large numbers of workers completing two fixed-term contracts, the Law may significantly increase the costs of labor force adjustment. In other words, just because labor regulations have not increased unemployment thus far does not preclude the possibility that it could have large impacts on future unemployment.

In addition, the widespread accounts of increases in labor subcontracting, both in the media and in official government statements, may indicate that the Labor Contract Law's effect on employment has been indirect. Firms are still hiring, but they are attempting to evade the strictures of the new Law by hiring workers indirectly through the massive expansion of labor service companies. Revisions to the Labor Contract Law, implemented in 2012, focused almost exclusively on the issue of labor subcontracting. The revisions defined more concretely the three key types of work that can be subcontracted – temporary, auxiliary, and substitute positions. Temporary positions are now restricted to posts under six months. Auxiliary work is defined as non-core functions of a firm, and substitute positions are only to be used when a formal employee is on leave. The law also raised fines for misusing labor subcontracting and tightened regulations on the operation of labor service companies. The Ministry of Human Resources and Social Security is also expected to release clear restrictions on the proportion of the workforce that can be subcontracted.

It is not clear, however, whether these revisions will be strictly implemented. There is considerable debate and disagreement within the government about the potential effects of the restrictions on firms, particularly if longer-term contracts, as stipulated by the law,

become more of the norm for formal employees. In addition, there are strong, vested interests within local governments in retaining at least some significant degree of labor subcontracting. Most labor service companies have affiliations with local governments and labor bureaus, and as mentioned above, labor subcontracting is very common among state-owned enterprises, public organizations, such as hospitals and universities, and government organizations (Wang, 2012).

Strict enforcement of the new Law has produced more modest success in expanding social insurance coverage, as many migrant workers who have labor contracts remain uncovered by the major social insurance programs. In other work, we point out the need to reduce fragmentation in program administration and lack of portability of social insurance to make social insurance benefits more attractive, reduce employer and employee contribution rates, and address the significant differences in coverage rates across different groups of workers (Giles et al, 2013). High costs of participating in social insurance schemes can have the perverse effect of increasing evasion, increasing labor informality, and reducing social insurance coverage.

The controversy and conflict spawned by the passage of the Labor Contract has continued, visible in the debate over the recent revisions and in the marked increase in labor disputes and conflict since 2008 (Wang, 2012). In 2012, mediated and arbitrated disputes totaled 1.5 million, a 10% increase over 2011 (2012 Report). The high tide of labor disputes that began in 2008 shows no sign of abatement. In 2011, workers initiated over 95% of the 1.38 million disputes that occurred, demonstrating their desire to realize the new worker protections in China's new labor laws (2011 Report). As the 2012 restrictions on labor subcontracting are implemented and more workers demand the relative security of open-ended contracts, social contention and debate over China's labor laws is also likely to continue.

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**Figure 1: Informality by residence status
(CULS, 2001, 2005, and 2010)**

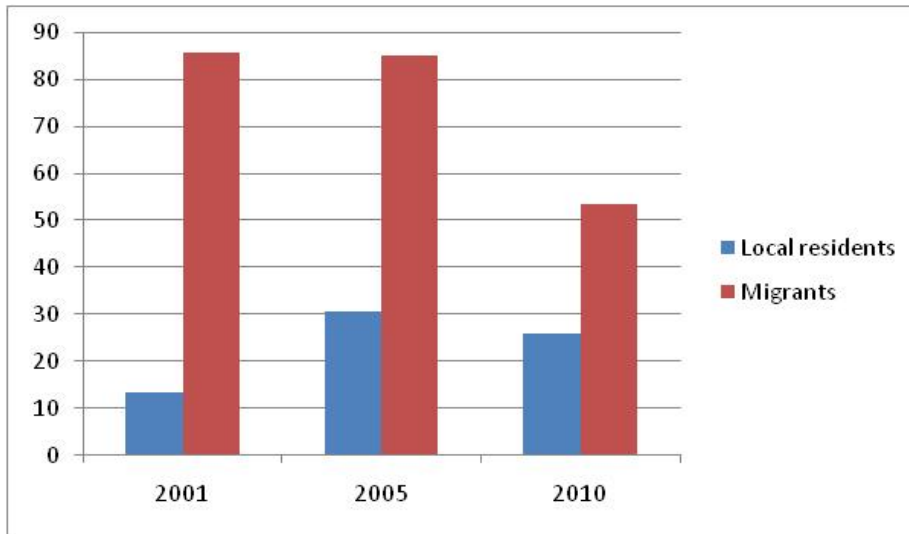


Figure 2. Arbitrated Labor Disputes, 1996-2010
China Labor Statistical Yearbook

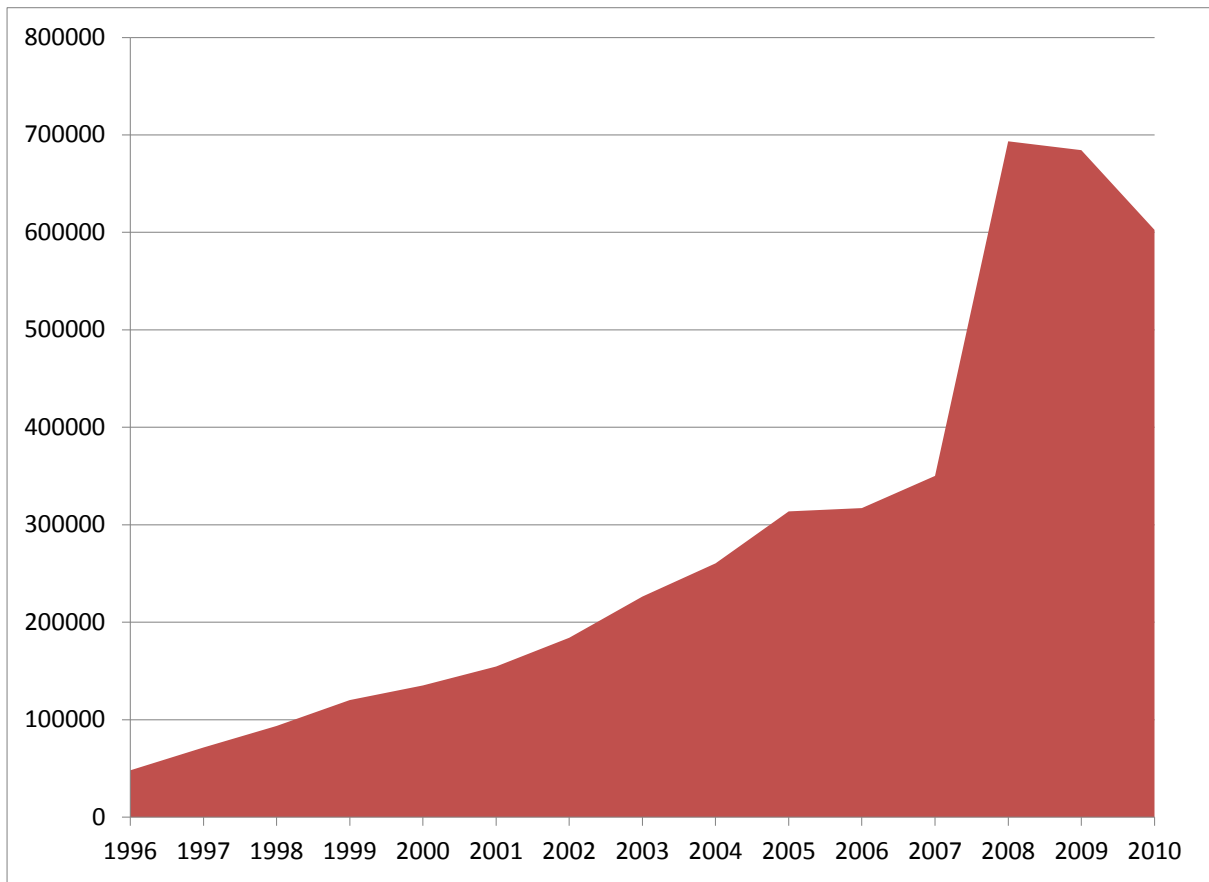
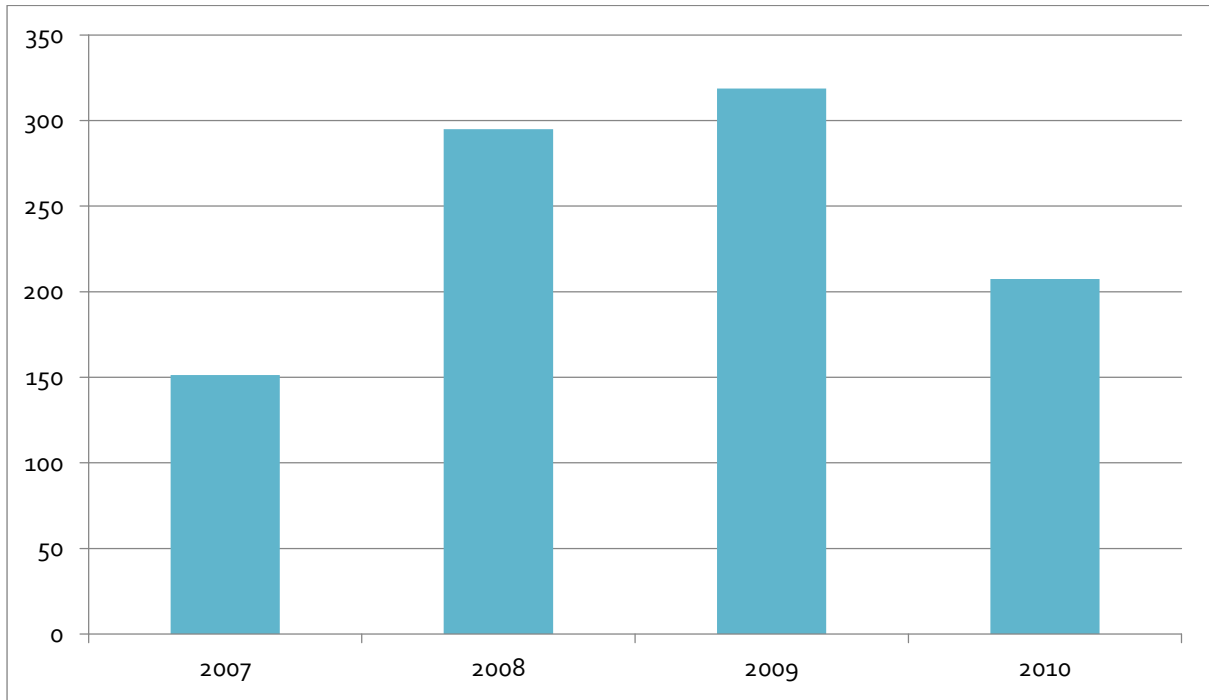


Figure 3

**Labor Disputes in Chinese Courts, 2007-2010
(in thousands, official data)**



**Table 1: Worker Assessment of Labor Contract Law Implementation by Employers
(China Urban Labor Survey 2010)**

	Mean (1-5)	Very good	Satisfied	So so	A little bad	Very bad
Local residents						
Before Sep. 2008	2.38	11.34	44.58	40.06	3.20	0.82
At present	2.37	10.35	46.07	40.16	2.85	0.57
Migrants						
Before Sep. 2008	2.45	8.49	45.00	40.66	5.17	0.68
At present	2.42	8.46	47.63	37.86	5.21	0.84

**Table 2: Firm Manager Evaluation of Strictness of Labor Regulation Enforcement
(People's Bank Manufacturing Firm Survey 2009)**

	Very strict	Strict	Not strict
By period:			
2007	21.57	71.12	7.31
Jan-Jun 2008	22.46	72.61	4.93
Jul-Dec 2008	23.47	72.33	4.19
Jan-Jun 2009	24.61	71.34	4.04
By size:			
Smallest	18.32	73.21	8.47
2nd quartile	25.02	70.38	4.60
3rd quartile	22.01	73.66	4.33
Largest	26.40	70.27	3.33

Table 3: Odds Ratios from Ordered Logit Models of Determinants of Labor Law Enforcement (1=very good, 5=very bad)

Variable	Local residents			Migrants		
	(1)	(2)	(3)	(1)	(2)	(3)
Male						
female	1.0347	0.9792	1.0081	1.0837	1.1274*	1.0982
16-30						
31-40	0.8585	0.8649	0.8676	1.0181	1.0289	1.0483
41-50	0.8732	0.9193	0.9169	1.0693	1.0365	1.1016
51-60	0.7841**	0.8303	0.7892*	1.0765	1.0782	1.1781
Primary						
junior high	0.8907	1.3349	1.2041	0.9379	0.943	0.9118
senior high	0.7250**	1.0984	0.8396	0.9321	1.0214	0.8995
college and above	0.3763***	0.8070	0.4953***	0.5649***	0.7332**	0.5501***
Shanghai						
Wuhan	1.4218***	1.3092***	1.5603***	1.7251***	1.4707***	1.6970***
Shenyang	0.7209**	0.5198***	0.7399*	0.7091**	0.6492***	0.7665*
Fuzhou	0.898	0.7529**	0.9337	1.6272***	1.4478***	1.6139***
Xian	1.6787***	1.2872**	1.5944***	1.6311***	1.3496***	1.6280***
Guangzhou	1.0839	0.8851	1.0732	1.5901***	1.5225***	1.6213***
no contract						
Contract		0.4908***			0.4845***	
Government						
SOE		1.1731			1.1312	
COE		1.1674			2.2935***	
Private		1.2414*			1.1595	
Foreign		0.9106			0.9179	
Manufacturing						
Other secondary		0.9044			1.5116***	
(construction)						
Wholesale, retail,		0.9148			1.0463	
catering						
Social service		0.8135			1.3040**	
Other service		0.7921**			1.2168	
Firm size (1 worker)						
2-7 workers		1.3305			1.0608	
8-19 workers		1.3240			1.2371	
20+ workers		1.1547			1.2133	
N	4442	3090	3090	4271	3857	3857
Pseudo R ²	0.022	0.039	0.021	0.017	0.03	0.017

Note: *p<0.1, ** p<0.05, *** p<0.01

Table 4: The Proportion of Workers Who Have a Labor Contract

	Urban-to-urban migrant workers			Rural-to-urban migrant workers			Total migrant workers			Urban local workers		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
2001												
All workers	25.99	24.73	25.47	12.59	11.22	12.10	15.41	14.52	15.08	69.22	63.19	66.68
Wage workers	50.40	42.71	47.01	29.51	22.67	26.81	34.60	28.15	31.97	77.23	69.76	74.06
2005												
All workers	24.33	19.27	22.16	11.86	7.23	9.75	13.92	9.06	11.73	68.09	60.91	64.96
Wage workers	52.37	53.77	52.89	35.51	28.05	32.59	39.15	33.19	36.85	76.37	68.90	73.14
2010												
All workers	57.76	58.09	57.91	24.91	25.90	25.37	33.43	34.37	33.86	71.69	69.59	70.80
Wage workers	77.45	72.49	75.07	51.29	51.36	51.32	60.44	59.01	59.76	81.24	78.78	80.20

Note: All workers include wage workers and self-employed workers.

Table 5: Marginal Probabilities from Probit Models of the Determinants of Having a Labor Contract in 2010

	Migrant wage employees		Local resident wage employees	
	Marginal effects	Marginal effects	Marginal effects	Marginal effects
Female	-0.0223	-0.0107	-0.0321**	-0.0133
31-40	0.0320	0.0235	0.0742***	0.0455***
41-50	-0.0132	-0.0553	0.0357*	-0.0130
51-60	0.0743	-0.0043	0.0481**	-0.0283
Junior high	0.1529***	0.1262**	0.0146	-0.0150
Senior high	0.2316***	0.2158***	0.1178***	0.0755*
College and above	0.4463***	0.3941***	0.2469***	0.1507***
Other secondary		-0.2489***		0.0063
Wholesale, retail and catering		-0.2646***		-0.0387
Social service		-0.2378***		-0.0758**
Other tertiary		-0.0986*		0.0247
SOE		0.2397***		-0.0309
COE		0.2114***		-0.1564***
Private		0.2456***		-0.2895***
Foreign-funded and joint venture		0.2161***		-0.0627
Wuhan	-0.2721***	-0.2327***	-0.2454***	-0.2525***
Shenyang	-0.4300***	-0.3977***	-0.5213***	-0.5275***
Fuzhou	-0.2731***	-0.2513***	-0.3106***	-0.2904***
Xi'an	-0.3452***	-0.3480***	-0.3277***	-0.3384***
N	2221	2221	3426	3426
pseudo R-sq	0.147	0.200	0.198	0.309

Table 6: Awareness of Labor Contract Law Provisions

	Local residents	Migrants
Q1. Do you think that when you are hired your employer should set a labor contract with you? (yes)	95.34	89.48
Q2. Do you think employers must pay you double wages for each month you worked beyond the allotted time for completing a labor contract? (yes)	80.87	77.00
Q3. If a worker violates the rules set by an employer can the employer terminate the worker's labor contract? (yes)	70.19	73.60
Q4. If you meet the required conditions and suggest an open-ended contract, must your employer comply? (yes)	70.17	67.76
Q5. Within how long do you think the labor contract should be signed after being hired? (one month)	39.58	45.83
Q6. For a one-year labor contract, what is the maximum probationary period? (2 months)	22.04	23.75
Mean score	63.03	62.90

Table 7: OLS Regression Results: Awareness of Labor Contract Law

Variable	Local residents			Migrants		
	(1)	(2)	(3)	(1)	(2)	(3)
male						
female	0.1394***	0.1385**	0.1367**	0.1609***	0.1255**	0.1367***
16-30						
31-40	0.8431***	0.7666***	0.7757***	0.2005***	0.1668***	0.1527**
41-50	1.2644***	1.2036***	1.2413***	0.1678***	0.1992***	0.1818***
51-60	1.2686***	1.3016***	1.3410***	-0.1427	0.0094	-0.0115
primary						
junior high	0.1459	-0.0350	-0.0293	0.0966	0.0269	0.0326
senior high	0.2795**	0.0885	0.1230	0.1365*	-0.0028	0.0376
college and above	0.4220***	0.2269	0.2907	0.4885***	0.2935***	0.4048***
Shanghai						
Wuhan	0.0399	0.2160**	0.1799**	0.2632***	0.2826***	0.2117***
Shenyang	-	-0.5386***	-0.6199***	-0.6090***	-0.6495***	-0.6950***
Fuzhou	0.7241***					
	-	-0.0800	-0.1414	-0.2558***	-0.1609*	-0.1908**
Xian	0.3311***					
	0.0771	0.2499**	0.2086**	0.0092	0.0197	-0.0531
Guangzhou	-0.0994	0.0498	0.0088	-0.4374***	-0.4301***	-0.4579***
no contract						
contract		0.2496***			0.1515**	
Government						
SOE		0.0353			-0.0488	
COE		-0.1280			-0.236	
Private		-0.0635			0.069	
Foreign		-0.0106			0.1249	
Manufacturing						
Other secondary		-0.1065			-0.2463**	
(construction)						
Wholesale, retail,		-0.2184**			-0.0802	
catering						
Social service		-0.0081			0.0298	
Other service		-0.1525*			-0.073	
Firm size (1						
worker)						
2-7 workers		-0.1670			-0.3597***	
8-19 workers		-0.2134			-0.1963	
20+ workers		-0.3837**			-0.136	
_cons	1.2922***	1.6600***	1.3425***	2.6942***	3.0128***	2.8287***
N	7953	5203	5203	6275	5432	5432
R ²	0.073	0.075	0.072	0.034	0.038	0.032

Note: *p<0.1, ** p<0.05, *** p<0.01

Table 8: Labor Disputes: Summary Statistics

		Local residents	Migrants
Have you ever prosecuted labor dispute? (yes)		0.90	0.81
The year you prosecuted your last prosecution	1997	3.20	
	1998	3.34	
	2001	3.42	
	2002	3.36	0.92
	2003	6.64	
	2004	4.15	0.66
	2005	0.00	12.96
	2006	12.46	30.69
	2007	10.64	18.86
	2008	21.92	17.96
	2009	23.64	17.96
	2010	7.23	0.00
The main reason for your last prosecution?	Amending labor contract	3.83	0.00
	Ending labor contract	17.93	0.60
	Working time	17.13	
	Wage	43.02	48.58
	Working safety	7.00	14.81
	Social welfare	2.62	1.67
	Training opportunity	0.00	
	Others		34.35
		8.48	(wage arrears)
Have you ever sought for settlement?(yes)		59.18	74.98
What is the final solution?	Completely solved	15.40	66.97
	Partly solved	11.67	24.84
	Not solved	56.52	7.19
	Solved but no implementation	12.35	1.00
	Others	4.06	0.00
Are you satisfied with the final solution?	Very satisfactory	15.40	17.67
	Satisfactory	21.27	53.90
	Not very satisfactory	22.98	21.94
	Very unsatisfactory	40.35	6.50
The main reason you are unsatisfactory	Spent too much time	43.17	58.01
	Spent too much money	0.00	0.00
	Arbitration is unfair	23.07	12.66
	Not Implemented	12.96	9.46
	Others	20.80	19.87

Table 9: Marginal Probabilities from Probit Model of Dispute Initiation

Variable	Local residents			Migrants		
	(1) marginal effects	(2) marginal effects	(3) marginal effects	(1) marginal effects	(2) marginal effects	(3) marginal effects
male						
female	-0.0027	-0.0025	-0.0033	-0.0006	-0.0004	-0.0009
16-30						
31-40	-0.0038*	-0.0030	-0.0042	-0.0007	-0.0005	-0.0007
41-50	-0.0034	-0.0045*	-0.0065**	-0.0008	-0.0004	-0.0007
51-60	-0.0041*	-0.0044**	-0.0060**	0.0011	-0.0008	-0.0011
primary						
junior high	0.6465***	0.8020***	0.7537***	0.2741***	0.3113***	0.2681***
senior high	0.4614***	0.5494***	0.4998***	0.5916***	0.6444***	0.5489***
college and above	0.6610***	0.5617***	0.5041***	0.7821***	0.8292***	0.7567***
Shanghai						
Wuhan	0.0033	0.0004	0.0010	0.0003	0.0010	0.0017
Shenyang	0.0022	-0.0018	-0.0024	-0.0006	0.0001	0.0004
Fuzhou	0.0029	-0.0010	-0.0001	0.0036	0.0025	0.0053
Xian	0.0064	0.0058	0.0052	0.0050	0.0048	0.0083
Guangzhou	0.0112	0.0076	0.0109	0.0023	0.0041	0.0056
no contract						
contract		-0.0024			-0.0002	
Government						
SOE		-0.0045			0.0014	
COE		0.0038			0.0006	
Private		0.0059			0.0048	
Foreign						
Manufacturing		0.0012			0.0126	
Other secondary (construction)		-0.0049**			0.0013	
Wholesale, retail, catering		0.0000			0.0061	
Social service		-0.0002			0.0014	
Other service						
Firm size (1 worker)		0.0057			-0.0010	
Firm size (2-7 workers)		0.0058			-0.0003	
Firm size (8-19 workers)		0.0037			-0.0001	
N	5015	3104	3104	4862	4171	4171
Pseudo R ²	0.033	0.072	0.038	0.068	0.129	0.069

Note: *p<0.1, ** p<0.05, *** p<0.01

Table 10: Firm Manager Assessment of Impact of Labor Regulations on Firm Employment Decisions (2009 People's Bank Manufacturing Firm Survey)

	Have labor regulations made it more difficult for your firm to hire and fire workers? (% yes)	Has new Law reduce hiring? (% yes)	Has new Law reduce firing? (% yes)
Total	34.5	15.8	30.8
By ownership type:			
State/collective	28.1	18.4	27.3
Private	31.6	19.0	33.8
Joint/Ltd/Other	35.4	15.2	32.8
Foreign	38.3	13.5	25.8
By province:			
Zhejiang	46.5	17.8	29.7
Jiangsu	31.9	20.3	35.0
Guangdong	45.5	15.8	38.9
Shandong	21.5	13.2	28.7
Jilin	25.4	51.5	34.1
Hubei	21.4	5.3	37.2
Shaanxi	26.0	7.1	27.7
Sichuan	20.4	5.1	13.8

Table 11. Share of Employed Workers Participating in Employer Provided Pension and Health Insurance by Migrant Status and Existence of Work Contract

2005						
Local			Migrant			
Total	Contract	No Contract	Total	Contract	No Contract	
Participates in Employer Provided Pension?	0.775	0.846	0.580	0.222	0.314	0.152
Participates in Employer Provided Health Insurance?	0.689	0.780	0.442	0.205	0.283	0.146
Observations	2789	1954	835	1073	407	666
2010						
Local			Migrant			
Total	Contract	No Contract	Total	Contract	No Contract	
Participates in Employer Provided Pension?	0.885	0.951	0.767	0.238	0.330	0.125
Participates in Employer Provided Health Insurance?	0.858	0.919	0.746	0.218	0.306	0.110
Observations	3790	2131	1659	2206	1024	1182

Table 12. Determinants of Participation in Employer-Based Pension Program								
Variables	2005				2010			
	Local		Migrant		Local		Migrant	
Employment Contract?	0.272*** (0.020)	0.186*** (0.021)	0.159*** (0.029)	0.117*** (0.028)	0.165*** (0.012)	0.147*** (0.013)	0.282*** (0.020)	0.295*** (0.022)
Age	0.040*** (0.007)	0.038*** (0.007)	0.031*** (0.011)	0.037*** (0.010)	0.016*** (0.005)	0.015*** (0.004)	0.004 (0.009)	0.006 (0.009)
Age-Squared	-0.000*** (0.000)	-0.000*** (0.000)	-0.000** (0.000)	-0.000*** (0.000)	-0.000* (0.000)	-0.000** (0.000)	-0.000 (0.000)	-0.000 (0.000)
Years of Schooling	0.021*** (0.005)	0.012*** (0.005)	0.009* (0.005)	0.014*** (0.005)	0.026*** (0.003)	0.015*** (0.003)	0.030*** (0.005)	0.031*** (0.006)
Post-Secondary Education	-0.032 (0.030)	-0.029 (0.029)	0.035 (0.052)	-0.026 (0.039)	0.004 (0.019)	-0.008 (0.017)	0.142*** (0.040)	0.089** (0.041)
Married	0.060** (0.028)	0.043* (0.026)	0.036 (0.038)	0.038 (0.033)	0.006 (0.015)	-0.005 (0.012)	0.035 (0.025)	0.034 (0.025)
Female	-0.021 (0.016)	-0.014 (0.016)	-0.036 (0.025)	-0.035 (0.024)	-0.014 (0.010)	-0.007 (0.009)	0.028 (0.020)	0.045** (0.021)
Industry and Danwei Dummies	No	Yes	No	Yes	No	Yes	No	Yes
Observations	2,783	2,783	1,073	1,072	3,782	3,767	2,192	2,192
Average Participation	0.777	0.777	0.226	0.226	0.848	0.847	0.283	0.283
Standard errors in parentheses								
*** p<0.01, ** p<0.05, * p<0.								

Appendix Table 1: Marginal Probabilities from Probit Models of the Determinants of Having a Labor Contract (2001)

	Migrant workers				Urban local workers			
	All workers		Wage workers		All workers		Wage workers	
	Marginal effects	Marginal effects	Marginal effects	Marginal effects	Marginal effects	Marginal effects	Marginal effects	Marginal effects
Female	-0.0113	0.0309	-0.0656*	-0.0023	-0.0581***	-0.0280	-0.0750***	-0.0398**
31-40	-0.0588***	-0.0463***	0.0593	0.0319	-0.0199	-0.1533***	-0.0055	-0.1125***
41-50	-0.0858***	-0.0774***	-0.0126	-0.0755	-0.0282	-0.1927***	-0.0213	-0.1460***
51-60	-0.0599	-0.0653**	0.0347	-0.0394	0.0419	-0.1474***	0.0403	-0.1017**
Junior high	0.0546*	0.0511*	0.0964	0.1120*	0.2185***	0.1644**	0.1761***	0.1392**
Senior high	0.1607***	0.1215***	0.2321***	0.2117***	0.3385***	0.2312***	0.2752***	0.2019***
College and above	0.4144***	0.3077***	0.4797***	0.4509***	0.4396***	0.3534***	0.3604***	0.3001***
Other secondary		-0.0603***		-0.1677***		-0.0138		-0.0042
Wholesale, retail and catering		-0.1563***		-0.2523***		-0.1124***		-0.0566
Social service		-0.1262***		-0.2687***		-0.1874***		-0.1513***
Other tertiary		-0.0793***		-0.2080***		-0.0146		0.0017
SOE		0.0351		0.0683		0.0361		0.034
COE		-0.0608**		-0.1379**		-0.2107***		-0.1866***
Private		-0.3831***		-0.2908***		-0.6192***		-0.4908***
Foreign-funded and joint venture		-0.0172		-0.0033		-0.2071***		-0.1763***
Wuhan	-0.0838***	-0.0568***	-0.0572	-0.0488	-0.1241***	-0.1525***	-0.0722***	-0.1199***
Shenyang	0.0172	0.0137	-0.0769**	-0.0554	-0.1183***	-0.0528	-0.0252	-0.0179
Fuzhou	0.0172	-0.0321*	0.0207	-0.0734*	-0.1976***	-0.2050***	-0.1509***	-0.1755***
Xi'an	0.0396*	-0.0083	0.0101	-0.0372	-0.0949***	-0.1363***	-0.0693***	-0.1130***
N	2591	2591	1348	1348	3355	3355	2953	2953
pseudo R-sq	0.078	0.260	0.052	0.143	0.086	0.330	0.073	0.216

AppendixTable 2: Marginal Probabilities from Probit Models of the Determinants of Having a Labor Contract (2005)

	Migrant workers				Urban local workers			
	All workers		Wage workers		All workers		Wage workers	
	Marginal effects	Marginal effects	Marginal effects	Marginal effects	Marginal effects	Marginal effects	Marginal effects	Marginal effects
Female	-0.0338*	-0.0234	-0.0421	-0.0546	-0.0749***	-0.0205	-0.0855***	-0.0322
31-40	-0.0363*	-0.0348*	0.1078	0.0825	-0.0190	-0.0974**	0.0284	-0.0394
41-50	-0.0597***	-0.0548***	-0.0526	-0.0754	-0.0251	-0.1271***	0.0251	-0.0676**
51-60	-0.0276	-0.0447**	-0.0237	-0.0692	0.0260	-0.1424***	0.0367	-0.0954**
Junior high	0.0068	0.0111	-0.0009	0.0174	0.1915***	0.0429	0.1481**	0.0216
Senior high	0.0915**	0.0949***	0.2566***	0.2849***	0.2919***	0.0752	0.2354***	0.0498
College and above	0.4620***	0.2835***	0.4723***	0.4379***	0.3878***	0.1709**	0.3182***	0.1440**
Other secondary		0.0358		0.1584		-0.0755		-0.0546
Wholesale, retail and catering		-0.0232		0.1406		-0.3174***		-0.2270***
Social service		-0.0186		0.0217		-0.2768***		-0.2504***
Other tertiary		-0.0037		0.0012		-0.0900**		-0.0655**
SOE		0.021		0.0508		-0.0112		-0.0135
COE		-0.0021		0.0232		-0.2144***		-0.1923***
Private		-0.3219***		-0.2351**		-0.5134***		-0.4137***
Foreign-funded and joint venture		0.0682		0.1343		-0.1083*		-0.1003*
Wuhan	-0.1029***	-0.0749***	-0.2420***	-0.2299***	-0.2452***	-0.1966***	-0.2046***	-0.1896***
Shenyang	-0.0733***	-0.0600***	-0.2696***	-0.2603***	-0.1762***	-0.1870***	-0.1685***	-0.1812***
Fuzhou	-0.0558***	-0.0458***	-0.2533***	-0.2459***	-0.1536***	-0.1897***	-0.1411***	-0.1711***
Xi'an	-0.0939***	-0.0714***	-0.2603***	-0.2554***	-0.1511***	-0.1852***	-0.1462***	-0.1780***
N	3556	3556	1304	1304	2891	2891	2540	2540
pseudo R-sq	0.150	0.286	0.124	0.174	0.079	0.326	0.074	0.257