Social Insurance for Migrant Workers in China:

Impact of the 2008 Labor Contract Law

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Abstract

Using the China Household Income Project (CHIP) 2007, 2008, and 2009 migrant survey data, this article provides new evidence on the possible effects of China's 2008 Labor Contract Law (LCL) on migrant workers' social insurance participation, including pensions, work injury insurance, unemployment insurance, medical insurance, and the housing provident fund. We find consistently strong evidence that migrant workers' labor contract status were significantly associated with their participation in all five types of social insurance. In particular, having or gaining a long-term contract (one year or above) helped promote migrant workers' social insurance participation, while losing one decreased their chance of participating in social insurance. Using a Difference-in-Differences (DD) method and relying on the panel sample, we find that the implementation of the LCL may have boosted the chance of having social insurance especially for migrant workers who moved from having no contract to having a contract and who moved from having a short-term contract to having a long-term or permanent contract. These effects were mostly significant except for participation in the housing provident fund.

Introduction

The rural-to-urban migrant population in China has grown continuously and rapidly since the early 1990s and has become a vital part of the Chinese labor force. From a mere 62 million in 1993, the number of migrants living and working away from their home villages reached 163 million by the end of 2012, making up about 44% of the urban labor force (National Bureau of Statistics [NBS], 2013; State Council, 2006). However, most of these migrant workers are "second-tier" citizens in the Chinese cities. Compared to their urban counterparts, they work longer hours, get less payment, and live in substandard conditions (Li and Li, 2010). Moreover, they have limited access to urban social benefits and services, making them further vulnerable from labor market and life cycle insecurities such as illness, old age, unemployment, and work injuries (Gao & Riskin, 2009; Khan & Riskin, 2005; Li, 2008; Wang & Chen, 2010).

To address this injustice and integrate the migrant workers into the urban labor market, in 2008, a new Labor Contract Law (LCL) was enacted to protect the rights and interests of workers. The LCL has two central goals: to enforce contract signing between employers and employees and to broaden social insurance coverage for employees. Specifically, first, the LCL stipulated that an open-term labor contract (i.e., with no fixed termination date) is deemed in effect if an employee has successfully concluded two consecutive fixed-term labor contracts or has worked for the employer for one year without a written labor contract (LCL Article 14; Leung, 2012). Second, the LCL requires employers to share their employees' social insurance cost, regardless of whether the employees are migrant workers or those with local Household Registration Status (Hukou). Social insurance should be included in the employee's labor contract, and an employee may terminate the labor contract and request for financial

compensation if the employer does not pay for the employee's social insurance (Hebel &

Schucher, 2008; LCL Article 17[7], 38[3], 46[1]).

Has the LCL been successful in achieving its intended goals? Given that the LCL was

enacted recently and given the lack of micro data, only two existing studies provide some

preliminary evidence on this topic. Becker and Elfstrom (2010) explored the impact of the LCL

on migrant workers by interviewing 367 migrant workers in Shenzhen, Dongguan, Zhuhai, and

Guangzhou in the Pearl River Delta and Suzhou in the Yangtze River Delta between January and

May 2009. Their found that 7% more workers had signed contracts since the LCL went into

effect, but the proportion with contracts was still only 60%, and their contracts lacked social

insurance provisions required by the LCL. They also found that participation rates in pensions

and work injury insurance increased by 9 and 10 percentage points, respectively, from before

2008.

Using the China Household Income Project (CHIP) 2007 and 2008 migrant survey data,

Gao, Yang, and Li (2012) examined the association between the migrant workers' labor contract

status and their social insurance participation using logistic regressions with rich controls and

city fixed effects. They found that having a labor contract, especially a long-term contract,

helped improve the migrant workers' social insurance coverage to a great extent. Exploiting the

panel nature of the CHIP data, they also found that moving from having a short-term contract or

no contract to having a long-term contract was greatly beneficial in boosting the migrant workers'

chance of having social insurance, whereas losing a long-term contract reduced their likelihood

of having social insurance. Their study did not directly investigate the impact of the LCL on

migrant workers' social insurance coverage, but provided suggestive evidence that the

implementation of the 2008 LCL may have helped promoting contract signing practice among the migrant workers which in turn helped improve their social insurance coverage.

Building on these two recent studies and to sort out the possible causal effect of the LCL, in this article, we use the newly available 2009 wave of the CHIP data in addition to the 2007 and 2008 waves and a difference-in-differences (DD) methodology to investigate the impact of the LCL on social insurance coverage for migrant workers, the second explicit goal of the LCL. We first replicate the analysis in Gao, Yang, and Li (2012) to verify if their results are robust in the longer study period covered in our study. To apply the DD method, we limit our analytical sample to the panel sample (i.e., migrants who stayed in the study for the entire 2007-2009 period). We treat the implementation of the 2008 LCL as a policy intervention that divides the study period into two time points (2007=pre-policy change; 2009=post-policy change). We hypothesize that the post-LCL period was associated with greater contract signing practice and broader social insurance coverage. Further, enabled by the DD method, we expect that those with labor contracts were more likely to have better social insurance coverage than those without contracts, and that those with more stable contracts were more likely to have better social insurance coverage than those with less stable contracts.

The rest of the article is organized as follows. The next section reviews the policy background and existing evidence, followed by a section introducing the data. The next section introduces our methodology and analysis procedures, followed by a section presenting the results. The final section concludes and discusses policy implications.

Policy Background and Existing Evidence

Social Insurance and Migrant Workers

The social insurance system in China is sharply divided by the urban-rural line, as every other aspect of the Chinese society. Every Chinese citizen is born to have either an urban or rural Hukou, with the urban citizens enjoying greater entitlements to social benefits and better life opportunities. Only very few rural citizens get the chance to obtain an urban Hukou. The rural-to-urban migrants—despite actually live and work in the citizens—still have limited access to the urban social benefits because of their rural Hukou. In 2007, social insurance, including pensions, unemployment insurance, and health benefits, accounted for 17% of total household income for urban citizens on average, while only 0.13% for migrant workers (Gao, Yang, & Li, 2013).

There are five types of social insurance in urban China, all of which are predominantly provided through employers: pensions, medical, unemployment, work injury, and maternity insurance. Both employers and employees are required to make financial contributions to the social insurance programs. Another important employment-based benefit, the housing provident fund, was established in 1994 to help employees establish personal housing fund accounts and increase their housing affordability as housing became privatized and housing prices rose drastically. The administration and financing of the housing provident fund are similar to those for the social insurance programs, with both employers and employees making regular payments. The CHIP migrant surveys asked about respondents' participation in pensions, work injury insurance, unemployment insurance, medical insurance, and the housing provident fund, all of which will be included in the analyses. Maternity insurance was not include in the surveys and therefore will be excluded from our analyses.

Migrants are often ignored by the social insurance system in China, partly due to their lack of urban Hukou and partly due to their less stable and lower paying jobs. Results from the CHIP 2002 data showed that only 5% or less of migrants had any social insurance coverage.

Further, the taxes and fees paid by the migrants actually exceeded any subsidies that they received (Gao & Riskin, 2009; Khan & Riskin, 2005; Li, 2008). Using the same data source, Song and Appleton (2008) found that the migrants were 8 percentage points less likely to have social insurance coverage than their urban peers. Evidence based on survey data from 7 Chinese cities in 2006 showed that less than 10% of migrant workers participated in social insurance programs through their employers (Xu, Guan, & Yao, 2011). The authors suggested that, in addition to lack of urban Hukou and their job characteristics, the migrants' lack of knowledge about social insurance programs and unwillingness to participate also contributed to their low social insurance coverage.

Indeed, there are both attractions and deterrents for the migrant workers to participate in social insurance. On the one hand, social insurance would help the migrant workers to survive difficult times due to sickness, injury, unemployment, and old age and to have greater human security. On the other hand, to participate in the social insurance programs, the migrant workers have to make regular contributions which might be not only a high amount but also nontransferable across jobs or localities. Given their low stability and high mobility, the migrant workers may have reasonable reservations regarding participation of social insurance programs.

As the Chinese government has expanded the rural social insurance system in recent years, many migrant workers also have some basic social insurance coverage, mainly medical insurance, in their home villages (Gao, 2010; Lardy, 2012). These benefits, however, are often not portable to the cities where they work and live, leaving the migrant workers only de facto coverage from their urban insurance (Gao, Yang, & Li, 2012). In this article, we only examine the migrant workers' participation in the urban medical insurance. In addition, given that the rural pensions program was only piloted in selected counties in 2009, we focused solely on urban

pension coverage for migrant workers. These omissions will not jeopardize the main purpose of this article but may lead to an upward bias in our estimation of the possible impact of LCL on migrant workers' urban social insurance participation.

The 2008 Labor Contract Law and Migrant Workers

The 2008 LCL was enacted to replace the previous 1995 Labor Law. Under the 1995 Labor Law, employers could refuse to sign labor contracts with workers or choose to sign short-term contracts only, a condition that made most workers, especially migrant workers, vulnerable from protection of their rights and benefits. The 2008 LCL aimed to rectify this by enforcing contract signing practice between employers and employees and requiring social insurance coverage for the employees to be written into the contracts. By the end of 2011, 86.4% of all employees in urban China had labor contracts, as compared to less than 20% before the enactment of the LCL (Hua, 2008; MHRSS, 2012; Xin, 2009).

The LCL is especially relevant to the private sector (i.e., private businesses and foreign firms) than the public sector (i.e., state-owned and collective enterprises). The contract signing practice and social insurance provision in the public sector were always much more stable than the private sector. One key intention of the LCL was to help protect the rights of the workers in the private sector and promote their human security through greater social insurance coverage. Migrant workers, due to their lack of urban Hukou and lower education and skills training, often work in the private sector, especially private domestic firms, and suffer from the lack of stable contracts and limited access to urban social benefits (Lan & Pickles, 2011).

Consequentially, the number of migrant workers participating in various urban social insurance programs has increased significantly in recent years. As shown in Figure 1, among the various social insurance programs, the highest participation rate is for work injury insurance.

About 25 million migrant workers had work injury insurance in 2006; after some modest increases from 2006 to 2008, this number jumped to 55.87 million in 2009 and then rose continuously to 68.28 million in 2011, representing 43% of all migrant workers. The second highest coverage is medical insurance. The number of migrant workers participating in medical insurance rose from 23.67 million in 2006 to 42.66 million in 2008 and then to 46.4 million in 2011, corresponding to 29% of all migrant workers. Migrant workers' participation in pensions and unemployment insurance grew dramatically. The number of migrant workers participating in pensions increased from 14.17 million in 2006 to 24.16 million in 2008 and then jumped to 41.4 million in 2011, reaching a participation rate of 26%. In 2011, 23.91 million migrant workers (or 15% of all migrant workers) had unemployment insurance, increasing steadily from 11.5 million in 2007 (MHRSS, 2007–2012).

[Figure 1 about here]

As mentioned earlier, only two existing studies provide some preliminary evidence on the possible impact of the LCL on migrant workers' social insurance participation. This article examines this important yet understudied topic and aims to tease out the possible causal link between the LCL and migrant workers' social insurance coverage as enabled by the DD methodology.

Data

This article uses data from the 2007, 2008, and 2009 waves of the CHIP migrant surveys. CHIP is a repeated cross-sectional study designed by a team of Chinese and Western economists and currently carried out by the China Institute for Income Distribution at Beijing Normal University. It is widely considered to be among the best available national survey data on household income, expenditures and program participation (Bramall, 2001; Gustafsson, Sicular

and Li, 2008; Khan and Riskin, 2005; Li, Sato and Sicular, 2013; Riskin, Zhao and Li, 2001).

With the high stability and continuity of the CHIP research team during the various waves of

study, CHIP data have been found to be highly consistent in study design, data collection

methods and data quality (Li, Sato and Sicular, 2013). To assess data quality, the CHIP team

randomly selected about 200 households in the most recent wave for return interviews.

Information re-collected among these households consistently matched the original data

collected from them, verifying the high reliability of the CHIP data.

The three waves of CHIP migrant data used in this study cover 15 cities in 9 provinces[1]

and include both temporary and long-term migrants. There are 5,007, 5,243, and 5,034

households (containing 8,446, 9,347 and 9,830 individuals) in 2007, 2008 and 2009 respectively.

Starting from 2007, the CHIP team decided to include a longitudinal component of the surveys

over the next four years, while continuing the cross-sectional surveys. The inclusion of the

longitudinal data enables researchers to track changes for the same individuals and families over

time. As of now, only the 2007-2009 data are available for use. Due to the high mobility of

migrants, only about one-third of the samples were tracked in all three years.

In this article, we restrict the analytical sample to individuals who were wage earners and

at least 16 years old. This yielded a sample size of 5,053, 5,107, and 4,884 individuals in the

respective 2007, 2008, and 2009 cross-sectional samples and 708 individuals in the panel sample

who remained in the study over the three-year study period.

CHIP migrant data suit the analytical needs of our study because they cover the pre- and

post-LCL periods and provide a unique opportunity to gauge the possible effects of the LCL.

CHIP includes detailed questions on the migrant workers' participation in various social

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[1] They are Guangzhou, Shenzhen and Dongguan in Guangdong Province; Shanghai; Nanjing and Wuxi in Jiangsu Province; Hangzhou and Ningbo in Zhejiang Province; Wuhan in Hubei Province; Chongqing Municipality; Chengdu in Sichuan Province; Hefei and Bengbu in Anhui Province; and Zhengzhou and Luoyang in Henan Province.

insurance programs and changes of their job contract status during the study period. The data also contain rich information on individual and household characteristics such as age, gender, education, occupation, employer ownership sector, employment industry, and various income sources.

Table 1 presents the demographic characteristics of our analytical samples. In the cross-sectional sample, the average age of the respondents was approximately 30-31 years old during 2007-2009. About 60% were male. The education level of the sample was relatively low, with 10-12% having only elementary school education or less, 50-55% with junior middle school education, and 19-22% with senior middle school education. Only 10-12% of the respondents had vocational school training and 5-7% had 3-year college or above. The average monthly income was 1,410 yuan in 2007 and increased to 1,850 yuan in 2009. In terms of employer ownership sector, about half worked in private enterprises, 22-29% worked for individual businesses, and 8-12% worked in foreign or joint venture enterprises. Only a small proportion worked in government agencies and institutions, state-owned, or collective enterprises (6% or less, respectively). Regarding employment industry, approximately one fifth to a quarter worked in manufacturing and in hotels, catering, real estate, and leasing or business services, followed by those working in construction, transportation, storage, and delivery (13-16%) and wholesale and retail (14-17%). Close to a quarter of the sample worked in household services in 2009, a big jump from 10% in 2007 and 7% in 2008.

[Table 1 about here]

In the panel sample, respondents were on average 1-2 years older and had slightly higher education levels than those in the cross-sectional sample. The share of male migrant workers reached about 65% in the panel sample as compared to about 60% in the cross-sectional sample.

The average monthly income as well as distribution of employer ownership sector and employment industry among the panel sample was similar to that of the cross-sectional sample.

Figure 2 presents the changes in migrant workers' labor contracts from 2007 to 2009. In the cross-sectional sample, overall the share of migrant workers with any type of contract increased from 64% in 2007 to 68% in 2009, implying that the LCL may have improved contract signing practices but its effect was limited. Specifically, the share of migrant workers with permanent contracts increased from 12% in 2007 to 15% in 2008, and then to 20% in 2009. The share of those with long-term contracts (one year and above) grew from 39% to 46% during this period. The most striking change possibly induced by the LCL was the decline in the share short-term contracts (less than one year); it decreased from 12% in 2007 to only 2% in 2009. Those with no contracts also dropped from 36% in 2007 to 32% in 2009.

[Figure 2 about here]

In the panel sample, from 2007 to 2009, the share of migrant workers with permanent contracts increased from 11% to 14%, while the share of those with long-term contracts decreased slightly from 45% to 44%. The share of short-term contracts decreased from 10% to 0%, while those with no contracts increased by 9 percentage points. This is possibly because that those with short-term contracts were more mobile than those with longer term contracts or with no contacts and therefore they were more likely to drop out of the panel study.

Figure 3 shows the changes in migrant workers' participation rates in the five social insurance programs examined in this study from 2007 to 2009. For both the cross-sectional and panel samples, the participation rates for pensions, work injury insurance, and unemployment insurance all had small to modest increases. The participation rate for medical insurance increased more than doubled from 2008 to 2009 in both samples, reflecting partly the influence

of the LCL and partly the government's push to incorporate the migrants into the urban medical insurance system. Participation in the housing provident fund stayed relatively stable during the study period for both samples.

[Figure 3 about here]

Figure 3 also shows that migrants in the panel sample fared better than those in the cross-sectional sample as they had higher participation rates across the social insurance programs, especially for pensions and work injury insurance. Specifically, in the panel sample, 30% of migrant workers participated in pensions and 27% had work injury insurance in 2007, both of which increased by 2-3 percentage points every year and reached 36% and 32% in 2009 respectively. The share with unemployment insurance increased from 19% in 2007 to 22% in 2009. The share with medical insurance increased from 13% in 2007 to 17% in 2008, and then jumped to 38% in 2009.

Methods

OLS Regressions

We first replicate the analysis conducted by Gao, Yang, and Li (2012) which used the 2007 and 2008 CHIP data to estimate the association between migrant workers' labor contract status and their social insurance participation. As our analysis covers the post-LCL period (i.e., 2009), we expect that our results to affirm their results that having a labor contract, especially a long-term contract, would help greatly improve the migrant workers' social insurance coverage. We also expect that, promoted by the LCL, moving from having a short-term contract or no contract to having a long-term contract would be greatly beneficial in boosting the migrant workers' chance of having social insurance.

To measure the migrant workers' social insurance participation for pensions, worker injury insurance, unemployment insurance, and the housing provident fund, we define participants as those whose insurance was paid by their employers and/or the migrant workers themselves.[2] To replicate the Gao, Yang, and Li (2012) study using the 2007-2009 data, we first run the following OLS regression model using pooled cross-sectional data from all three years under study (equation 1):

$$Y = \alpha + \beta X + \gamma T + \delta Z + \theta C + \varepsilon \quad (1)$$

where the dependent variable Y represents participation status (yes or no) in the respective five social insurance programs mentioned above. The key independent variable X is the migrant worker's contract status, including permanent contract, long-term contract (1 year and above), short-term contract (less than 1 year), and no contract. The variable T represents the year dummies, with 2007 as the omitted value. We expect that the years 2008 and 2009 are associated with greater social insurance participation, especially 2009, partly due to the enactment of the LCL and partly due to expansions in social insurance programs. The vector Z represents the migrants' demographic characteristics (including age, gender, education level, and monthly income) and employment characteristics (including employer ownership sector and industry). The parameter C represents city characteristics including the natural logarithm of the city per capita GDP and city level ratio of state and collective sector employees to private sector employees.[3] Because some individuals in the sample lived in the same household,[4] we cluster the

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[2] Only a small proportion of the employee sample paid for these types of social insurance by themselves. Specifically, in the 2007 cross-sectional sample, only 2.69% of migrant workers paid for pensions by themselves, only 1.08% paid for work injury insurance, only 0.79% paid for unemployment insurance, and only 0.36% paid for their housing provident fund. We ran all regressions without this group, and the results were very consistent with what we present in the paper. These results are thus not presented but are available upon request.

[3] Alternatively we have tried including city fixed effects to account for unobserved heterogeneity among cities. Those results are very consistent with the results reported in this paper and are available upon request.

[4] Approximately 32% of individuals lived in the same household in our pooled cross-sectional sample, and 34% of individuals lived in the same household in our panel sample.

individuals at the household level to adjust for heteroskedasticity in this and all subsequent

regression models. ε is the error term.

Treating 2008 as the year for policy change, we further make use of the panel nature of

the survey data to examine how the migrants' contract changes from 2007 to 2009 helped

explain their social insurance participation in 2009 and determine whether a change to a more

stable contract status would be associated with higher social insurance participation rates partly

enabled by the LCL. Data in 2008 are thus not used for this model except that they are used to

determine whether the respondent remained in the sample that year. We revise the regression

model above to the following (equation 2):

$$Y_{09} = \alpha + \mu P_{07} + \beta X + \gamma V + \delta Z + \theta C + \varepsilon \quad (2)$$

In this equation, participation in the five respective social insurance programs in 2009 is

represented by the dependent variables Y_{09}, while the respondents' social insurance participation

status in 2007 (P_{07}) and all other control variables remain in the model. The main change is that,

in addition to the migrants' contract status in 2007, we add a variable V to capture the changes in

their contracts from 2007 to 2009. In the panel sample, 53.25% of migrant workers did not

change contract status between 2007 and 2009, 24.58% had better contracts and 19.21% had

worse contracts. An additional 2.97% of migrant workers changed from having a short-term and

no contract or vice versa. Because this group is relatively small, they are treated as a separate

group. Similar to Gao, Yang, and Li (2012), we expect better contracts to be associated with

increased social insurance participation and worse contracts to be associated with decreased

social insurance participation.

Specifically, we explore the effects of five specific contract change scenarios to

determine which types of changes had the greatest influence on the migrants' social insurance

coverage. These possible changes include two scenarios with a change to a better contract (i.e., from a long- or short-term contract or no contract to permanent contract and from a short-term or no contract to a long-term contract) and two scenarios with a change to a worse contract (i.e., from a permanent to a long- or short-term or no contract and from a long- to a short-term or no contract) the final scenario includes those who changed from having a short-term to no contract or vice versa[5].

As mentioned earlier, the literature (Lan and Pickles, 2012) suggests that the LCL may have a stronger impact on the private sector, especially private domestic enterprises and individual businesses. To test if this is the case, we run the regression above and all subsequent regression models first among the panel sample and then among those in the panel sample who worked in private businesses only (including private domestic enterprises and individual businesses). We expect that the effects are larger in magnitude in migrant workers sample in the private businesses.

In addition to the possible effects of recent social policy changes that we are unable to capture empirically in these models, another possible omitted variable is the individual's ability or personality. Some workers may be more capable and work hard, thus earning both a more stable contract and better social insurance coverage. Some workers may be strong bargainers who—despite their ability and work ethics—are able to obtain better social insurance coverage through their bargaining power. While we are unable to fully account for this unobserved variable, controlling for the migrant workers' social insurance participation in 2007 and their various demographic and employment characteristics in the panel sample strengthens our estimation of the association between labor contract status and social insurance participation.

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[5] Because very few cases changed from having a short-term to no contract ($N = 49$) and vice versa ($N = 40$), we pooled these two groups.

DD Estimates

To gauge the possible causal effect of the LCL on migrant workers' social insurance participation, we exploit a DD design to estimate the pre- and post-LCL difference for those without and with labor contracts and for those with worse and better labor contracts. We assume that there were no other major policy changes during 2007-2009 that would have a strong impact on the migrant workers' labor contract status or social insurance participation. In reality there were some expansions in the urban medical insurance to incorporate the migrants into the urban system. However, we argue that this expansion affected all migrants similarly and therefore would not greatly undermine our estimate of the relationship between LCL and their social insurance coverage. In other words, any possible effects that such social insurance expansions may have on the migrant workers' social insurance participation would be through changes in their contract status, after controlling for other individual, employer, and city characteristics.

To generate the DD estimates, we run the following OLS regression (equation 3):

$$Y_{i,t} = \alpha + \alpha_1 \text{Treat} + \alpha_2 \text{Time} + \alpha_3 \text{Treat} * \text{Time} + \beta X + \gamma V + \delta Z + \theta C + \varepsilon \quad (3)$$

where $Y_{i,t}$ is participation in the five respective social insurance programs in 2009. Treat indicates belonging to the treatment group as opposed to the control group and Time indicates 2009 instead of 2009. The coefficient on the interaction term between Treat and Time would capture the DD effects of LCL on migrant workers' participation in the five respective types of social insurance programs.

In the DD analysis, we employer four pairs of treatment and control groups to better understand the nuances of the possible effects of LCL on the migrant workers' social insurance participation. First, we consider those who had no contracts in both 2007 and 2009 as the control group and compare them with two treatment groups: 1) those having any type of contract in 2009,

and 2) those having a short- or long-term contract in 2009. As evident in Gao, Yang, and Li (2012), those with permanent contracts did not seem to have a clear advantage in social insurance coverage as they may have had worked for the same employer for a long time and lacked an opportunity to negotiation for greater benefits. Consequentially, we expect the DD effects to be larger for the second treatment group than for the first.

Second, we consider those who had no contract or a short-term contract in both 2007 and 2009 as the control group, given that those with short-term contracts are much more vulnerable than those with long-term contracts. We then compare them with two treatment groups: 1) those having a long-term or permanent contract in 2009, and 2) those having a long-term contract in 2009. We expect that excluding the group with permanent contracts would reveal larger DD effects of the LCL on migrant workers' social insurance participation. As in the case for equations (1) and (2), we first run these DD regressions among the panel sample and then restrict the sample to private businesses only, expecting larger effects among the private business sample.

Results

OLS Regression Results

Table 2 reports the OLS regression results on the association between migrant workers' contract status and social insurance participation using pooled cross-sectional data from all three years under study estimated from equation (1). Consistent with Gao, Yang, and Li (2012), we find that migrant workers with any type of contact were more likely to participate in all five types of social insurance than those with no contract. Specifically, having a long-term contract significantly boosted one's likelihood of participating in social insurance by 10 (for housing provident fund) to 27 (for pensions) percentage points. Having a short-term contract had the next largest effect, improving one's likelihood of having social insurance by 6 to 13 percentage points.

Having a permanent contract increased one's chance of participating in social insurance by 3 to 9

percentage points. Migrant workers were more likely to have pensions, unemployment insurance,

and medical insurance in 2009 than in 2007 after controlling for the various individual, employer,

and city characteristics, possibly due to the implementation of the LCL at least partially, while

the year 2008 was not associated with such a positive outcome.

[Table 2 about here]

The individual, employer, and city characteristics showed expected associations with the

migrant workers' social insurance participation. Older, male, and more educated migrant workers

were more likely to have social insurance than their younger, female, and less educated peers.

Those working in government agencies, state-owed, collective, and foreign or joint-venture

enterprises were more likely to have social insurance than those working in the private domestic

sector. Among those in the private domestic sector, those working in private enterprises had a

slight advantage in their social insurance participation than those in individual businesses.

Migrant workers in manufacturing were more likely to have social insurance than those in other

industries. Cities with higher per capita GDP were more likely to have greater social insurance

participation (except for the housing provident fund) by migrant workers, and cities with a higher

ratio of state/collective sector employees were more likely to have greater participation in work

injury, unemployment, and medical insurances but less participation in the housing provident

fund by migrant workers.

Table 3 presents the OLS regression results on the effects of migrant workers' contract

status and contract change on their social insurance participation in 2009. Part A reports results

in the panel sample (i.e., migrant workers who remained in the study throughout 2007-2009)

while Part B reports results for migrant workers in private businesses (including private domestic

enterprises and individual businesses) within the panel sample. All individual, employer, and city characteristics included in Table 2 are also controlled for in Table 3. Their effects are largely similar to what we report in Table 2 and discuss above and are not shown in this or any subsequent tables.

[Table 3 about here]

Results in Part A of Table 3 show that participation in social insurance in 2007 was significantly and positively associated with social insurance participation in 2009. Those who had a long-term contract in 2007 consistently had greater likelihood of participating in social insurance in 2009. Additionally, gaining a long-term contract from 2007 to 2009 was especially predictive of greater social insurance participation in 2009, while losing a long-term contract was consistently detrimental to one's social insurance participation in 2009. These results affirm the powerful role played a long-term contract on the migrant workers' social insurance participation documented by Gao, Yang, and Li (2012) using the CHIP 2007-2008 data.

Results in Part B of Table 3 reveal that having or gaining a long-term contract improved one's probability of having social insurance more for the migrant workers in private businesses than for those in state-owed, collective, or foreign businesses. These result patterns are evident in the larger magnitudes of the regression coefficients for having or gaining a long-term contract in Part B than in Part A. The effects of losing a long-term contract, however, seemed to be slightly smaller for those working in private businesses than in other ownership sectors. Results in both Parts A and B show that changing between a short-term contract and no contract was associated with a lower probability of having social insurance, possibly due to the instability experienced by these migrant workers.

DD Results

Table 4 presents the DD estimation results on the possible effects of gaining a labor contract from 2007 to 2009 on social insurance participation in 2009. As mentioned earlier, in this table, those who had no contracts in both 2007 and 2009 make up the control group. They are compared with two treatment groups: 1) those having any type of contract in 2009, and 2) those having a short- or long-term contract in 2009. As both control and treatment groups started with having no contracts in 2007, we assume that any change in their social insurance participation was due to their contract change and the implementation of the LCL in 2008. Part A reports results on these two respective comparisons in the panel sample and Part B reports the results on the subsample of those who worked in private businesses only.

[Table 4 about here]

As shown in Part A of Table 4, we find that gaining a contract from 2007 to 2009 had a consistently positive effect on migrant workers' participation in four types of social insurances (except for the housing provident fund), and gaining a short- or long-term contract (as opposed to a permanent contract) was more beneficial in promoting their social insurance participation. Interestingly, these result patterns were no longer significant and/or smaller in magnitude for several social insurances when the sample is restricted to those working in private businesses only possibly due to the smaller sample sizes.

Table 5 presents the DD results on the effects of gaining a long-term or permanent contract on social insurance participation in 2009. In this table, those who had no contract or a short-term contract in both 2007 and 2009 are treated as the control group, given that those with short-term contracts are much more vulnerable than those with long-term contracts. They are compared with two treatment groups: 1) those having a long-term or permanent contract in 2009, and 2) those having a long-term contract in 2009. Similar to Table 4 above, Part A reports results

on these two respective comparisons in the panel sample and Part B reports the results on the subsample of those who worked in private businesses only.

[Table 5 about here]

Results in Table 5 are largely consistent with those in Table 4, showing the positive effect of gaining a long-term or permanent contract on migrant workers' social insurance participation. The magnitudes of these effects were mostly similar to and occasionally slightly larger than those shown in Table 4. Similar to Table 4, the effect magnitudes were mostly smaller in magnitude when the sample is restricted to those working in private businesses. Given that our DD estimates do not entirely meet the assumptions for using a DD method and rely on sample sizes, these results need to be interpreted in caution. Nevertheless, the DD results show consistent patterns as our OLS regression results and affirm the positive association between gaining a labor contract, especially a long-term one, and social insurance participation for the migrant workers.

Conclusion and Discussion

Using the China Household Income Project (CHIP) 2007, 2008, and 2009 migrant survey data, this article provides new evidence on the possible effects of China's 2008 Labor Contract Law (LCL) on migrant workers' social insurance participation. Using both the cross-sectional and panel nature of the data, we find consistently strong evidence that migrant workers' labor contract status were significantly associated with their participation in all five types of social insurance under study, including pensions, work injury insurance, unemployment insurance, medical insurance, and the housing provident fund. In particular, having or gaining a long-term contract (one year or above) helped promote migrant workers' social insurance participation, while losing one decreased their chance of participating in social insurance. Using a Difference-

in-Differences (DD) method and relying on the panel sample, we find that the implementation of the LCL may have boosted the chance of having social insurance especially for migrant workers who moved from having no contract to having a contract and who moved from having a short-term contract to having a long-term or permanent contract. These effects were mostly significant except for participation in the housing provident fund.

This article is among the first to directly examine the possible effects of the 2008 LCL on migrant workers' social insurance participation. Though caution needs to be taken when interpreting these results, it is evident that the LCL has helped the migrant workers to have greater access to the urban social insurance system in China. This would undoubtedly help provide better protection of their security from crisis in both the life cycle and due to market fluctuations. Using newer waves of the CHIP data as well as other data sources and more robust analytical methods in future research will help us better understand the possible effect of the LCL on the lives of the migrant workers and their families.

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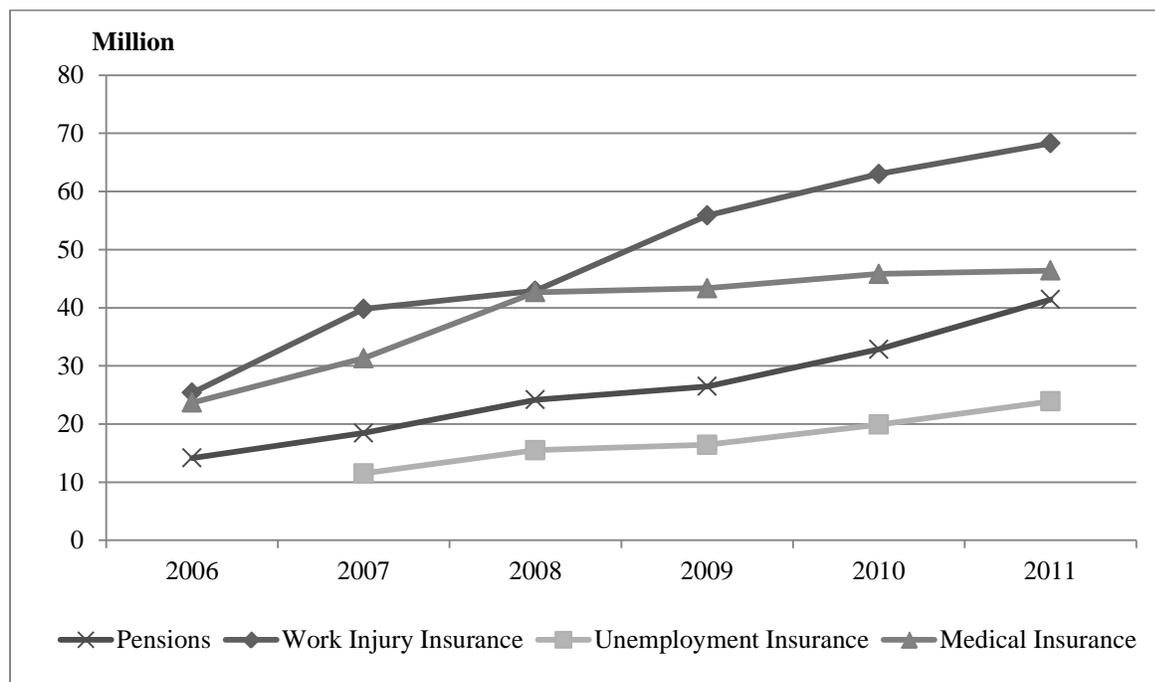
Fig. 1. The numbers of migrant workers participating in social insurance, 2006–2011

Source: Ministry of Human Resources and Social Security [MHRSS] (2006, 2007, 2008, 2009, 2010, 2011). *Statistical Communiqué on Human Resources and Social Security.* http://www.mohrss.gov.cn/SYrlzyhshbzb/zwgk/szrs/ndtjsj/

Fig. 2. Changes in migrant workers' labor contracts from 2007 to 2009

Source: Authors' calculations using CHIP migrant survey data.

Fig. 3. Changes in migrant workers' social insurance participation rates from 2007 to 2009

Source: Authors' calculations using CHIP migrant survey data.

Table 1 Descriptive statistics of sample demographics (%)

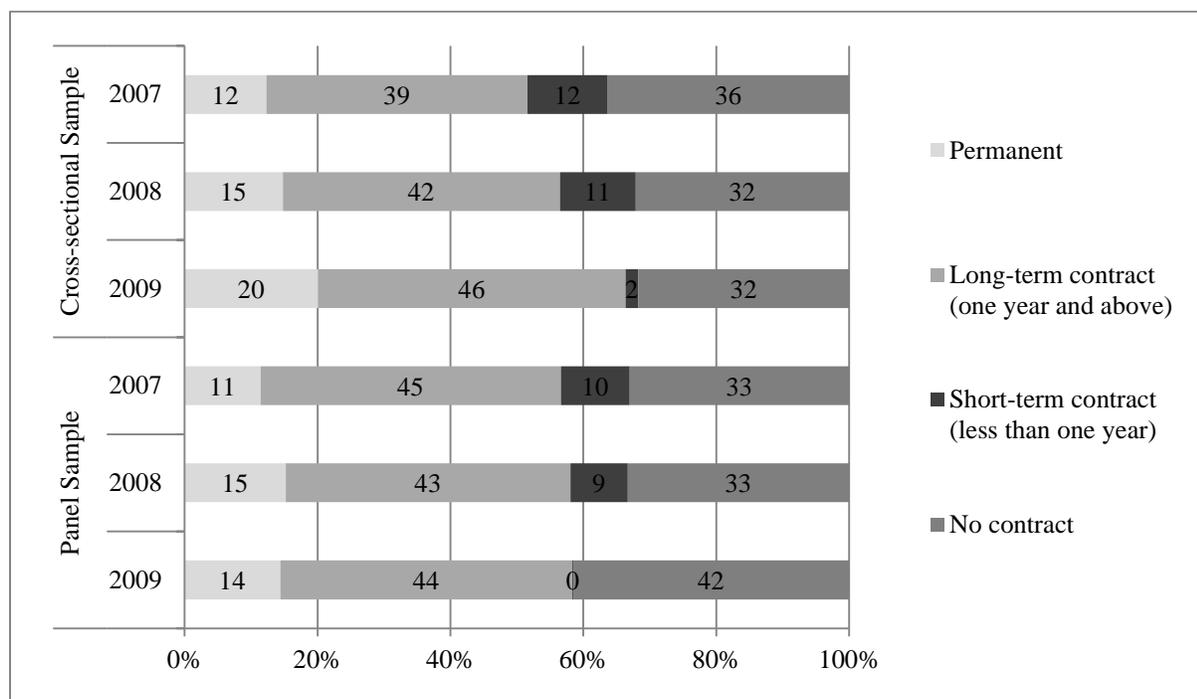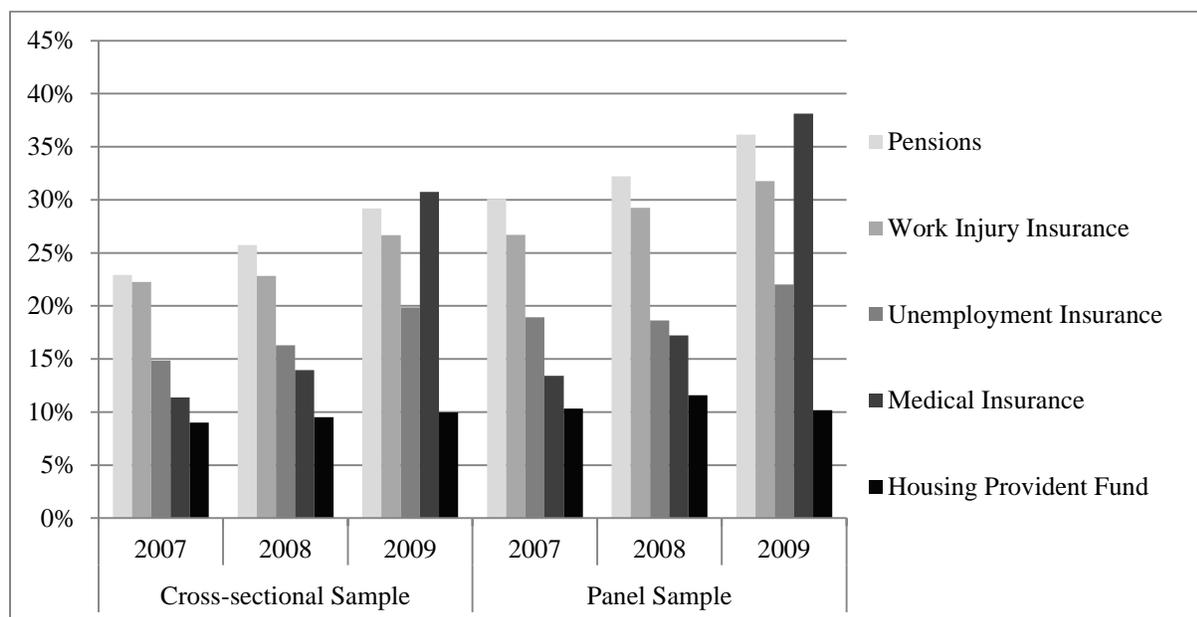|	Cross-sectional Sample			Panel Sample		
	2007	2008	2009	2007	2008	2009
Age						
Mean	29.94	30.56	30.79	31.16	32.07	32.92
Std. Dev.	(10.16)	(10.26)	(10.00)	(9.74)	(9.74)	(9.76)
Male (%)	60.72	61.67	59.95	64.97	64.55	64.97
Education Level (%)						
Elementary school or below	11.68	12.36	10.69	9.89	9.89	9.89
Junior middle school	54.66	50.01	49.67	49.15	49.15	49.15
Senior middle school	18.92	20.27	21.70	22.03	22.03	22.03
Vocational school	9.90	11.88	10.61	12.29	12.29	12.29
3-year college or above	4.85	7.28	7.33	6.64	6.64	6.64
Monthly income (¥)						
Mean	1409.67	1629.78	1850.26	1400.18	1654.71	1816.11
Std. Dev.	(670.32)	(784.00)	(1462.51)	(659.52)	(849.18)	(917.34)
Employer Ownership Sector (%)						
Private enterprises	48.43	53.36	42.38	48.31	50.71	47.32
Individual businesses	22.62	21.23	29.30	23.16	20.90	27.26
Foreign or joined venture enterprises	11.93	9.71	8.13	12.85	10.88	6.07
Government agencies and institutions	6.77	6.00	6.94	6.78	6.36	7.20
State-owned enterprises	5.54	6.14	5.57	4.66	7.77	8.05
Collective enterprises	4.18	4.15	4.71	4.24	3.39	4.10
Other or missing	0.53	1.22	2.97	0.00	0.00	0.00
Employment Industry (%)						
Manufacturing	24.34	26.17	19.45	20.34	24.58	17.66
Construction, transport, storage, and delivery	16.64	13.97	13.60	10.45	10.73	11.86
Wholesale and retail trade	15.57	17.28	13.80	21.61	20.48	19.35
Hotel and catering services, finance, real estate, leasing and business services	24.20	27.21	18.28	26.84	28.53	18.08
Households services	10.15	7.41	24.92	11.02	7.20	24.29
Information, computer services, research and technical service, education, health, social welfare, culture, sport and entertainment	9.08	9.75	9.95	9.75	8.47	8.76
N	5053	5107	4884	708	708	708

Table 2
OLS regression results on social insurance participation in cross-sectional sample (N=15,044)

VARIABLES	Pension	Work Injury Insurance	Unemployment Insurance	Medical Insurance	Housing Provident Fund
Contract status (No contract is omitted)					
Permanent	0.0795**	0.0897**	0.0596**	0.0537**	0.0347**
	(9.0801)	(9.9173)	(7.9798)	(6.4912)	(6.1361)
Long term contract (one year and above)	0.2745**	0.2439**	0.1847**	0.1930**	0.0985**
	(32.7567)	(30.1000)	(25.7479)	(26.4239)	(18.6123)
Short term contract (less than one year)	0.1270**	0.1257**	0.0898**	0.0720**	0.0565**
	(9.7838)	(9.6549)	(7.9382)	(7.2258)	(6.0078)
Year (2007 is omitted)					
2008	-0.0052	-0.0313**	-0.0091	-0.0054	-0.0060
	(-0.6282)	(-3.7587)	(-1.2079)	(-0.7551)	(-0.9611)
2009	0.0250**	0.0015	0.0258**	0.1524**	-0.0017
	(2.7178)	(0.1643)	(3.0050)	(17.5162)	(-0.2555)
Monthly income (Ln)	0.0806**	0.1005**	0.0511**	0.0805**	0.0582**
	(8.6447)	(11.0905)	(6.2251)	(9.5777)	(8.4675)
Age	0.0256**	0.0144**	0.0136**	0.0092**	0.0039**
	(13.7140)	(7.8056)	(8.2329)	(5.2416)	(3.0576)
Age squared	-0.0003**	-0.0002**	-0.0002**	-0.0001**	-0.0000*
	(-11.7143)	(-7.1445)	(-6.9668)	(-4.2445)	(-2.3145)
Female (Male is omitted)	-0.0128+	-0.0303**	0.0060	-0.0018	-0.0026
	(-1.9437)	(-4.8893)	(1.0638)	(-0.3133)	(-0.5621)
Education level (Elementary school or below is omitted)					
Junior middle school	0.0579**	0.0301**	0.0348**	0.0317**	0.0262**
	(5.3721)	(2.9249)	(3.7910)	(3.3033)	(4.1034)
Senior middle school	0.1222**	0.0866**	0.0753**	0.0672**	0.0395**
	(9.4148)	(6.9383)	(6.6961)	(5.8390)	(4.8192)
Vocational school	0.1692**	0.1262**	0.1131**	0.1014**	0.0814**
	(10.6684)	(8.1440)	(7.8689)	(7.1812)	(7.2135)
Three-year college or above	0.1772**	0.1111**	0.1250**	0.1121**	0.0971**
	(9.5728)	(6.1248)	(7.4551)	(6.7538)	(6.8767)
Employer ownership sector (Individual business is omitted)					
Government agencies and Institutions	0.1334**	0.0979**	0.0590**	0.0999**	0.0457**
	(7.8161)	(5.9640)	(4.0224)	(6.1833)	(4.0992)
State-owned enterprises	0.1837**	0.1186**	0.0897**	0.1646**	0.0762**
	(10.1939)	(6.6442)	(5.4457)	(9.5540)	(5.4469)
Collective enterprises	0.1380**	0.1168**	0.0861**	0.0540**	0.1192**
	(7.5404)	(6.2261)	(4.9131)	(3.0552)	(7.5678)

Private enterprises	0.0274**	0.0286**	0.0195**	0.0149*	0.0134**
	(3.6914)	(3.9236)	(3.0686)	(2.2260)	(3.0059)
Foreign or joined venture enterprises	0.2172**	0.1840**	0.1792**	0.1258**	0.1317**
	(14.5683)	(12.1750)	(12.2127)	(8.6098)	(10.3953)
Others	0.0425	0.0266	0.0446+	0.0356	0.0572**
	(1.4714)	(0.9655)	(1.7048)	(1.3221)	(2.6362)
Employment Industry (Manufacturing is omitted)					
Construction, transport, storage, and delivery	-0.1858**	-0.1327**	-0.1304**	-0.0991**	-0.1141**
	(-15.1184)	(-10.3459)	(-11.7111)	(-8.8412)	(-12.4892)
Wholesale and retail trade	-0.0907**	-0.1060**	-0.0822**	-0.0406**	-0.0650**
	(-7.3277)	(-8.6972)	(-7.2670)	(-3.6786)	(-6.8776)
Hotel and catering services, finance, real estate, leasing and business services	-0.1015**	-0.1132**	-0.0896**	-0.0458**	-0.0793**
	(-9.0064)	(-10.1417)	(-8.7047)	(-4.4991)	(-9.3356)
Households services	-0.1378**	-0.1343**	-0.1079**	-0.0739**	-0.0919**
	(-10.9052)	(-10.6935)	(-9.4267)	(-6.2557)	(-9.9389)
Information, computer services, research and technical service, education, health, social welfare, culture, sport and entertainment	-0.0695**	-0.0758**	-0.0536**	0.0020	-0.0630**
	(-4.7983)	(-5.2933)	(-3.9954)	(0.1492)	(-5.7769)
City per capita GDP (Ln)	0.0246**	0.0308**	0.0153*	0.0414**	0.0028
	(3.3670)	(4.2867)	(2.4020)	(6.4289)	(0.5240)
City ratio of state/collective to private sector employees	0.0075	0.0422**	0.0208**	0.0211**	-0.0305**
	(1.1380)	(6.2957)	(3.3107)	(3.5179)	(-6.6260)
Constant	-1.2626**	-1.2474**	-0.7660**	-1.2319**	-0.4530**
	(-14.2655)	(-14.3084)	(-10.0155)	(-15.2677)	(-7.3501)
R-squared	0.2527	0.2203	0.1675	0.2040	0.1158

Note: $**p < .01$. $*p < .05$. $+p < .10$.

Table 3

OLS regression results on the effects of contract status and contract change on social insurance participation in 2009

	Pension	Work Injury Insurance	Unemployment Insurance	Medical Insurance	Housing Provident Fund
Part A (In panel sample, N=708)					
Social insurance participation in 2007	0.3573**	0.2234**	0.1795**	0.1509**	0.3080**
	(7.6469)	(5.0059)	(3.7223)	(2.7510)	(4.9588)
Contract Status in 2007 (No contract omitted)					
Permanent	0.0402	0.1151	0.0260	-0.0626	-0.0349
	(0.5450)	(1.1326)	(0.2921)	(-0.7917)	(-1.0237)
Long term contract	0.2482**	0.3111**	0.2336**	0.3224**	0.1157**
(one year and above)	(4.8677)	(6.4881)	(5.5484)	(6.1292)	(3.7920)
Short term contract	0.1306	0.2217**	0.2140*	0.2067*	0.0080
(less than one year)	(1.5801)	(2.5935)	(2.5281)	(2.2724)	(0.1248)
Contract change from 2007 to 2009 (no change is omitted)					
Change to better contract					
From long- or short-term contract or no contract to	-0.0266	-0.0338	-0.0035	-0.0663	-0.0703*
permanent contract	(-0.4174)	(-0.5682)	(-0.0608)	(-1.0481)	(-2.0168)
From short-term or no contract to long-term	0.3022**	0.2188**	0.2993**	0.2577**	0.1012+
contract	(4.2393)	(3.2464)	(4.2406)	(3.3242)	(1.8004)
Change to worse contract					
From permanent to long- or short-term or no	-0.0066	-0.0341	0.0012	0.1004	0.0739+
contract	(-0.0807)	(-0.3135)	(0.0130)	(1.1642)	(1.6529)
From long- to short-term or no contract	-0.2897**	-0.3313**	-0.1611**	-0.3475**	-0.1299**
	(-4.7678)	(-5.9277)	(-2.8058)	(-5.2634)	(-3.5256)
Between short-term and no contract	-0.1689	-0.2733*	-0.1924+	-0.2745*	-0.0349
	(-1.6364)	(-2.5677)	(-1.8284)	(-2.4117)	(-0.5227)
Part B (In private businesses within panel sample, N=506)					
Social insurance participation in 2007	0.3681**	0.1871**	0.1242*	0.1416+	0.2819**
	(6.1223)	(3.4211)	(1.9914)	(1.6508)	(3.2302)
Contract Status in 2007 (No contract omitted)					
Permanent	-0.0106	0.0776	0.0543	-0.1619**	0.0032
	(-0.2016)	(0.6558)	(0.5011)	(-2.9528)	(0.1024)
Long term contract	0.2911**	0.3448**	0.2321**	0.3344**	0.1061**
(one year and above)	(4.8952)	(6.1025)	(4.6633)	(5.2793)	(2.8286)
Short term contract	0.2050*	0.2984**	0.2732**	0.2544*	-0.0232

(less than one year)	(2.1489)	(3.1334)	(2.9381)	(2.3148)	(-0.2899)

Contract change from 2007 to 2009 (no change is omitted)

Change to better contract

From long- or short-term contract or no contract to permanent contract	-0.0213	-0.0990	0.0085	-0.0817	0.0001
	(-0.2825)	(-1.3517)	(0.1281)	(-1.0464)	(0.0026)
From short-term or no contract to long-term contract	0.3299**	0.2401**	0.3230**	0.2707**	0.1954**
	(3.6969)	(3.0482)	(4.0069)	(2.7713)	(2.7702)

Change to worse contract

From permanent to long- or short-term or no contract	0.0786	-0.0229	0.0113	0.1460*	0.0494
	(1.1810)	(-0.1851)	(0.1017)	(2.3145)	(1.1497)
From long- to short-term or no contract	-0.2387**	-0.3265**	-0.1107	-0.3008**	-0.0713
	(-3.1964)	(-4.8127)	(-1.4526)	(-3.7442)	(-1.5157)
Between short-term and no contract	-0.2099+	-0.3555**	-0.2581*	-0.3398**	0.0150
	(-1.9541)	(-3.2483)	(-2.4276)	(-2.6911)	(0.1808)

Note: All other control variables included in Table 2 are also controlled for in these models.
**$p < .01$. *$p < .05$. +$p < .10$.

Table 4

Difference-in-Differences results on the effects of gaining a labor contract on social insurance participation in 2009

	Pension	Work Injury Insurance	Unemployme nt Insurance	Medical Insurance	Housing Provident Fund
Part A: (In panel sample)					
Part A1: from no contract to having a contract					
(N=234, treat=68, control=166)					
Treat	0.1120**	0.0594	0.0390	0.0050	0.0235
	(2.7691)	(1.5154)	(1.3867)	(0.2669)	(1.0814)
Time	0.0539*	0.0120	-0.0001	0.0652**	-0.0006
	(2.3862)	(0.5584)	(-0.0096)	(2.6290)	(-0.0592)
Treat*Time	0.1980**	0.1688*	0.2070**	0.3358**	0.0736
	(2.6489)	(2.4627)	(3.5485)	(4.9329)	(1.6375)
Part A2: from no contract to having a short- or long-term contract					
(N=210, treat=44, control=166)					
Treat	0.1323*	0.0852	0.0428	-0.0109	0.0180
	(2.4922)	(1.6019)	(1.2437)	(-0.9325)	(0.7074)
Time	0.0552*	0.0146	0.0026	0.0680**	-0.0018
	(2.5122)	(0.6925)	(0.2364)	(2.7965)	(-0.1836)
Treat*Time	0.2622**	0.1683+	0.2614**	0.4311**	0.1101+
	(2.7479)	(1.8514)	(3.3188)	(5.2202)	(1.8142)
Part B: (In private businesses within panel sample)					
Part B1: from no contract to having a contract					
(N=198, treat=52, control=146)					
Treat	0.1233**	0.0709	0.0510	0.0232	0.0320
	(2.6231)	(1.6457)	(1.5048)	(1.1431)	(1.1965)
Time	0.0521*	0.0097	0.0054	0.0733**	0.0008
	(2.2432)	(0.4579)	(0.4448)	(2.9531)	(0.0782)
Treat*Time	0.1483	0.1241	0.1652*	0.3184**	0.0703
	(1.6315)	(1.5762)	(2.2634)	(3.8580)	(1.3012)
Part B2: from no contract to having a short- or long-term contract					
(N=177, treat=31, control=146)					
Treat	0.1445*	0.1445*	0.0572	0.0026	0.0247
	(2.2125)	(2.2125)	(1.2710)	(0.3575)	(0.7425)
Time	0.0520*	0.0520*	0.0068	0.0740**	0.0003
	(2.2755)	(2.2755)	(0.5570)	(2.9867)	(0.0322)
Treat*Time	0.2192+	0.2192+	0.2295*	0.4278**	0.1020
	(1.8616)	(1.8616)	(2.3232)	(4.3936)	(1.4084)

Note: All other control variables included in Table 2 are also controlled for in these models.
**$p < .01$. *$p < .05$. +$p < .10$.

Table 5
Difference-in-Differences results on the effects of gaining a long-term or permanent contract on social insurance participation in 2009

	Pension	Work Injury Insurance	Unemployment Insurance	Medical Insurance	Housing Provident Fund
Part A: (In panel sample)					
Part A1: from having no or a short-term contract to a long-term or permanent contract (N=307, treat=120, control=187)					
Treat	0.2258**	0.1954**	0.1390**	0.0621*	0.0784**
	(5.5815)	(4.5616)	(3.8931)	(2.2718)	(2.6920)
Time	0.0583**	0.0039	0.0091	0.0644**	-0.0037
	(2.6133)	(0.1702)	(0.6896)	(2.6999)	(-0.4064)
Treat*Time	0.1809**	0.1636*	0.2126**	0.3620**	0.0294
	(2.8238)	(2.5283)	(3.6701)	(6.2214)	(0.6996)
Part A2: from having no or a short-term contract to a long-term contract (N=274, treat=87, control=187)					
Treat	0.2444**	0.2424**	0.1609**	0.0302	0.0786*
	(5.0128)	(4.5622)	(3.5819)	(1.1150)	(2.1991)
Time	0.0593**	0.0047	0.0104	0.0672**	-0.0054
	(2.7341)	(0.2084)	(0.8045)	(2.8609)	(-0.6030)
Treat*Time	0.2590**	0.1884*	0.2864**	0.4638**	0.0617
	(3.4958)	(2.4139)	(4.0404)	(7.2898)	(1.1811)
Part B: (In private businesses within panel sample)					
Part B1: from having no or a short-term contract to a long-term or permanent contract (N=253, treat=90, control=163)					
Treat	0.2257**	0.1952**	0.1453**	0.0731*	0.0819*
	(4.9313)	(4.0581)	(3.4999)	(2.5275)	(2.3609)
Time	0.0542*	-0.0006	0.0159	0.0714**	-0.0010
	(2.4034)	(-0.0264)	(1.1653)	(2.9738)	(-0.1039)
Treat*Time	0.1424+	0.1621*	0.1932**	0.3281**	0.0392
	(1.8907)	(2.1223)	(2.7521)	(4.8279)	(0.7625)
Part B2: from having no or a short-term contract to a long-term contract (N=225, treat=62, control=163)					
Treat	0.2574**	0.2655**	0.1777**	0.0537+	0.0886*
	(4.4723)	(4.2786)	(3.2692)	(1.7732)	(1.9925)
Time	0.0547*	0.0008	0.0179	0.0723**	-0.0017
	(2.4758)	(0.0329)	(1.3171)	(3.0164)	(-0.1748)
Treat*Time	0.2106*	0.1606+	0.2534**	0.4119**	0.0604
	(2.3306)	(1.6923)	(2.8666)	(5.3632)	(0.9132)

Note: All other control variables included in Table 2 are also controlled for in these models.
**$p < .01$. *$p < .05$. +$p < .10$.