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Employers as landlords for rural-to-urban migrants in Chinese cities

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1. Bian, Y, J R Logan, H Lu, Y Pan and Y Guan (1997), "Work units and housing reform in two Chinese cities", in X Lu and E J Parry (editors), *Danwei: The Chinese Work Unit in Historical and Comparative Perspective*, M E Sharpe, Armonk, NY; also Bian, Y, J R Logan, H Lu, Y Pan and Y Guan (1997), "Work units and the commodification of housing: observations on the transition to a market economy with Chinese characteristics", *Social Sciences in China* (English Edition) Vol 18, pages 28–35; and Li, B (2001), "China's housing reform and work incentive effects", PhD thesis, London School of Economics, UK.

ABSTRACT In Chinese cities, employer-provided housing has played an important part in accommodating low-income, rural-to-urban migrants. Employer housing is often used to study other problems such as management style or worker psychology. In this paper we intend to examine employer-provided housing for its own sake. We use two surveys in the cities of Taiyuan and Tianjin in China to understand the reasons why Chinese employers want to provide housing for employees, the conditions of this type of housing and whether workers are satisfied with it. In doing so, we may identify areas that suffer from serious market failure and will discuss possible solutions to the problems.

KEYWORDS China / cities / employer-provided housing / rural–urban migration

I. INTRODUCTION

Employers have played an important part in the housing sector in Chinese cities. Housing used to be one of the biggest welfare items for many urban residents during the central planning era;⁽¹⁾ however, except for the most recent policy changes concerning contributions to the Housing Provident Fund, state-initiated housing benefits enforced by employers have never been available to workers migrating from rural areas. As the housing sector was privatized, people were expected to buy houses in the private market rather than apply for welfare housing from their employer or local government, and by the late 1990s, most employers had stopped providing welfare housing for employees in the cities. To this day, employer housing provision within the private sector is at most a decision made by the employers themselves based on their financial circumstances. The legally binding responsibility for all employers regarding housing is limited to contributing to the Housing Provident Fund, a form of forced savings whereby employers contribute partly to the fund to support home ownership;⁽²⁾ as a result, most employers no longer consider themselves to be housing providers. However, as more rural-to-urban migrants moved into the cities, employers started to provide dormitories for migrant workers, especially the newcomers, and it seems that the employer as a housing provider is becoming relevant again. What is different from the past, however, is that employer-provided housing is not a welfare item but, rather, a convenient arrangement to improve business competitiveness.

There is a growing body of literature on the housing conditions of rural-to-urban migrant workers based on surveys in different parts of China.⁽³⁾ These studies examine the housing conditions of migrant workers and the causes of housing inequality. As revealed in these papers, both the private market – either formal or informal – and employers are crucial in providing houses for migrant workers. However, most of these studies are on housing demand. The housing role of employers, although recognized by many city authorities as being important, is rarely examined in depth. Even fewer studies attempt to examine the motivations of employers as housing providers for migrant workers. We believe that unless we understand the motivations behind employers' housing provision, it will be very difficult to seriously involve one of the most important actors in realistically improving the housing conditions of rural-urban migrants.

In this paper, we look at employer-provided housing for rural-urban migrants in two Chinese cities, Tianjin and Taiyuan. We want to find out why employers wish to provide accommodation to employees at all and how the goals of employers' housing provision are realized. We then outline the housing outcomes for employees who live in dormitories, and these are discussed in comparison to housing outcomes for workers who live in houses acquired in the private market, in terms of housing adequacy. Finally, we look at the attitude of migrant workers towards this type of housing arrangement, and in the conclusions, we discuss the possible ways to improve housing conditions for migrant workers who live in particularly poor quality employer-provided accommodation.

II. HOUSING PROVISION BY EMPLOYERS IN THE WORLD

In the Communist system, one explanation for employer housing provision is that it is associated with distributive justice,⁽⁴⁾ i.e. employers function as agents of the state to allocate in-kind benefits. However, it is difficult to justify why just distribution has to be carried out by employers and not by local governments. Another explanation is that employers have better information about the employees than any other government agent, and therefore are the "best" available policy enforcers. This seems to be a realistic solution in a country where the state does not have enough resources and information to monitor at the local level. In the context of China during the central planning era, another important factor is social control. The reason why local governments wanted employers to take control of housing provision was because labour mobility was not encouraged. By giving employers the power to control housing, it was easier to prevent workers from leaving their jobs⁽⁵⁾ and thus, they "automatically" became less mobile.

In a market economy, housing is usually provided by the private market. When the market fails, the state steps in. In terms of direct provision, employers play a marginal role at most. In the history of industrialization, employers played a role in town planning in purpose-built industrial towns and provided housing or housing subsidies for their employees. This was a prominent phenomenon during the early industrial age in developed countries.⁽⁶⁾ Other types of employer-provided housing are often available when a company sends employees away from their home country or city, to compensate the expatriates for having to live in a foreign environment. The conditions for such provision can vary.

2. Li, B (2005), "Urban housing privatization: redefining the responsibilities of the state, employers and individuals", in S Green and G L Shaojia (editors), *Exit the Dragon? Privatization and State Control in China*, Chatham House, London, and Blackwell Publishing, pages 145–168.
3. Duda, M, B Li and H Peng (2008), "Household strategies and migrant housing quality in Tianjin", in Ingrid Nielsen and Russell Smyth (editors), *Migration and Social Protection in China*, World Scientific Publishing Co, Singapore; also Duda, M and B Li (2008), "Housing inequality in Chinese cities. How important is hukou?", *Landlines* LLA080 104, pages 14–19; Jiang, L (2006), "Living conditions of the floating population in urban China", *Housing Studies* Vol 21, pages 719–744; Li, B, M Duda and X An (2009), "Drivers of housing choice among rural-to-urban migrants: evidence from Taiyuan", *Journal of Asian Public Policy* Vol 2, No 2, pages 142–156; Li, B, M Duda and H Peng (2007), "Low-cost urban housing markets. Serving the needs of low-wage rural-urban migrants?", Working Paper WP07MD1, Lincoln Institute of Land Policy, Cambridge, Mass, USA; Wu, W (2002), "Migrant housing in urban China: choices and constraints", *Urban Affairs Review* Vol 38, No 1, page 90; and Zhang, L, S X B Zhao and J P Tian (2003), "Self-help in housing and *chengzhongcun* in China's urbanization", *International Journal of Urban and Regional Research* Vol 27, pages 912–937.
4. Giacobbe-Miller, J K, D J Miller and V I Victorov (1996), "Russian pay practices, preferences and distributive justice judgements: implications for joint ventures", in A A Ullman and A Lewis (editors), *Privatization and Entrepreneurship: The Managerial Challenge in Central and Eastern Europe*, Haworth Press, Binghamton, NY, page 305.
5. See reference 1, Li (2001).
6. Cohen, L (1991), *Making a New Deal: Industrial Workers in Chicago, 1919–1939*, Cambridge University Press, 542 pages; also Licht, W (2008),

"Fringe benefits: a review essay on the American workplace", *International Labour and Working-class History* Vol 53, pages 164–178.

7. Wederspahn, G M (1992), "Costing failures in expatriate human resources management", *Human Resource Planning* Vol 15, accessed 8 August 2008 at <http://www.allbusiness.com/human-resources/347972-1.html>.

8. Binford, L (2009), "From fields of power to fields of sweat: the dual process of constructing temporary migrant labour in Mexico and Canada", *Third World Quarterly* Vol 30, pages 503–517; also Farquhar, S, J Samples, S Ventura, S Davis, M Abernathy, L McCauley, N Cuilwik and N Shadbeh (2008), "Promoting the occupational health of indigenous farm workers", *Journal of Immigrant and Minority Health* Vol 10, pages 269–280; Gabbard, S and J M Perloff (1996), *All It Takes is Confidence: Job Search Confidence and Farm Workers' Wages, Benefits and Working Conditions*, California Agricultural Experiment Station, Giannini Foundation of Agricultural Economics, University of California; and Villarejo, D and M Schenker (2006), "Environmental health policy and California's farm labour housing", Report prepared for the John Muir Institute on the Environment, University of California, Davis.

9. Banister, J (2005), "Manufacturing earnings and compensation in China", *Monthly Labour Review* Vol 128, page 22; also Cooke, F L (2004), "Foreign firms in China: modelling HRM in a toy manufacturing corporation", *Human Resource Management Journal* Vol 14, pages 31–52; and Taylor, B (2001), "The management of labour in Japanese manufacturing plants in China", *The International Journal of Human Resource Management* Vol 12, pages 601–620.

10. Brown, A D, S J Jejeebhoy, I Shah and K M Yount (2001), *Sexual Relations among Young People in Developing Countries. Evidence from WHO Case Studies*, World Health Organization (WHO), Geneva.

Sometimes, when it is difficult for an employee to find a decent house in a poor country, the employer may build suitable accommodation for them. Sometimes, when the cost of housing in the destination is too high for an employee to afford, the employer may also provide it.⁽⁷⁾ When a job is seasonal or temporary and workers need to come from other places, an employer may provide temporary accommodation during the working season. This is mostly seen in the employment of farm workers.⁽⁸⁾

In developing countries, dormitories for factory workers are a popular form of employer-provided housing. In the existing literature, dormitories are often used in the study of other issues, such as military-style management and the abuse of workers' rights,⁽⁹⁾ social segregation and health problems.⁽¹⁰⁾ However, few studies have examined employer-provided housing per se. These studies cannot explain why housing provided by employers, which exhibits the many problems discussed in earlier research, is actually popular among migrant workers; nor why housing provided by employers represents such a large share of migrant housing when the private rental market and informal housing are also accessible.

III. THE CASES OF TIANJIN AND TAIYUAN

a. Background of the two cities

Tianjin is one of China's four provincial level municipalities and is divided into 18 county level divisions and six districts (Heping, Hexi, Hedong, Hongqiao, Hebei and Nankai), which form the city proper. These six districts are often referred to as the inner-city areas and this is where the survey took place. Tianjin's urban population has been growing rapidly, largely due to migration. At the end of 2006, the estimated "long-term" population (i.e. the number of residents who had been in the city for at least six months) was 11 million, up 320,000 from the previous year. Of these, 1.4 million were migrants, that is, without Tianjin *hukou*, all but 200,000 of whom were "temporary".⁽¹¹⁾ At this level, rural-to-urban migrants made up roughly 10 per cent of the city's total population.

Taiyuan is the capital city of Shanxi province and is a centre for both business and industry. The economy is very dependent on natural resources and the city is known for its coal production and chemical industry. Unlike in many coastal cities, light industries are not well developed in Taiyuan. The population in the city centre is 2.3 million. There are six central districts, which include both urban and suburban areas, namely Yingze, Xinghualing, Wanbolin, Xiaodian, Jiancaoping and Jinyuan, and our survey was conducted in the urban areas of these six districts. The most quoted estimate of the number of rural-urban migrants working and living in Taiyuan was 300,000, in 2007.⁽¹²⁾

b. Data collection

The data used in this paper are based on a survey in Tianjin from January to February 2007 and one in Taiyuan from May to July 2007. The surveys were carried out using a structured questionnaire, with some of the questions being open-ended in the event that the interviewees' answers

were not covered by the choices that were provided. The questionnaire included questions on demographic and household features, migration plans, employment, income and household expenditure, housing conditions and housing satisfaction.

Sampling took place among low-wage, low-skilled migrants, specifically including only those who, at the time of interview, did not have residence permits for the city (to ensure that they were indeed migrants), had not come to the city as students, and did not own homes in the city (to ensure that our results were not biased by the very small minority of rural-to-urban migrants who had become wealthy enough to escape the housing issues experienced by most migrants). The resulting sample included only low-status migrants of the type who would be expected to suffer the most acute housing problems and thus be the focus of policy development.

Unlike for urban residents, there were no full residential records for rural-urban migrants to the cities. There was therefore no pre-existing sample frame to survey housing for these migrants. To deal with this, the sample was stratified based on migrant occupation categories. Official data from surveys conducted in 2005 among migrants in nine major cities, including Tianjin, were used to identify the breakdown of migrants by employment sector for Tianjin.⁽¹³⁾ Furthermore, the rural survey team of the National Statistics Bureau of PRC published information on the employment structure of rural-urban migrants living in the central provinces of China, and this was used in the survey in Taiyuan.⁽¹⁴⁾ Sample percentages in the survey were matched to the major job categories (e.g., industries, construction, service sector, and transportation), and respondents were sought out at their workplaces. By covering the range of variation in migrant occupations, the sample is assured of capturing the range of housing types occupied by the majority of rural migrants.⁽¹⁵⁾

Fifteen to 25 interviewers were sent out each day. In order to avoid repetition, the urban districts were divided into smaller catchment areas and the surveys were spread evenly between the areas. The survey in Tianjin gathered 796 valid responses, the one in Taiyuan 805.

As shown in Table 1, Tianjin and Taiyuan have different economic structures. In Taiyuan, the service sector (catering and domestic) is more important than other sectors in the city, and also takes in a larger share of migrant workers than the service sector in Tianjin. This is largely because of Taiyuan's fast economic growth in energy and resource-based industries. These industries are more capital intensive and need more skilled workers than light industries. In the past five years or so, as the residents of Taiyuan became richer, the service sector became very prosperous and many migrant workers were attracted to service sector jobs in the city. In contrast, Tianjin is known for manufacturing and exporting consumer goods. Also, the city has gone through a sustained period of growth in real estate development. Therefore, manufacturing industries and the construction sector have attracted many migrant workers.

For the kind of small-scale surveys that is used in this research, it is difficult to guarantee that each category of employment will provide enough respondents. To overcome this problem, all categories were compressed into four larger sectors, namely industries (including manufacturing and mining), construction, service (including hotel/restaurants, wholesale/retailing, domestic and other services) and street (including street and recycling and self-employed people in the other categories). These four

11. Household registration (*hukou*) shows the place of residency. It is also used by the Chinese government to establish welfare entitlement in cities.

12. Government of Taiyuan (2007), "'Migrant workers' home" is set up in our city" (*woshi chengli 'nongmingong zhijia'*), 25 October, accessed 1 July 2009 at <http://www.taiyuan.gov.cn/?sj=88715>.

13. The survey was carried out by the Rural Household Survey Team of the National Statistics Bureau and was published as: Ministry of Labour and Social Security (2005), "The employment number, structure and characteristics of rural to urban migrants: a report by the MLSS, PRC (*laodong baozhang bu ketizu guanyu nongmingong qingkuang de yanjiu baogao: dangqian nongmingong liudong jiuYe shuliang, jiegou yu tedian*) Part I", China Labour Security News (*zhongguo laodong baozhang bao*), 11 August 2005, accessed 8 November 2009 at http://www.lm.gov.cn/gb/employment/2005-08/11/content_82630.htm.

14. Rural Survey Team, National Statistics Bureau of PRC (2005), "The number, structure and characteristics of farmers leaving their villages to work, 2004" (2004 nian nongmin waichu wugong de shuliang, jiegou ji tedian), China 3F information net, accessible at <http://www.sannong.gov.cn/fxyc/ldlzy/200507110158.htm>.

15. For a more detailed discussion of the sampling and data description, see reference 3, Li, Duda and Peng (2007).

TABLE 1
Migrant employment distribution by employment sector

Sector	Tianjin		Taiyuan	
	Frequency	%	Frequency	%
Industries	217	27.3	145	18.0
Construction	218	27.4	162	20.1
Service	254	31.9	417	51.8
<i>restaurant/hotel</i>	93	11.7	162	20.1
<i>wholesale/retailing</i>	80	10.0	125	15.6
<i>domestic and other services</i>	81	10.2	130	16.1
Street	98	12.3	81	10.1
<i>street vending</i>	57	7.2	49	6.1
<i>recycling</i>	41	5.1	32	4.0
Other	9	1.1	0	0
Total	796	100	805	100

SOURCE: Data from the Tianjin and Taiyuan surveys (2007).

larger sectors will be used in the analyses in the following sections of this paper.

IV. IMPORTANCE OF AND MOTIVATION FOR EMPLOYER PROVISION

First, one must establish how important employers are as housing providers. Table 2 shows the proportion of employer-provided housing as a percentage of total migrant housing. The table shows three sets of data:

- **the number of people receiving employer-provided housing in a certain employment sector as a percentage of total employer-provided housing** – for Tianjin, the data show that construction companies were the biggest provider of migrant housing (45 per cent) and industrial companies were second (38.4 per cent), whereas in Taiyuan, the service sector employers played a bigger role (45.3 per cent);
- **the number of people living in employer-provided housing in a certain employment sector as a percentage of the number of respondents in that particular sector** – this indicator shows how likely it is that a worker from a specific employment sector can be housed by their employer. The results show that in Tianjin, if a worker was employed in construction and industry, he/she was very likely to live in employer-provided dormitories. More than 80 per cent of construction workers and 70 per cent of industrial workers lived in employer-provided housing. In Taiyuan, construction and industrial workers were also very likely to be accommodated by their employers, although the shares were smaller than in the corresponding categories in Tianjin. However, in the service sector, a worker was more likely to be housed by employers in Taiyuan than in Tianjin; and
- **the number of people living in employer-provided housing in a certain employment sector as a percentage of the**

sample total in the city – the results suggest that in Tianjin, industrial and construction companies contributed the most to migrant housing, whereas in Taiyuan, the service and construction sectors offered the largest shares of migrant housing. On the whole, employers in Tianjin (404 out of 796 (50.9 per cent)) were more likely to provide housing to migrant workers than employers in Taiyuan (305 out of 805 (37.9 per cent)).

Considering that private housing markets are very active in Chinese cities, and there is a large informal housing sector for migrant workers, why are employers interested in providing housing for employees at all? Some earlier studies have highlighted the low affordability of migrant workers and their lack of access to urban housing benefits. This line of argument may only be useful in explaining the behaviour of migrant workers who would like to own houses. Housing benefits in cities are never applicable to private renting. Also, the houses offered by private landlords in the informal sector may not necessarily be more expensive than employer-provided housing. Therefore, for migrant workers who are not yet able to own houses, the answer to the question of why employers are interested in providing accommodation may be the result of a number of efficiency considerations.

First, employers expect workers to work long hours. In large cities, it is difficult for migrant workers to obtain housing near the workplace, especially when the companies they work for are in central locations. The reality is that if workers have to spend a lot of time commuting, it will be very difficult to enforce longer working hours. Therefore, providing housing collectively for employees either on site or in a nearby place can be very effective in reducing commuting time or in making it easy for employers to ask workers to work longer hours. Obviously, there is the problem of exploitation. However, the Labour Law that set the maximum working hours per week turned out to be unpopular with both employers and migrant workers.⁽¹⁶⁾ Many workers would rather work longer hours in order to save more money in a relatively shorter period of time. Therefore in many cities, local policies were established that allowed workers to work longer hours on condition that they were paid higher rates for the extra hours. This turned out to be a more popular solution than the rigid control of working hours.⁽¹⁷⁾

To find out whether employer housing provision really has any impact on commuting times. The latter were cross-tabulated with the provider of the current accommodation. Table 3 shows that in both Tianjin and Taiyuan, the daily commuting times of the interviewees ranged from zero to 1.5 hours. However, if a worker lived in employer-provided accommodation, the commuting time was very unlikely to be more than half an hour. In contrast, workers who lived in private accommodation spent more time commuting. These findings suggest that employer-provided housing is indeed useful for reducing commuting time for workers. It is undoubtedly a convenient solution for both employers and migrant workers.

Second, employee dormitories can potentially reduce labour costs for employers. It means that housing costs are internalized, which often works out to be cheaper for the employer than paying for rentals, utilities and commuting costs at market prices. A small business owner offering accommodation to migrant employees might provide a spare room in his/

16. Buckley, C (2006), "Foreign investors may quit if China tightens up labour law", *The Times*, 19 June, accessed 6 July 2009 at <http://business.timesonline.co.uk/tol/business/markets/china/article676240.ece>.

17. Lu, T (2008), "On the equal working rights for migrant workers", (Lun wailai wugong ren yuan de ping deng wugong quan li), Masters dissertation No D922.5, Shandong University, PRC.

TABLE 2
Employer-provided housing by employment sector

Sector	Tianjin		Taiyuan			
	Employer-provided /total employer-provided ⁽¹⁾ (% of 404)	Employer-provided / industry total ⁽²⁾ (%)	Employer-provided /total employer-provided ⁽³⁾ (% of 796)	Employer-provided /total employer-provided ⁽¹⁾ (% of 305)	Employer-provided / industry total ⁽²⁾ (%)	Employer-provided /total employer-provided ⁽³⁾ (% of 805)
Industries	38.4	71.4	19.5	22.3	46.9	8.4
Construction	45.0	83.5	22.9	31.8	59.9	12.0
Service	5.1	0.4	0.1	45.3	33.1	17.1
Street	1.5	6.7	0.9	0.7	2.5	0.2
Total	100	50.9	50.8	100	37.9	37.9
Total (N)	404		796	305		805

⁽¹⁾ This column shows the number of people receiving employer-provided housing in a certain employment sector as a percentage of total employer-provided housing (404 in Tianjin and 305 in Taiyuan).

⁽²⁾ This column shows the number of people living in employer-provided housing in a certain employment sector as a percentage of the number of respondents in that particular sector.

⁽³⁾ This column shows the number of people living in employer-provided housing in a certain employment sector as a percentage of the sample total in the city (796 in Tianjin and 805 in Taiyuan).

SOURCE: Data from the Tianjin and Taiyuan surveys (2007).

TABLE 3
Daily commuting time (one way)

	Employer-provided			Non-employer-provided		
	Frequency	%	Cumulative	Frequency	%	Cumulative
Tianjin						
I live on site	241	59.8	59.8	78	21.8	21.8
<0.5 hour	146	36.2	96.0	218	61.1	82.9
0.5–1 hour	14	3.5	99.5	47	13.2	96.1
1–1.5 hours	1	0.3	99.8	8	2.2	98.3
>1.5 hours	1	0.3	100	6	1.7	100
Total	403	100		357	100	
Taiyuan						
I live on site	177	58.0	58.0	85	17.0	17.0
<0.5 hour	122	40.0	98.0	349	69.8	86.8
0.5–1 hour	5	1.6	99.6	53	10.6	97.4
1–1.5 hours	1	0.3	99.9	10	2.0	99.4
>1.5 hours	0	0	100	3	0.6	100
Total	305	100		500	100	

SOURCE: Data from the Tianjin and Taiyuan surveys (2007).

her home or business property. For a very large company hiring hundreds of workers, it may be economical to build standardized dormitories for the employees. As shown in Table 4, in both Tianjin and Taiyuan, when employers provide accommodation, most of the time, tenants do not need to pay rent, although in some cases employees are asked to pay rent to employers. Usually this is cheaper than a market rent, however, this may work out to be profitable for the employers, because dormitories are shared rooms or flats. One dormitory room can often hold 6–10 people and rent is charged by bed space per person rather than by room or flat. In contrast, private landlords are not very likely to rent a similar-sized room to so many people at one time. Moreover, hosting many people in one room or one apartment is often considered anti-social by neighbours and community authorities,⁽¹⁸⁾ and as a result it is not as easy for a private landlord to rent out a flat as a dormitory in a residential area. In Tianjin, the average number of people sharing a flat was nine; in Taiyuan it was six. As shown in Table 5, most of the accommodation offered by employers was shared, whereas private landlords were much less likely to provide shared accommodation.

We cannot really show how much more expensive a dormitory room can be than a privately rented room because of the many factors that may affect rent levels. The fact that employers are reluctant to provide housing for couples or families can be helpful in showing that employers do not provide housing just to make life easier for employees, but rather, to reduce unit labour costs.

Similarly, living closer to employers is not only about reducing commuting time, it also means reduced commuting costs, which can be a large part of a migrant worker’s living costs.⁽¹⁹⁾ Table 6 shows the means of commuting, and from this we see that by providing housing for employees, employers can secure a high proportion of workers who do not need to spend much money on commuting, i.e. they either

18. Wang, Y (2007), “Calling for cheap housing – group renting: banning may not be as good as facilitating” (huhuan lianzu fang – qunzu xianxiang: qudi heru shudao), *Shanghai Economics (Shanghai jingji)* Vol 11, pages 6–11; also Li, Y (2009), “The economic and social analyses of group renting (qunzu): a case study of Shanghai”, *Shanghai Real Estate (Shanghai Fangdi)* Vol 6, pages 16–23.

19. Li, B (2005), “Urban social change in transitional China: a perspective of social exclusion and vulnerability”, *Journal of Contingencies and Crisis Management* Vol 13, pages 54–65.

TABLE 4
Rent payment by provider: do you pay rent?

	Private landlord		Employer		Others		Total Frequency
	Frequency	%	Frequency	%	Frequency	%	
Tianjin							
No	0	0.0	320	91.7	29	8.3	349
Yes	339	75.8	84	18.8	24	5.4	447
Total	339	42.6	404	50.8	53	6.7	796
Taiyuan							
No	0	0.0	287	93.2	21	6.8	308
Yes	474	95.8	18	3.6	3	0.6	495
Total	474	59.0	305	38.0	24	3.0	803

SOURCE: Data from the Tianjin and Taiyuan surveys (2007).

TABLE 5
Sharing by provider: do you live in shared accommodation?

	Private landlord		Employer		Other		Total Frequency
	Frequency	%	Frequency	%	Frequency	%	
Tianjin							
Yes	91	19.0	373	78.0	14	2.9	478
No	251	79.2	31	9.8	35	11.0	317
Total	342	43.0	404	50.8	49	6.2	795
Taiyuan							
Yes	107	28.9	244	65.9	19	5.1	370
No	366	85.1	60	14.0	4	0.9	430
Total	473	59.1	304	38.0	23	2.9	800

SOURCE: Data from the Tianjin and Taiyuan surveys (2007).

lived on site or travelled on foot or by bicycle. If a worker who lived in a dormitory had to commute, he/she was more likely to be offered a pick-up service by the employer than the worker who lived in privately rented accommodation. The latter was more likely to use public or private transport. This is probably because it is cheaper to offer pick-up services when workers live more closely to each other.

If it is true that employers provide housing in order to internalize the costs of worker accommodation, then one would expect that workers who are housed by their employers would be paid less. This is indeed the case. In Tianjin, respondents living in employer-provided housing earned on average 260 yuan less than those who rented privately. If we further examine the rents of singles living in shared dormitories, the average rent charged by employers was about 102 yuan per month. If a worker lived in a privately rented house, the monthly rent was on average 318 yuan – a 216 yuan difference. Similarly, the pay gap in Taiyuan between workers living in private properties and employer-provided dormitories was 190 yuan per month. Rents in Taiyuan were 95 yuan and 173 yuan for employer-provided housing and private housing, respectively⁽²⁰⁾ – a difference of 78 yuan. These differences show that when an employer provides housing for the employee, the latter is usually paid less.

20. Small business owners in rented business properties are not included in the calculation because they would have to pay the rent for business purposes anyway.

TABLE 6
Means of commuting to work

	Tianjin				Taiyuan			
	Employer-provided		Non-employer-provided		Employer-provided		Non-employer-provided	
	Frequency	% (of 404)	Frequency	% (of 392)	Frequency	% (of 305)	Frequency	% (of 500)
On site (no need to commute)	174	43.1	31	7.9	179	58.7	85	17.0
On foot	179	44.3	162	41.3	127	41.6	215	43.0
Bicycle	52	12.9	181	46.2	16	5.2	198	39.6
Employer-provided transportation	22	5.4	2	0.5	8	2.6	5	1.0
Public transportation	8	2.0	26	6.6	5	1.6	32	6.4
Private transportation	1	0.2	6	1.5	0	0.0	15	3.0
Total count*	436		408		335		550	

NOTE: *We asked each respondent to report the three most frequently used means of commuting. Therefore, the totals counts are greater than the total number of interviewees.
SOURCE: Data from the Tianjin and Taiyuan surveys (2007).

Third, providing housing for workers may also be used as a way of controlling them.⁽²¹⁾ There are several reasons why employers might try to impose such control. First, as shown in earlier studies, there are high turnover rates among rural–urban migrant workers.⁽²²⁾ This is often because workers have no loyalty to their employers and are constantly looking for better opportunities. Second, workers can be influenced by others outside work more easily if they live in privately rented flats. For example, some workers might be convinced by peers to start gambling or investing in the highly speculative stock markets and become less motivated at work. All this will, unavoidably, be costly for employers. Providing accommodation to migrant workers and prolonging working hours is often used by employers as a means to cultivate enterprise loyalty and reduce outside distractions.⁽²³⁾ Ninety-one of the 305 interviewees from Taiyuan and 48 of the 404 interviewees from Tianjin who lived in employer-provided housing reported that they had decided to do so because it was required by their employers.

Furthermore, employers, especially large factory owners, often recruit workers directly from rural villages. Once the workers have been brought to the cities, it is more efficient if they can start work immediately rather than spend time trying to settle down. After all the effort an employer has put into recruiting new workers, he does not want them travelling around the city, initially looking for accommodation but soon to be snatched up by other employers. If new workers start work immediately, they have little time to shop around for other jobs, at least for a while. In this way, providing accommodation for new workers can be a useful tool in building up employee loyalty. If employers do indeed take this into consideration, in Tianjin and Taiyuan we should be able to show that workers living in employer-provided housing are more likely to be newcomers. In Tianjin, workers living in employer-provided housing had on average been in the city for 2.5 years, whereas those living in the private sector had been in Tianjin for more than six years. In Taiyuan, the two groups

21. Smith, C and N Pun (2006), "The dormitory labour regime in China as a site for control and resistance", *The International Journal of Human Resource Management* Vol 17, pages 1456–1470.
22. Eng, I (1997), "The rise of manufacturing towns: externally driven industrialization and urban development in the Pearl River delta of China", *International Journal of Urban and Regional Research* Vol 21, pages 554–568; also Fan, C C (2002), "The elite, the natives and the outsiders: migration and labour market segmentation in urban China", *Annals of the Association of American Geographers* Vol 92, pages 103–124; and Wong, C S, Y Wong, C Hui and K S Law (2001), "The significant role of Chinese employees? Organizational commitment: implications for managing employees in Chinese societies", *Journal of World Business* Vol 36, pages 326–340.
23. Ip, P K (2003), "Business ethics and a state-owned enterprise in China", *Business Ethics: A European Review* Vol 12, pages 64–77; also Smith,

C (2003), "Living at work: management control and the dormitory labour system in China", *Asia Pacific Journal of Management* Vol 20, pages 333–358.

24. Ma, Z (2001), "Urban labour force experience as a determinant of rural occupation change: evidence from recent urban–rural return migration in China", *Environment and Planning A* Vol 33, pages 237–256; also Roberts, K D (2001), "The determinants of job choice by rural labour migrants in Shanghai", *China Economic Review* Vol 12, pages 15–39.

had lived in the city for 2.8 years and 5.8 years, respectively. If we just look at newcomers who had worked in the city for less than six months, of the 65 newcomers in Tianjin, 58 lived in employer-provided housing, and in Taiyuan, 42 out of 70 lived in employer-provided housing.

The reason why newcomers in Taiyuan made up a larger proportion of people living in privately rented housing was mainly because 22 of them worked in the service sector. In contrast, very few newcomers worked in the service sector in Tianjin. It has been established in other studies that newcomers tend to work in more organized industries such as manufacturing and construction. Once they have gained more experience and a better knowledge of the city they move onto service sector jobs, which are less physically demanding and require a higher level of independence.

⁽²⁴⁾ The reason why Taiyuan had more newcomers working in the service sector than Tianjin has something to do with the industrial structure of the towns, as discussed earlier. It may also be explained partly by the origin of the migrants. Taiyuan is the capital city of Shanxi province and has a very large rural hinterland, and a large proportion of migrant workers are intra-provincial migrants. Because of the greater cultural similarities and stronger social networks, it is relatively easier for migrants from within the province to settle down and adapt to the system. In contrast, Tianjin is a municipality with a very small rural hinterland, and most migrant workers are from other provinces. Also, because of its thriving manufacturing sector, migrants mainly come looking for jobs as manufacturing workers. In our survey, only 17 migrants (2 per cent) came from the rural areas of Tianjin. If we take into account nearby provinces, another 187 workers (23.5 per cent) came from neighbouring Hebei province and from Beijing. The rest (74.5 per cent) were from other parts of the country. In contrast, in Taiyuan, 453 migrants (56 per cent) were from within the province and only 44 per cent from outside.

V. HOUSING CONDITIONS

As has been argued, employers provide housing to meet their own business interests; therefore one can anticipate that employers will try to do the minimum in order to maximize their profits. This can be reflected in the quality of employer-provided houses

Table 7 shows the frequency distribution of the physical quality of housing. The quality indicator comprises responses to five propositions regarding the existing accommodation (access to a private toilet, in-house tap water, access to a source of heating, temporary structure and the building being used for other purposes), with the respondents allocating a point for each positive response (i.e. for each problem they faced). The housing quality index is constructed by counting the number of points: no points = no problem; one point = some problem; two points = significant problem; three to five points = severe problem. There are other problems listed in the international literature on housing quality indicators, such as facilities for showering and cooking. We do not include these in our analysis because in many circumstances, workers can shower and eat food at work.

According to our surveys, 12.7 per cent of houses in Tianjin suffered from severe problems; in Taiyuan, the figure was 18.3 per cent. In employer-provided housing in both Tianjin and Taiyuan, "severe problem" and "no problem" formed the two largest categories, whereas privately rented housing suffered more from "less severe" problems.

TABLE 7
Housing quality

	All			Employer-provided			Non-employer-provided		
	Fre- quency	%	Cumu- lative	Fre- quency	%	Cumu- lative	Fre- quency	%	Cumu- lative
Tianjin									
Severe problem	146	18.3	18.3	110	27.2	27.2	36	9.2	9.2
Significant problem	183	23.0	41.3	80	19.8	47.0	103	26.3	35.5
Some problem	229	28.8	70.1	70	17.3	64.4	159	40.5	76.0
No problem	238	29.9	100	144	35.6	100	94	24.0	100
Total	796	100		404	100		392	100	
Taiyuan									
Severe problem	102	12.7	12.7	68	22.3	22.3	34	6.8	6.8
Significant problem	156	19.4	32.1	61	20.0	42.3	95	19.0	25.8
Some problem	246	30.6	62.7	73	23.9	66.2	173	34.6	60.4
No problem	301	37.4	100	103	33.8	100	198	39.6	100
Total	805	100		305	100		500	100	
NOTE: Taiyuan: Pearson chi2(3) = 15.5445 Pr = 0.001 Kendall's tau-b = 0.1000 ASE = 0.033									
Tianjin: Pearson chi2(3) = 17.6758 Pr = 0.001 Kendall's tau-b = 0.1210 ASE = 0.033									
SOURCE: Data from the Tianjin and Taiyuan surveys (2007).									

The housing quality index was cross-tabulated with the compressed employment sectors, and Table 8 shows that accommodation offered by construction companies suffered from poor quality (94.5 per cent of all housing with severe problems and 51.3 per cent of all housing with significant problems in Tianjin; and 70.6 per cent and 37.7 per cent, respectively, in Taiyuan). This might be because construction companies are usually project based. The accommodation is temporary and is either demolished or moved to a different site once a project is completed. The accommodation generally comprises containers, sheds or even tents, and as a result these tend to suffer from poor facilities.

Tianjin data showed that 70.7 per cent of housing with no reported problems was provided by industrial companies. Thirty-four per cent of housing fell into the "significant problem" and "some problem" categories. Very little housing had severe problems. However, in Taiyuan, the distribution was more spread out. The proportion of housing suffering from severe problems in the industrial sector was higher. Altogether, 77.9 per cent suffered from at least some problems and the proportion of housing with no problems was much lower than in Tianjin. Again, the explanation might lie in the different industrial structures of the two cities. As mentioned earlier, industrial jobs in Taiyuan are mainly in the heavy industrial sector, such as coal mining. Migrant workers working in these industries are usually hard labourers. The ways in which these industries are organized and the types of jobs that are available are quite similar to construction projects. Although resource-based companies, such as mining companies, are less mobile than those in construction, they too would not be permanent. In contrast, Tianjin's industrial jobs are mostly in the light industries, such as electronics and garment manufacturing, and unless there are foreseeable problems, these companies do not anticipate relocating or

25. Construction companies can do so because an on-going construction project has its own working site. Dormitories are built on the enclosed territory occupied by the companies.

26. Li, B (2006), "Floating population or urban citizens? Status, social provision and circumstances of rural-urban migrants in China", *Social Policy and Administration* Vol 40, pages 174–195.

27. See reference 3, Duda, Li and Peng (2008); also see reference 3, Li, Duda and An (2009).

closing down. Therefore, it is worthwhile for these factory owners to build dormitories with permanent structures and of decent quality.

Quite a large proportion of housing in the service sector had "less severe" problems and very few had "severe" problems. This might be related to the fact that service sector jobs are usually located centrally. If employers provide accommodation close to their businesses, it is unlikely that they will be able to build inferior quality or temporary dormitories in a central location.⁽²⁵⁾ As a result, the types of housing that service sector workers lived in were either rented or employer-owned properties in residential areas, or workers' accommodation attached to the business properties.

Some environmental quality indicators such as noise level are important to the quality of life of migrant workers. For example, to keep up with the tight project schedule, most construction projects do not stop at night, especially when a project is running late. Because workers' accommodation is on site, noise levels are very high.⁽²⁶⁾ We asked respondents to report the noise levels in the employer-provided housing and to rate them: very noisy – cannot sleep well at night; some noise – noisy but does not disturb sleeping; little noise (Table 9). The results show that accommodation offered by construction companies was indeed the most problematic. Dormitories in the manufacturing companies in Tianjin could also be problematic. However, factory dormitories in the industrial sector in Taiyuan were less noisy. This is probably because heavy industries usually have larger plants and the dormitories are not very close to the working site. However, service sector accommodation suffered from disturbing noise at night. This might be because some workers in the catering and entertaining businesses live on the premises, and service businesses often stay open until late at night.

Overcrowding is a known feature of migrant workers' housing, and employer-provided housing is no exception; indeed, it may be more crowded than privately rented housing. This has a lot to do with the layout of dormitories, where it is very common for four to eight people to share one room. If it is a flat, it would be shared by an average of six to nine people. Overcrowding can make the shortage of basic facilities in some houses with severe problems even more difficult for the residents. In Tianjin and Taiyuan, overcrowding was the most reported issue of employer-provided housing.

VI. HOUSING SATISFACTION

Despite the problems discussed here, it is nonetheless up to the workers to judge whether they like the housing they live in. During the interviews they were asked how satisfied they were with their accommodation and were asked to report their level of satisfaction on a scale of five. The results are shown in Table 10. On average, more people were satisfied with employer-provided housing than with privately rented housing. About 15 per cent of the interviewees in Tianjin and 11 per cent in Taiyuan were not satisfied with the housing provided by their employers. This contradicts our earlier findings that employer-provided housing suffers from more problems than privately rented housing. The explanation may be that when people expressed their housing satisfaction, they also took into consideration non-quality factors. Duda et al. and Li et al.⁽²⁷⁾ used the same datasets, which showed that migrant workers in these two cities most valued convenience for

TABLE 8
Providers of poor quality housing

	Severe problem	Significant problem	Some problem	No problem	Sector total
Tianjin					
Industrial sector					
Frequency	2	26	26	99	153
% of row total	1.8	32.5	37.1	70.7	38.3
% of column total	1.3	17.0	17.0	64.7	100
Construction sector					
Frequency	104	41	25	12	182
% of row total	94.5	51.3	35.7	8.6	45.5
% of column total	57.1	22.5	13.7	6.6	100
Service sector					
Frequency	3	10	19	27	59
% of row total	2.7	12.5	27.1	19.3	14.8
% of column total	5.1	16.9	32.2	45.8	100
Street sector					
Frequency	1	3	0	2	6
% of row total	0.9	3.8	0.0	1.4	1.5
% of column total	16.7	50.0	0.0	33.3	100
Total for Tianjin					
Frequency	110	80	70	140	400
% of row total	100	100	100	100	100
% of column total	27.5	20.0	17.5	35.0	100
Taiyuan					
Industrial sector					
Frequency	16	18	19	15	68
% of row total	23.5	29.5	26.0	14.6	22.3
% of column total	23.5	26.5	27.9	22.1	100
Construction sector					
Frequency	48	23	19	7	97
% of row total	70.6	37.7	26.0	6.8	31.8
% of column total	49.5	23.7	19.6	7.2	100
Service sector					
Frequency	3	20	35	80	138
% of row total	4.4	32.8	47.9	77.7	45.2
% of column total	2.2	14.5	25.4	58.0	100
Street sector					
Frequency	1	0	0	1	2
% of row total	1.5	0.0	0.0	1.0	0.7
% of column total	50.0	0.0	0.0	50.0	100
Total for Taiyuan					
Frequency	68	61	73	103	305
% of row total	100	100	100	100	100
% of column total	22.3	20.0	23.9	33.8	100

SOURCE: Data from the Tianjin and Taiyuan surveys (2007).

work and the low cost of housing. Employer-provided housing was indeed cheaper and offered easy commuting.

The breakdown into quite dissatisfied and very dissatisfied respondents according to employment shows that in both Tianjin and Taiyuan, in the employer-provided housing sector, those respondents who were very dissatisfied were mostly from the construction companies.

TABLE 9
Providers and noise levels (number and %)

	Very noisy	Some noise	Little noise	Total
Tianjin				
Industrial sector	12	75	66	153
	24.5	44.6	36.1	38.3
Construction sector	34	67	81	182
	69.4	39.9	44.3	45.5
Service sector	2	25	32	59
	4.1	14.9	17.5	14.8
Street sector	1	1	4	6
	2.0	0.6	2.2	1.5
Total	49	168	183	400
	100	100	100	100
Taiyuan				
Industrial sector	8	23	37	68
	19.0	27.7	20.6	22.3
Construction sector	23	36	38	97
	54.8	43.4	21.1	31.8
Service sector	11	23	104	138
	26.2	27.7	57.8	45.2
Street sector	0	1	1	2
	0.0	1.2	0.6	0.7
Total	42	83	180	305
	100	100	100	100

SOURCE: Data from the Tianjin and Taiyuan surveys (2007).

TABLE 10
Housing satisfaction

	Employer-provided			Non employer-provided		
	Frequency	%	Cumulative	Frequency	%	Cumulative
Tianjin						
Very satisfied	55	13.6	13.6	62	15.8	15.8
Quite satisfied	160	39.6	53.2	112	28.6	44.4
No strong opinion	131	32.4	85.6	166	42.3	86.7
Quite dissatisfied	34	8.4	94.0	41	10.5	97.2
Very dissatisfied	24	5.9	100	11	2.8	100
Total	404	100		392	100	
Taiyuan						
Very satisfied	131	43.0	43.0	126	25.3	25.3
Quite satisfied	64	21.0	64.0	172	34.5	59.8
No strong opinion	76	24.9	88.9	123	24.6	84.4
Quite dissatisfied	25	8.2	97.1	63	12.6	97.0
Very dissatisfied	9	3.0	100	15	3.0	100
Total	305	100		499	100	

SOURCE: Data from the Tianjin and Taiyuan surveys (2007).

The quite dissatisfied mainly came from the construction and industrial sectors. In Taiyuan, industrial workers were on average more dissatisfied with their housing than their counterparts in Tianjin. This accords with the earlier discussion, namely that workers in the heavy industries in Taiyuan were accommodated more like the construction workers rather than like the manufacturing workers. However, in the private rental sector, the dissatisfied were mainly from the service sector.

VII. CONCLUSIONS AND POLICY IMPLICATIONS

As argued by Kumar,⁽²⁸⁾ focusing on the demand side in low quality housing may not offer any insight into what can be done to improve poor housing conditions. Examining suppliers' behaviour can, however, offer important insights into ways of improving the quality of housing supply. In this paper, we focus on employer provision only. Unlike the private landlords' housing stock, which will exist regardless of market conditions, employers' housing supply comes and goes together with job opportunities. When there are more vacancies, employers may decide to offer accommodation to attract workers. In a city, employer-provided accommodation can be flexible, convenient and less risky for the state if the workforce is highly mobile.

The cases of Tianjin and Taiyuan have been used to show why employers wanted to become involved in providing housing for migrant workers; also what kind of housing they provided, how the housing conditions compared with privately rented housing and whether migrant workers were happy with it. The findings suggest that employer-provided housing is not primarily an attempt to meet the housing needs of migrant workers; rather, is it a solution based on employers' pursuit of competitiveness and profit. Employer provision can facilitate these purposes in two ways: by reducing labour costs and by offering a competitive pay package to secure labour supply. What has been established in this paper is that employer housing provision in Tianjin and Taiyuan has successfully driven down workers' salaries, has facilitated long working hours and has attracted newcomers. However, because some employers have adopted a minimalistic approach, the housing quality and living environment have suffered. Paradoxically, it seems that workers preferred employer-provided housing – this because it is cheaper and more convenient for commuting purposes.

Our findings also show that the quality of housing provided by employers varied by employment sector. Project-based businesses that expected to move on to a different site in the foreseeable future were likely to provide temporary housing with very poor facilities. Manufacturing companies tended to provide permanent structure housing, and this was better equipped. Workers living on site suffered more from noisy environments.

These results lead to some useful policy insights. Employer-provided housing can be a very useful source of migrant housing; however, employers who are trying to reduce production costs may not be interested in adequate quality. At the same time, migrant workers, especially newcomers who value lower costs and convenient commuting, are willing to live in employer-provided housing even if the quality is poor. It is very difficult for us to tell whether, if there were cheaper and good quality housing available in the private rental market, the workers would choose to live in housing offered by private landlords. We therefore face a typical situation of market

28. Kumar, S (1996), "Landlordism in third world urban low-income settlements: a case for further research", *Urban Studies* Vol 33, pages 753–782.

failure. Employers and workers may agree on poor quality housing, which is of course socially undesirable.

The market failure may be corrected by various government interventions; however, there have been a number of failed attempts by many city authorities to provide purpose-built, cheap rental flats in suburban areas of the cities.⁽²⁹⁾ These properties were considered less convenient in terms of commuting and neither were they good at meeting family needs. In the past several years, reforms have focused on giving migrant workers equal access to various urban housing benefits and finance, with the purpose of improving migrants' housing affordability. However, the fact that these benefits only target workers who want to own houses is often ignored.

Improving housing affordability across the board may not be an effective solution to addressing the market failure faced by low-income rural-urban migrants, as our research has shown that employer-provided housing includes a whole range of features that are valued by migrant workers. These include cheaper rents, easier commuting and even labour management and control. Therefore, it may be useful to consider supply-side policies to encourage/require employers to provide better quality housing. Our research also suggests that policies targeting project-based industries can be the most effective in eliminating accommodation of the poorest quality.

In the early days of urban housing reform, various regulations tried to establish a minimum housing standard for urban citizens (certain number of square metres per person); these were then used for urban residents to receive housing subsidies. This standard only related to the size of the flat and there were no requirements related to the quality and facilities that a house should have. Even this minimum standard was never used as a measurement to judge the housing adequacy of migrant housing. As discussed in this paper, overcrowding, a lack of basic facilities and high noise levels may all have negative impacts on migrant workers' physical and psychological health. Therefore, despite agreements between employers and employees, there is still room for the government to encourage employers and private providers to provide adequate housing for low-income migrants, especially the newcomers.

29. See reference 3, Li, Duda and An (2009).

REFERENCES

- Banister, J (2005), "Manufacturing earnings and compensation in China", *Monthly Labour Review* Vol 128, pages 22–40.
- Bian, Y, J R Logan, H Lu, Y Pan and Y Guan (1997a), "Work units and housing reform in two Chinese cities", in X Lu and E J Parry (editors), *Danwei: The Chinese Work Unit in Historical and Comparative Perspective*, M E Sharpe, Armonk, NY.
- Bian, Y, J R Logan, H Lu, Y Pan and Y Guan (1997b), "Work units and the commodification of housing: observations on the transition to a market economy with Chinese characteristics", *Social Sciences in China* (English Edition) Vol 18, pages 28–35.
- Binford, L (2009), "From fields of power to fields of sweat: the dual process of constructing temporary migrant labour in Mexico and Canada", *Third World Quarterly* Vol 30, pages 503–517.
- Brown, A D, S J Jejeebhoy, I Shah and K M Yount (2001), *Sexual Relations among Young People in Developing Countries. Evidence from WHO Case Studies*, World Health Organization (WHO), Geneva.
- Buckley, C (2006), "Foreign investors may quit if China tightens up labour law", *The Times*, 19 June, accessible at <http://business.timesonline.co.uk/tol/business/markets/china/article676240.ece>.
- Cohen, L (1991), *Making a New Deal: Industrial Workers in Chicago, 1919–1939*, Cambridge University Press, 542 pages.
- Cooke, F L (2004), "Foreign firms in China: modelling HRM in a toy manufacturing corporation", *Human Resource Management Journal* Vol 14, pages 31–52.
- Duda, M and B Li (2008), "Housing inequality in Chinese cities. How important is hukou?", *Landlines* LLA080 104, pages 14–19.

- Duda, M, B Li and H Peng (2008), "Household strategies and migrant housing quality in Tianjin", in Ingrid Nielsen and Russell Smyth (editors), *Migration and Social Protection in China*, World Scientific Publishing Co, Singapore.
- Eng, I (1997), "The rise of manufacturing towns: externally driven industrialization and urban development in the Pearl River delta of China", *International Journal of Urban and Regional Research* Vol 21, pages 554–568.
- Fan, C C (2002), "The elite, the natives and the outsiders: migration and labour market segmentation in urban China", *Annals of the Association of American Geographers* Vol 92, pages 103–124.
- Farquhar, S, J Samples, S Ventura, S Davis, M Abernathy, L McCauley, N Cuilwik and N Shadbeh (2008), "Promoting the occupational health of indigenous farm workers", *Journal of Immigrant and Minority Health* Vol 10, pages 269–280.
- Gabbard, S and J M Perloff (1996), *All It Takes is Confidence: Job Search Confidence and Farm Workers' Wages, Benefits and Working Conditions*, California Agricultural Experiment Station, Giannini Foundation of Agricultural Economics, University of California.
- Giacobbe-Miller, J K, D J Miller and V I Victorov (1996), "Russian pay practices, preferences and distributive justice judgements: implications for joint ventures", in A A Ullman and A Lewis (editors), *Privatization and Entrepreneurship: The Managerial Challenge in Central and Eastern Europe*, Haworth Press, Binghamton, NY, pages 305–320.
- Government of Taiyuan (2007), "'Migrant workers' home' is set up in our city" (woshi chengli 'nongmingong zhijia'), 25 October, accessible at <http://www.taiyuan.gov.cn/?sj=88715>.
- Ip, P K (2003), "Business ethics and a state-owned enterprise in China", *Business Ethics: A European Review* Vol 12, pages 64–77.
- Jiang, L (2006), "Living conditions of the floating population in urban China", *Housing Studies* Vol 21, pages 719–744.
- Kumar, S (1996), "Landlordism in third world urban low-income settlements: a case for further research", *Urban Studies* Vol 33, pages 753–782.
- Li, B (2001), "China's housing reform and work incentive effects", PhD thesis, London School of Economics, UK.
- Li, B (2005a), "Urban housing privatization: redefining the responsibilities of the state, employers and individuals", in S Green and G L Shaojia (editors), *Exit the Dragon? Privatization and State Control in China*, Chatham House, London, and Blackwell Publishing, pages 145–168.
- Li, B (2005b), "Urban social change in transitional China: a perspective of social exclusion and vulnerability", *Journal of Contingencies and Crisis Management* Vol 13, pages 54–65.
- Li, B (2006), "Floating population or urban citizens? Status, social provision and circumstances of rural–urban migrants in China", *Social Policy and Administration* Vol 40, pages 174–195.
- Li, B, M Duda and H Peng (2007), "Low-cost urban housing markets. Serving the needs of low-wage rural–urban migrants?", Working Paper WP07MD1, Lincoln Institute of Land Policy, Cambridge, Mass, USA.
- Li, B, M Duda and X An (2009), "Drivers of housing choice among rural-to-urban migrants: evidence from Taiyuan", *Journal of Asian Public Policy* Vol 2, No 2, pages 142–156.
- Li, Y (2009), "The economic and social analyses of group renting (*qunzu*): a case study of Shanghai", *Shanghai Real Estate (Shanghai Fangdi)* Vol 6, pages 16–23.
- Licht, W (2008), "Fringe benefits: a review essay on the American workplace", *International Labour and Working-class History* Vol 53, pages 164–178.
- Lu, T (2008), "On the equal working rights for migrant workers", (Lun wailai wugong renyuan de pingdeng wugong quanli), Masters dissertation No D922.5, Shandong University, PRC.
- Ma, Z (2001), "Urban labour force experience as a determinant of rural occupation change: evidence from recent urban–rural return migration in China", *Environment and Planning A* Vol 33, pages 237–256.
- Ministry of Labour and Social Security (2005), "The employment number, structure and characteristics of rural to urban migrants: a report by the MLSS, PRC (laodong baozhang bu ketizu guanyu nongmingong qingkuang de yanjiu baogao: dangqian nongmingong liudong jiuye shuliang, jiegou yu tedian) Part I", China Labour Security News (zhongguo laodong baozhang bao), 11 August, accessible at http://www.lm.gov.cn/gb/employment/2005-08/11/content_82630.htm.
- Roberts, K D (2001), "The determinants of job choice by rural labour migrants in Shanghai", *China Economic Review* Vol 12, pages 15–39.
- Rural Survey Team, National Statistics Bureau of PRC (2005), "The number, structure and characteristics of farmers leaving their villages to work, 2004" (2004 nian nongmin waichu wugong de shuliang, jiegou ji tedian), China 3F information net, accessible at <http://www.sannong.gov.cn/fxyc/ldlzy/200507110158.htm>.
- Smith, C (2003), "Living at work: management control and the dormitory labour system in China", *Asia Pacific Journal of Management* Vol 20, pages 333–358.
- Smith, C and N Pun (2006), "The dormitory labour regime in China as a site for control and resistance", *The International Journal of Human Resource Management* Vol 17, pages 1456–1470.
- Taylor, B (2001), "The management of labour in Japanese manufacturing plants in China", *The*

- International Journal of Human Resource Management* Vol 12, pages 601–620.
- Villarejo, D and M Schenker (2006), "Environmental health policy and California's farm labour housing", Report prepared for the John Muir Institute on the Environment, University of California, Davis.
- Wang, Y (2007), "Calling for cheap housing – group renting: banning may not be as good as facilitating" (huhuan lianzu fang – qunzu xianxiang: qudi heru shudao), *Shanghai Economics (Shanghai jingji)* Vol 11, pages 6–11.
- Wederspahn, G M (1992), "Costing failures in expatriate human resources management", *Human Resource Planning* Vol 15, accessible at <http://www.allbusiness.com/human-resources/347972-1.html>.
- Wong, C S, Y Wong, C Hui and K S Law (2001), "The significant role of Chinese employees? Organizational commitment: implications for managing employees in Chinese societies", *Journal of World Business* Vol 36, pages 326–340.
- Wu, W (2002), "Migrant housing in urban China: choices and constraints", *Urban Affairs Review* Vol 38, No 1, pages 90–119.
- Zhang, L, S X B Zhao and J P Tian (2003), "Self-help in housing and *chengzhongcun* in China's urbanization", *International Journal of Urban and Regional Research* Vol 27, pages 912–937.