



THE ROYAL INSTITUTE OF  
INTERNATIONAL AFFAIRS

**Social Inequalities and Wage, Housing and Pension Reforms in  
Urban China**

**Asia Programme Working Paper, No. 3**

**June 2003**

By

**Gong Sen, Director for the Institute of Social Insurance Policy Analysis  
Group, Ministry of Labour and Social Security, People's Republic of China**

**Li Bingqin, Research Officer, STICERD, London School of Economics and  
Political Science, b.li@lse.ac.uk**

Asia Programme  
Royal Institute of International Affairs  
Chatham House  
10 St James's Square  
London  
SW1Y 4LE  
United Kingdom

Contact: Stephen Green, Head of Asia Programme, sgreen@riia.org

The Royal Institute of International Affairs is an independent body which promotes the rigorous study of international questions and does not express opinions of its own. The opinions expressed in this paper are the responsibility of the author.

© Sen Gong and Bingqin Li 2003. All rights reserved.

## Summary

This paper studies the sources of social inequalities largely neglected by the previous researches on urban China's socio-economic reforms. The research focuses on the policy guided differential treatments to the employees of non-enterprises and the employees of enterprises in the reforms of the work related rewarding schemes, including wage, pension and housing. A simple model is developed to look at the determinants of individuals' total work rewards and the combined effects of these reforms. The authors use the model to explain the logic behind the seemingly random welfare reform policies and their interactions with the wage reforms. This paper argues that the average amount of reward for the non-enterprise employees is consistently higher than that for the enterprise employees in all the three aspects of wage, housing and pensions. The gap has widened in recent years. The welfare reforms reinforce the income inequalities between the two groups.

## Introduction

Since the late 1990s, social inequalities in urban China have attracted lots of interest. According to the *China Statistics Yearbook*, from 1991 to 2001, the annual growth rate of the disposable income per capita in the urban areas was 15.3 per cent. The average wage of the urban employees grew at 15.9 per cent per annum. If we look at the inequalities behind the income growth, the Gini coefficient for the urban areas grew from 0.16 in 1978 to 0.284 in 1996, and to 0.33 in 2001. In the past ten years or so, urban income inequality has become the most intensively studied topic among the various forms of social inequalities (Nee 1989, 1996; Peng, 1992; Rona-Tas 1994; Bian and Logan 1996; Xie and Hannum 1996; Gustafsson and Li, 1997, 1998, 1999; Zhao, 1999, Zhou 2000, Wang and Wang, 2002). Since the mid 1990s however, the social security reforms and the labour market reforms have been under the spotlight. The redistributive effects of the newly constructed welfare system start to cause greater concerns (Adamchak, et al., 1999; Gibson, et al., 2003).

Previous researches have identified several sources for the increased social inequalities in urban China. The first is market transition. As argued by Adamchak, et al. (1999), marketisation causes income disparity among the urban employees. There is a stronger link between enterprise profitability and employee wages. In addition, at enterprise level, returns to human capital become higher since the reform (Nee, 1991; Wu and Xie, 2002) and work incentives (Fleisher and Wang, 2001). Political advantages are less influential in differentiating labour compensations (Cao and Nee, 2002).

The second source is globalisation: the "Open Door Policy", and in particular, the efforts to join GATT and later the WTO (Wei and Wu, 2001; see Guan, on overseas investment in China, 2001; see also Wang and Zhai, 1998; Yang and Huang, 1997, on trade liberalisation). Corruption is the third major source of increased income inequality. It is quite different from the market related sources. Shirk (1993), Fan and Grossman (2001) and Johnston (2001) claim that corruption, in the forms of extraction of bribes or nepotistic favours and the appropriation of public property or public funds for personal benefits, has become a way to compensate the government officials for their "losses" generated by the reforms. The officials are motivated to exchange the power in their hands (such as quota allocation, application approval, and inspections) with money. As indicated by Johnston (2001), the Tequan (□□), a range of privilege-seeking activities by officials, has "created new grievances related to growing inequalities".

In general, the first two sources can be combined together as market factors. The division of market induced and corruption generated income inequality assumes that the reforms in the enterprise sector have brought benefits to their employees. These benefits are much larger than the benefits enjoyed by the employees in other sectors. Therefore, the corrupted

behaviour of the government officials is their “rational” efforts to collect their shares in the greater affluence brought by the reforms. This line of thought also helps to bring a solution to the anti-corruption campaigns. It suggests preventing corruption by increasing the salaries of the government officials to a much higher level (gaoxin yanglian, □□□□) (Wei, 1999). This paper looks at the inequalities during the recent social and economic reforms and pays attention to an aspect of policy-led inequalities largely neglected by the previous researchers. It does not try to join the numerous debates on the feasibility of preventing corruption by raising the salaries, but raises a question about the assumption: although there has been little attempt to reform the work pay system in the non-state sector, whether the staff in the un-(under-) reformed sectors lose out in the reforms, so that the corruption is somewhat less deplorable, though not legal.

## Definitions and Methods

In this paper, we categorise all the work units<sup>1</sup> into the urban enterprise sector (including private, collective, and state owned enterprises) and the urban non-enterprise sector (including government agencies and institutional organisations<sup>2</sup>). The reason to put the institutional organisations together with the government agencies is that the pay system in the two types of organisations are very similar, neither of which are reformed as progressively as the system in the enterprises. In the era of the planned economy, the work units were responsible for providing various welfare benefits to the employees. The benefits covered a wide range of daily life, from subsidised food and clothes to the social welfare, such as healthcare, housing and pensions. Gradually, all the enterprises (first the private and collective owned and later the state owned) participate in the marketisation processes. The employees have to contribute to the individual accounts through which they will receive benefits in the future. However, the non-enterprise sector has not followed the steps of the enterprises closely. The employees in the non-enterprise sector continued to enjoy the defined benefits without any contribution. Not until recently, was there a series of attempts to integrate the welfare provision of the non-enterprise and the enterprise sectors.

Partly because of its special features such as public control and non-profit making, the non-enterprise sector as a whole is rarely analysed in the same manner as the enterprises in the literature on the economic transformation of China. The existing analyses of the employee payment reforms mainly focus on the incentive effects of the changed waging methods. This paper attempts to analyse the enterprise and non-enterprise sectors with a single framework—the work reward framework, which puts together the wage and welfare provision reforms.

We use urban housing and pension reforms to illustrate the relation between wage and work related benefits. There are three reasons to choose housing and pension reforms. First, the housing and pension schemes were the two earliest initiatives in changing the social welfare system. Secondly, pensions had been the biggest cash benefits and the housing benefits were the biggest in-kind benefits offered by the State. The government spending on pension has increased significantly during the last two decades (see Figure 1). At the same time, the pension expenditures as part of the total welfare expenditures have also increased steadily (see Figure 2). Housing expenditures as part of the total urban household expenditures have more than doubled in the last ten years (see Table 1). It should be noted that the item of “residence” in Table 1 only includes rent, heating and energy costs. The costs of buying

---

<sup>1</sup> Work units, also *Danwei* (□□), mean the state or collectively owned work places which, in the period of the planned economy, provided the employees with paid work as well as in-kind benefits. However, in the transitional period, people talk about “work units” in a less strict sense that it can be any work places. In this paper, “work units”, interchangeable with another term “work organisations”, includes all types of employers.

<sup>2</sup> Institutions refer to the organisations that provide social services. They are operated either by the government agencies or by the government funded organisations. They mainly provide social services in the areas of education, science and technology, culture, health care and others (State Council, No. 252, 1998).

houses, which take the largest share in household housing expenditures, are not included. It is estimated that, by the end of 2001, 81.2% urban residents had bought or held partial ownership of one or more flats (China Information, 01-11-2002). Therefore, it is reasonable to conclude that the household expenditures on housing can be much higher than the numbers shown in Table 1. Thirdly, the current reform schemes on both housing and pension are transiting from a defined benefit system to a defined contribution system, which might have systematic influences on the cash flows towards different social groups.

Policies in this paper can be at two different levels. The framework-setting policies are at the higher level. They include the main policies issued by the central and local governments to set the tone for the reforms. Examples of this type of policies include the series of decisions to adopt contribution based welfare system which are supplemented by a number of subcategories of policies in the specific areas. The more specific provisions for the implementation of the framework policies are at the lower level. These policies are the local governments' interpretations of the policies and the details of implementations, for example the policies that set the local contribution rates. The central government may also issue this type of policies occasionally, such as the wage increases for the civil servants. Each lower level policy always has its root in a framework policy.

In the following sections, we first examine the redistributive results of the urban housing and pensions through observation of the aggregate data and some local surveys. Then, we go through the details of the policies, and try to identify the policy factors that systematically contribute to the unequal redistributive results.

## **Redistributive Effects of the Reforms**

In this section, we look at the relationship between the rewards of the non-enterprise employees on the one hand, and those of the enterprise employees on the other. The term "rewards" here means the sum of wage income and the benefits one can get at work.

### **Wage Differences**

Figure 3 compares the average wage levels of the non-enterprise sector and those of the enterprise sector. The government agencies and the institutional organisations are presented separately to highlight the effects of the recent wage increases for the civil servants<sup>3</sup>. From 1978 to 2001, the average wage levels of all the employees had risen steadily and significantly. Before 1994, the enterprise employees had earned slightly more than the employees from the non-enterprise sector had. In 1994, the non-enterprise employees started to get more. The wages of the employees in the institutional and government organisations grew slightly faster than the wages of the enterprise employees. Since then, the average wages of the employees in the institutions and government organisations remained above the average wages of the enterprise employees. The wage increases for the government employees clearly accelerated at the end of the 1990s. As a result, the average wage of the government organisations was about 10 percent higher than that of the enterprises at the beginning of the new millennium. The gap between the non-enterprise employees and the enterprise employees was for the first time bigger than Rmb1000 in 2001.

The result suggests that despite of the unchanged wage determination mechanism, the wage increases for the non-enterprise employees seldom fall behind those of the enterprise employees. Especially in the late 1990s, the wage gap between the two sectors has widened. The non-enterprise employees are, in average, at a better position.

---

<sup>3</sup> Figure 3 does not include the data for the series of the most recent wage increases. They will be discussed in details in the later sections of this paper.

## **Pension Differences**

Figure 4 illustrates the state pension expenditures on each urban pensioner. During the period of 1995-2001, the retirees from the enterprises had, in average, received much less money than the retirees from the non-enterprises. Somewhat similar to the wage changes, in the second half of the 1990s, the pension benefits for each pensioner had increased for all of the three types of work units. However, the annual pension growth for the employees in the institutional organisations had clearly been faster than that for the enterprise employees. Despite that the average pension growth might not necessarily be slower for the enterprises than for the government organisations, the government pensioners clearly had a much higher starting point. By the end of the 1990s, the civil servants had enjoyed a much higher level of pensions than the enterprise pensioners had. In 2001, the average pension benefits for the government employees were more than 60 per cent higher than the average pension benefits for the enterprise employees<sup>4</sup>.

If we consider the situation jointly with the wage changes, it is not difficult to see that the pension provision had actually enlarged the advantageous position of the non-enterprises in wage income.

## **Housing Differences**

Housing inequalities are more complicated to study than the inequalities in wages and pensions, as there is no official statistics to reflect the differences in housing conditions. Some technical problems also make it hard to judge the differences observed in the data. First, houses are obtained at household level. A household's housing conditions can improve through the contribution of either one or more family members. Therefore, it can be misleading just to discuss housing provision at the individual level. Secondly, housing is closely related to the local demographic features and the social-economic situations. The valuation of housing conditions can be very different according to the preferences of individuals or households. Because of the shortage in comparable data, it is almost impossible to draw a comprehensive picture for the housing inequalities in China. However, some researchers did study some aspects of housing inequalities in the earlier stages of the reforms. We try to put the existing pieces of researches together to obtain a bigger picture of the housing inequalities in China.

Whyte and Parish (1984) summarise the housing inequalities at the earliest stage of the reforms. They suggest that there was a connection between housing provision and the authoritative position. Persons in higher positions or with stronger connections to the authorities tended to get the largest and the best-equipped flats. Walder (1995) discusses the significance of party membership in obtaining better housing with a Tianjin sample obtained in 1986. He reports that as late as 1985, households in the top 20 per cent of income had about a third more floor space than the other households had. In addition, the flats of the Communist Party members were likely to be better equipped. "They were more likely to have running water, a separate kitchen and sanitary facilities" as described by Logan and Bian (1993) in a research on a similar topic.

A more recent research by Logan and Bian (1999) based on the data collected in Tianjin and Shanghai in the 1990s analyses a series of factors that can cause housing inequalities. First, people with higher income and better education enjoy better housing conditions. Secondly,

---

<sup>4</sup> One might argue that the pensioners and the current employees are different social groups although they belong to the same work units. Therefore, the gains of the pensioners are not the gains of the current employees. However, as will be discussed in the later section, pension reform is not only a short-term plan to redistribute cash to the pensioners. Instead, the aim is to establish long term and possibly sustainable wage linked redistributive schemes, through which pension funds flow into the individual accounts in a more or less stable pattern. At least in the near future, the current redistributive pattern is likely to continue as the current employees retire.

Communist Party membership as well as authoritative positions can be useful in obtaining good quality housing. Thirdly, the employees of the larger organisations that are higher on the authoritative ladders are more likely to get larger and better-equipped flats. Finally, the employees of the institutional organisations enjoy better housing facilities. Another significant finding is that workers in the state enterprises or in the ‘new sectors’ of the economy (the private or semi-private sectors) do not enjoy better housing conditions than the employees from the other sectors.

Besides, Wang (2000) analyses the impact of the housing reform on the urban poor in China. His summary is that “most of the early reform policies were irrelevant to the urban poor families.” The impact of the housing reform was limited to the established employees in the non-enterprise sector, particularly in the administrative and other institutional organisations that have developed a work unit housing provision system. He also studies the sectoral features of the urban housing system. His argument is that the non-enterprise sector and other institutional organisations, as well as large-scale enterprises have much greater capacity to provide housing to their employees. In other words, the organisations that can pay higher and more stable salaries can provide better housing to the employees; whereas smaller enterprises cannot afford to do so. However, the employees in the smaller work units often earn less than the employees in the larger work units do.

All these analyses describe the housing provision before a major housing reform happened in the late 1990s. It means, although with patchy reforms in the housing provision, the majority of the households still lived in the houses obtained via the work units. The economic reform in the enterprise sector means the enterprises could only provide housing with their own revenues. However, the non-enterprise employees continued to receive free or heavily subsidised houses from the work units. In the latest reform, the drastic transition schemes toward a marketized housing system only contribute to the differences. They will be discussed in the later part of this paper.

### **Summary of the Redistributive Effects**

So far, we have studied the redistributive effects of the housing and pension reforms until the late 1990s. From the early 1980s when the economic reform started to take off, the salaries of the non-enterprise sector employees had grown in relation to the salaries of enterprise sector employees, and this trend only accelerates in the 1990s. Housing and pension benefits further widened the gap. The civil servants and the employees of the institutional organisations had benefited more from the reforms than the enterprise employees had. In the next section, we further look at the policies that behind the inequalities. The documents on the most recent reforms are analysed to see how the advantages of the non-enterprise employees are reinforced in the latest housing and pension reform schemes.

### **The Policies behind the Sectoral Inequalities**

From what we have discussed above, the enterprise sector and the non-enterprise sector always have different rewarding mechanisms. The differences have in turn created different policy preferences for the future reforms by the employees from the two parts of the economy. A simple model is helpful to bring out the internal connections between the different reforms in the past and possibly lead to understanding of more recent reforms.

### **The Determinants of Employee Rewards—A Simple Model**

The overall welfare reform has attempted to free individual employers from welfare provision or administration, a social obligation imposed on all the employers in the central planning era. In the planned economy, the administrative level, scale and the ownership of the work units were crucial in wage determination (see Yuan and Fang, 1998, for the development of the

earlier graded wage system and the later simplified revisions). The wages were not dependent on the employees' performance or the profitability of the employers. Welfare provision was handled in a similar frame of administration in which the pensions and housing funds (or houses) were allocated downwardly along the administration lines of employers. Housing and pensions were no more than additions to wages, and were, in essence, parts of the employees' rewards.

The reforms have changed, gradually, the rewarding mechanisms for the enterprise employees. The market (or the employers) started to decide the employees' wages, and various welfare programmes have changed from a defined benefit type into defined contribution type. At the beginning, only the employees working for the private and the collective enterprises were exposed to the market. As a result, the state owned work units including state owned enterprises and the non-enterprise sector have different pay system from the ones adopted in the private sectors. Later reforms pulled the state enterprises away from the non-enterprise sector. The state enterprises joined the other enterprises and started to enjoy autonomous pay system. Thus, the boarder between different groups of the employers shifted from the distinction between state and non-state sectors to the distinction between the enterprises and the non-enterprises.

Specifically regarding housing and pensions, all enterprise employees are supposed to have their own individual accounts. The enterprises and the employees have to contribute jointly to the individual accounts. The contribution rates are percentages (subject to changes) of the employees' salaries. In housing, the governments at various levels set the ceiling and floor for the contribution rates and the enterprises may have a final say about the rates in the officially approved ranges according to the specific circumstances of each enterprise. In pension, the provincial governments set the contribution rates, and the local enterprises have to arrange contributions accordingly. A further step of the reform as scheduled by the state is to extend the contribution system to the non-enterprise sector to integrate the welfare mechanisms for the two sectors.

However, the determinants of the rewards of the enterprises and the non-enterprises are bound to be different owing to the differences in the ways they are financed and operated. To obtain a clearer view, we develop a simple model to identify the determinants of the employee rewards. The model evolves according to the stages of the reforms. The first stage is the period before the reform started. The rewards for the employees are the sum of wages ( $w$ ) and benefits ( $b$ , specifically in this paper, pensions and housing). The government policies rather than the employers determine the levels of wages and benefits. Therefore, the rewards for all employees in various work organisations are  $[w(\text{policies})+b(\text{policies})]$ . The second stage started from the time market wages were introduced to the enterprises. The reward schemes for the enterprise employees become  $[w_e(\text{profits})+b_e(\text{policies})]$ .<sup>5</sup> But the reward schemes for the non-enterprise employees remain unchanged:  $[w_{ne}(\text{policies})+b_{ne}(\text{policies})]$ . The third stage is the period to adopt contribution based welfare provision. With the new system, the rewards for enterprise employees change to  $[w_e(\text{profits})+b_e(w_e)]=[w_e(\text{profits}) +b_e(w_e(\text{profits}))]$ . As suggested by the new reform proposals, in the near future, the reward schemes for the non-enterprise employees may change to  $[w_{ne}(\text{policies}) +b_{ne}(w_{ne}, \text{policies})]=[w_{ne}(\text{policies})+b_{ne}(w_{ne}(\text{policies}), \text{policies})]$ .  $b_{ne}(w_{ne}(\text{policies}))$  shows that the wages are policy-determined and they are the basis for contribution-based benefits. The model is summarised in Table 2 according to the stages of reforms for a clearer view.

From appearance, the benefits for both the enterprises and the non-enterprises are contribution based and wage related. This is also the basis for the reformers' claim of an integrated welfare

---

<sup>5</sup> Although work performance also potentially affects the amount of salaries that the employees receive, since the average wage levels of a certain sector might not necessarily change just because of rewarding the better and punishing the worse, we will not include work performance in the following discussions.

provision scheme. A further look may show that in the enterprise sector, profitability determines how much the employees can earn; whereas in the non-enterprise sector, the governments and the collectives pay the employees. The governments directly or indirectly (through policy guidelines) set the wage levels for the non-enterprises. In this sense, although both based on contribution, the reward schemes cannot automatically bring about the same results for the employees for the two sectors.

In the following sections, we will look at the roles of the policies, i.e. the factor  $p$  in the determinations of work related rewards and the interaction between  $p$  and wages in the non-enterprise sector.

### **Differences in Interests and Policy Preferences**

In any reform, the individuals seek to protect their interests and avoid losses. The employees from the non-enterprises are currently shielded from market pressures, as they have relatively stable jobs and their wages are protected. In addition, as shown in Figure 1, they have so far fully enjoyed the rising wage levels as the employees in the enterprises. As to the benefits, after the establishment of the individual accounts, the policies on contribution require that the work units contribute jointly with the employees. Clearly, the contributions of the work units are benefits given to the individuals. Therefore, the more a person can contribute, the more he or she can get from the employer.

In the model discussed in the last section, to maximise the gains from the reforms, the employees from different sectors need to adopt different strategies to increase or protect the total amount of reward they can get from work. The non-enterprise employees may seek to influence the policy makers to change the policies in the way that the non-enterprise sector may benefit from the reforms. In this context, they can lobby either for salary increases or for benefit increases. The connection between the wages and the benefits determines which one (wage or benefit) to lobby. For example, when the benefits have no connection with the wages, one may pursue increases in either wage or policy-determined benefits. If the benefits are dependent on the amount of wage, a person only needs to focus on getting higher salaries. Benefits may increase indirectly. In contrast, the enterprise employees need to count on the profitability of the enterprises.

In terms of group interests, since the government officials (with personal interests and closer connections to the policy makers) and the staff of the institutional organisations (with better education and ability to have their voices heard) have greater influences on policy making<sup>6</sup>, they tend to pursue favourable changes in the policy determined elements in the reward schemes. For example, when welfare is not related to wage, they might seek the protection of the group interests by choosing policies that are favourable to the non-enterprise employees. When the wage is determined by the policies and the welfare is related to wage, they can negotiate to obtain better wage deals for the non-enterprise employees. In this way, we can trace the various sources of inequalities behind the ongoing social welfare reform policies.

### **Favourable Policies for the Non-Enterprises**

So far, we have identified the favourable treatments to the non-enterprises in the reforms via aggregate data and some survey results. The model identifies the government policies as the main factor behind the unequal results. In this section, we look at the policy changes in recent

---

<sup>6</sup> Some researches suggest that the employees in the non-enterprise sector, especially the work units directly led by the Central Government, are at the top of the social ladder. They are the upper class in the society. They have greater power (fuelled by the political, educational and social capitals at hand) to put their voices through and influence the policy-making than the rest of the society (Lu, 2002).



years to see whether the policies have been actual manipulated as the model suggests and how the interests of the non-enterprises have been protected.

### **Slower Pension Reform in the Non-Enterprises<sup>7</sup>**

At the beginning of the 1950s, under the earliest pension system since the Communist Party came into power, the enterprises and the non-enterprises enjoyed similar qualifying standards for retirement, but the pensions for government employees were slightly higher than the retirement allowances for enterprise employees. In the late 1950s, however, the pension schemes for the two sectors were fully unified.

In the late 1960s, a revised pension system required that the finance and administration of pensions entirely be the responsibilities of the work units. That is to say, each enterprise should pay pensions to its staff and workers out of its own revenues; and each government organisation and institution out of its own budget. There was no accumulation of any kind and no risk pooling across different work units. The coverage was very limited. Only work units in the state sector and some large collective enterprises could afford to pay pension regularly to their former employees.

In 1984, some local governments started to initiate the “social pooling” for the pensions of enterprise employees. In June 1986, the State Council required both the enterprises and individuals to contribute to the pooling funds for the pensioners. The enterprises were required to pay an amount equal to 15% of the employees’ total wage, while the individuals were required to contribute no more than 3% of their own wages. This was the first contribution mechanism that involved individuals.

Starting from 1995, a two-tier pension provision system was established: a pay-as-you-go system which with defined benefits equal to 20 per cent of the average local wage, and an individual account which was contributed jointly by employers and employees. The local governments obtained discretion to design their own pension reform schemes according to local circumstances.

In July 1997, the State Council issued a document (No 26) to define the future reform of the pension system. The new system had three components: a small basic pension (pay-as-you-go; 20% of the local average monthly salary), a bigger individual account pension (preferably fully funded; monthly rate: total saving/120; expected replacement rate: 35 per cent for an average employee if the investment return equals to the growth rate of average earnings) and a voluntary individual supplement account pension (fully-funded; can be exempted from taxation). The employers were to contribute to the individual accounts (no more than 20 per cent of wages). The employees would also contribute (starting from 4 per cent of wage and would increase to 8 per cent in the end). In the most recent reform (State Council, 2000), the enterprise contributions would be used to finance the social pooling funds; and the individuals contribute to the individual accounts. Thus, the management of individual accounts could be separated from that of the social pooling funds.

However, the civil servants and the employees of the institutional organisations were not included in all these reforms. Their current pension arrangements do not change. They continue to enjoy the state-financed benefits. Without any individual contribution to the public pension schemes, the employees from the government agencies and the institutional organisations receive more than 90 per cent of their final year salaries as pensions, which are still financed on a pay-as-you-go basis, guaranteed by the state and provided by the work organisations. For the employees who used to work for the non-enterprise sectors and moved to the enterprises, the pension rates are lower. They have to participate in the pension

---

<sup>7</sup> For a more detailed account of the history of pension reforms, see Gong (2003).

programme of the enterprises. They contribute jointly with their employers. However, the big gap between the pension level of the civil servants and the institution employees has hampered the mobility from the non-enterprises to the enterprises. The difference may be large enough to prevent mobility from the non-enterprises to the enterprises. However, this contradicts the State's intention to downsize the public sector and promote more efficient public services. According to the schedule, the next step is to reform the pensions for the semi-public servants. Some places, are carrying out pilot experiments to work on the policy difference between the enterprises and the public organisations to facilitate individuals to move from one type of organisations to another.

The history of the development of China's pension system suggests that the enterprises and the non-enterprises had been treated in the same way over the planned period. The economic reform has deeply divided the system. Civil servants enjoy generous state pensions, whereas the majority of enterprise employees have to finance their own pensions, probably with state subsidies.

### **Slower Housing Reform in the Non-Enterprises<sup>8</sup>**

Until the mid-1980s, individuals received houses or housing benefits from their employers (who served as the agents or administrators of the state housing policies) or the local governments. The distribution of the benefits was need-based. Houses were allocated to the urban employees without charge. The occupants did not own the houses. They had to pay rent to the work units or the local housing management offices. The employers or the house management offices were responsible for maintaining the houses. The urban employees would also receive benefits for heating and the energy supply for the houses they lived in. The houses were not transferable although in many cases they were handed over to the occupants' children after the occupants died. However, owing to extremely limited resources, not all the employees could get free housing. The waiting time for getting houses became painfully long. The standards of qualifying for house allocation were very strict. The type and size of the work units, the employees' titles and qualifications, political statuses, education and family backgrounds, marriage statuses, current housing conditions and housing histories are all factors that might influence the housing allocation procedures.

Before the 1990s, in order to encourage individuals to buy houses and end their dependence on the state, the government redesigned the subsidies for private ownership and public renting. Rent subsidies were reduced. A housing market offering subsidised purchases was established. However, these measures failed to distract the individuals from focusing on the work allocation as the only major source of acquiring housing. On the one hand, rent increases were not significant enough to discourage the occupants to live in the public houses. On the other, there was no attempt to distinguish the house buyers. Houses were purchased in large quantities by the work units at the subsidised prices to fulfil further allocation to the employees. Such policy facilitated the publicly funded work units, which had greater pooling power to buy houses in the market. As a result, the employees in the state sector, including the non-enterprises and the large state owned enterprise could afford to allocate more houses to the employees. At the same time, the employees of the private and collective enterprises had to buy houses in the markets without any subsidies.

In the early 1990s, to prevent the public funds from flooding into the housing market, "the new houses new policy" strategy came into force to separate the newly built houses from the old housing stocks. The work units could not use state subsidies to buy houses for their employees. In 1992, individual accounts (housing provident funds) were launched to obtain contributions from both the employers and the employees. The contribution rate to the housing provident funds was set as a certain percentage of one's wage. The employers should

---

<sup>8</sup> For a more detailed account of the recent housing reforms, see Li (2001).

contribute jointly with the employees. The work units should pay (at least) the same amount into the accounts once the employees paid their share. Individuals could withdraw or even borrow against the savings in their accounts if they decided to buy houses in the market or buy the flats they were living in. It means that the individuals who had successfully secured the employers' contribution had actually secured housing benefits in the form of bank savings. In this period, the work based housing allocation was running parallel to the private housing market. The non-enterprises continued to follow the old system. The civil servants and the public servants were eligible for work unit allocation (with some individual contribution). The enterprise employees would not receive any subsidies from the state (except that, in some rare cases, the work units were affluent enough to allocate houses to the employees at their own costs, such as some companies in the financial sectors and some foreign enterprises.)

Starting from 1998, the state decided to carry out comprehensive reform in housing provision. No more houses should be allocated free of charge or at great subsidies to the employees after a certain deadline. The non-enterprises were no exception. Rent for public houses would be raised to market level gradually but steadily. In this way, a framework for "marketised" housing system was established. In this system, there would be no more in-kind housing allocation. However, some room was left to allow changes in the details of the reform schemes, such as the contribution rates and the mechanism to allow old employees (those who started working before 1992) to continue getting some housing benefits (such as status-tested subsidies for purchasing houses). The local government could also be somewhat flexible in the timing of implementing new schemes according to the local financial situation.

### **Favourable Wage and Welfare Increases for the Non-Enterprises**

After the reforms, the individual accounts become the most important source of funding for housing and pensions for the majority of the urban employees. The effect of the individual accounts can be two sided. On the one hand, the individual accounts include contributions as a percentage of the wages by the employers. To the employees, their employers' contributions are actually cash benefits. On the other hand, in-kind benefits no longer exist and the employees have to contribute. The level of the benefits depends on the net result of the two effects. The reforms have provided a mechanism for people from the higher wage groups to acquire, systematically, larger amounts of benefits than the people from the lower income groups do.

Rationally, in the reform, people would like to maintain or even increase the total rewards and strive to prevent losses. With the wage plus benefits rewarding structure, they can either seek to keep the wage level or the benefit level directly or indirectly (via wage increase). The groups with greater ability to influence the policy-makers are the winners. Clearly, data of this type is very difficult to obtain. However, some observations of the government initiated changes in salaries and benefits in the last several years can be helpful in understanding the situation.

Following the model developed in the earlier sections, we first look at the government initiated wage changes for the non-state sector. Starting from September 1999, there have been four major pay rises for the employees from the government agencies and the institutional organisations: 30% increase in September 1999; Rmb100 monthly pay rise in April 2001; 15% increase in October 2001 plus a double pay in December 2001; and another 15% increase in October 2002<sup>9</sup>. In this way, the wages of these government and institution

---

<sup>9</sup> The pay rise in October 2002 caused vehement criticisms and protests from the other social sectors. It was postponed because "the government concerns about the poor" (Southern Net, 23-12-2002). Soon after, according to the government report of 2003, there will be a further pay rise on 1 July 2003. This time, the growth rate will not be disclosed until then.

employees would soon be doubled. The wage growth is clearly much faster than that of other employees. One needs to bear in mind that before 1999, as we have shown in the earlier section of this paper, the wage growth of the non-enterprises had already caught up with that of the enterprises.

So far, most of the pensioners retired from non-enterprises do not receive pensions under the new pension schemes as the pensioners in the enterprises. The individual accounts are for the enterprise employees. Most of the civil servants and the public servants are not affected. In 2000, some institutional organisations (but not the government organisations) started to experiment with pension reforms.

Two factors were relevant to the initiative. First, the central government intended to reduce the number of public employees and encourage private sector's involvement in the provision of public services, such as education, eldercare and healthcare. The boundary between the public and the private sectors in the provision of public services is blurred. As a result, a large number of the employees of the previous public services leave the non-enterprise sector and become enterprise employees. In addition, more people would join the new institutional organisations, which are more like business enterprises rather than government funded organisations. Second, as part of the initiatives to integrate the welfare provision for the enterprise and non-enterprise sectors, the pension system of the non-enterprises would take a similar form as that of the enterprises, i.e. a complex structure that combines social pooling and individual contributions.

Therefore, higher salaries would establish an advantageous starting point for the future contribution to the individual accounts. This provides an explanation for the series of wage increases in a very brief period before any welfare reform was about to start. However, in 2001-2002, the proposed pay-rises invited strong criticisms from the public. Under the public pressure, further wage increases had to stop. It means that the non-enterprise employees could not continue to benefit from further wage increases at least in the immediate future. As a side effect, the contribution from their employers would also stop growing. However, this is not the end of the story. As a replacement, in late 2002, the central government expressed an unambiguous intention to increase the pensions for the employees of the government and the institutional organisations.

Housing is no exception. Before mid 1998, urban housing reform had focused on the housing for enterprise employees. Since mid 1998, the government decided to abandon in-kind housing allocation and replace it with cash benefits. Direct allocation of public houses was (temporarily) banned and the individuals including non-enterprise sector employees would receive cash subsidies for housing. Therefore, the non-enterprise sector employees will be treated the same as enterprise employees. The former also has to contribute to the housing provident funds and buy houses in the market. Before the 1998 reform was fully launched, the civil servants were able to enjoy a special treatment: the "last allocation". It means the civil servants had a last opportunity to receive free housing allocation. For this purpose, the state published a list of official housing standards for the central government employees. Those whose housing conditions were below the standards were entitled to further housing allocation or cash subsidies (See Table 3). These benefits would only be available to the existing employees. Similarly, the local governments also seized the "last" opportunity to improve the housing conditions for the local civil servants (See Table 4 for the example of Tianjin, and Wang, 2000, for the example of Guangzhou).

The media described the looming boom in the housing market for subsidised houses as "catching the last train". These policies secured that the civil servants at various levels would be the last beneficiaries of the old housing system and possibly the first of the newly established system, "cash based housing provision" (*huobi fenfang*, □□□□). These policies did not only help to maintain minimum housing standards for the civil servants, but also

allowed differentiated “treatments” according to administrative positions. What is more, the standards were apparently much higher than the minimum standard for the other urban residents.<sup>10</sup> This policy clearly indicates an effort to protect the diminishing advantages enjoyed by the people higher up along the administration ladder.

Similarly, in the new system, since the employers and the employees jointly contributed to the housing provident funds, higher wages would enhance the position of the non-enterprise sector employees in receiving benefits through their employers’ contributions to the individual accounts. Again, this explains the incentives for the repeated wage increases for the non-enterprises in the late 1990s and the early 2000s.

In general, in all the three areas of reform, wage, housing and pensions, the government policies have constantly put the non-enterprise sector in a favourable position. According to the model we proposed in the earlier section, two factors are relevant in order to receive greater amount money from the work units, wages and benefits. Both of them can be manipulated through policy making for the non-enterprise employees. In practice, when persistently favourable treatment in one factor, such as fast wage increases, face challenges, the efforts are diverted to the other factors, such as pensions or housing. Therefore, the seemingly random policies are not as disconnected as they look. Namely, there is a hidden target behind them: protect the interests of the non-enterprise employees. The changes brought by the housing, pension and the wage reforms have guaranteed the employees in the non-enterprise sector a favourable position in the overall levels of rewards received from work.

## **Conclusion**

This paper examined the differentiated treatment towards the enterprise and non-enterprise sectors in the wage, housing and pension reforms in China. The overall data of the last two decades suggest that although the non-enterprise employees have not gone through similar wage reforms as the ones experienced by the enterprise employees, the wage increases of the non-enterprises have not fallen behind those of the enterprises in terms of the actual amount. Especially in the late 1990s, the non-enterprise employees started to receive higher salaries than the enterprise employees. What is more, the reforms in housing and pension provision reinforced the advantageous positions of the non-enterprises. The policies have clearly favoured the non-enterprise employees.

The model tries to bring together all the reforms of the work rewarding system, including wages, pensions and housing. It emphasises that the welfare provision for the non-enterprises and the enterprise cannot be the same even with the governments’ call for an integrated welfare system. The determinant of the amount of rewards for the enterprise employees is the profitability of the enterprises. However, the determinants of the amount of rewards for the non-enterprise employees are the policy guidelines. With the reformed rewarding schemes, the non-enterprise sector has the incentives to influence the policies to protect their own interests.

We then go into the details of the policy changes both regarding welfare framework changes and the specific settings. The results show that the policies on wage and welfare reforms are behind the growing advantages of the non-enterprise employees. Although the reformers announced an “integrated”, contribution and wage-based welfare scheme, the seemingly random changes in the policy guided wage changes and pension and housing reforms for the

---

<sup>10</sup> In contrast, the poverty line set for housing allocation for the same year in Tianjin was “less than 8 sq. m.” It means those who did not work for the government and lived below this standard could be qualified for government housing assistance, such as further allocation, or cash subsidies.

non-state sector employees actually lead to the combined effects of economic inequalities (as shown by the wage gaps) and social inequalities (as shown by the gap in benefit levels). In all, this paper shows that the non-enterprise sector employees had consistently enjoyed favourable treatments in the wage and welfare reforms. The wage-based welfare schemes could not provide, as the reformers claimed, unified welfare provision. It guarantees a policy-guided track toward unequal redistribution, in which the non-enterprise employees benefit more than the others do, through manipulating one or more of the components of the rewarding package directly or indirectly by the policy makers.

## Acknowledgements

The authors would like to thank Guy Mayraz, Hyun-Bang Shin for their helpful comments.

## References

- Adamchak, D. J., et al. (1999) "Occupations, Work Units and Work Rewards in Urban China", *International Sociology*, 1999, F, Vol. 14(4): 423–441.
- Bian, Y. and Logan, J. R. (1996) "Market Transition and the Persistence of Power: the Changing Stratification System in Urban China." *American Sociological Review*, 61: 739-758.
- Cao, Y. and Nee, V. (2002) "Remaking Inequality: Market Expansion and Income Stratification in Reforming State Socialism", unpublished paper.  
<http://www.lsu.edu/sociology/workingpapers/Cao-Nee-Remaking.pdf>
- China Finance Periodicals Press (2000) *Finance Yearbook of China*.
- China Information (2002) "Growing Urban Life Quality", Beijing, China, 01/11/2002.
- China Statistics Bureau (2001) "Report for the Fifth National Census" (di wu ci quanguo renkou pucha gongbao, □□□□□□□□□□□□□□),  
<http://www.stats.gov.cn/tjgb/rkpcgb/qgrkpcgb/200203310083.htm>.
- China Statistics Press, *China Labour Statistical Yearbook*, related issues.
- Fan, C. S. and Grossman, H. I. (2001) "Incentives and Corruption in Chinese Economic Reform" *Journal of Policy Reform*, 4(3), 2001, pp195-206.
- Fleisher, B. M. and Wang, X. (2001) "Efficiency Wage and Work Incentives in Urban and Rural China", *Journal of Comparative Economics*, 29: 645-62.
- Gibson, J., et al (2003) "Improving Estimates of Inequality and Poverty From Urban China's Household Income and Expenditure Survey", *Review of Income and Wealth* 49(1).
- Gong, S. (2003) *The State and Pension Policy Instability in the People's Republic of China*, PhD thesis, UK: University of Sheffield.
- Guan, X. (2001) "The Impact of Economic Globalisation on China's Social Stratification" (Jingji quanqiuhua dui zhongguo shehui fengceng de yingxiang, □□□□□□□□□□□□□□), paper presented at the "Annual Conference of China Sociology Association (zhongguo shehuixue xuehui nianhui, □□□□□□□□□□)", July 2001.  
<http://www.columbia.edu/~amm248/how%20reform%20worked%20in%20china.pdf>.
- Gustafsson, B. and Li, S. (1997) "Types of income and inequality in China at the end of the 1980s", *Review of Income and Wealth*, 43(2), pp. 211-226.
- Gustafsson, B. and Li, S. (1998) "Inequality in China at the end of the 1980s: locational aspects and household characteristics", *Asian Economic Journal*, 12(1), pp. 25-64.
- Gustafsson, B. and Li, S. (1999) "A more unequal China? Aspects of inequality in the distribution of equivalent income", unpublished.
- Hussain, A. (2001) "Pension Reform in China: Its Progress and Challenges", Paper Presented at the "Conference on Financial Sector Reform in China", September 11-13, 2001.
- Johnston, M. (2001) "Corruption in China: Old Ways, New Realities and a Troubled Future", unpublished paper, <http://people.colgate.edu/mjohnston/MJ%20papers%2001/currhist.pdf>
- Li, B. (2001) *China's Housing Reform and Work Incentive Effects*, PhD thesis, UK: London School of Economics.

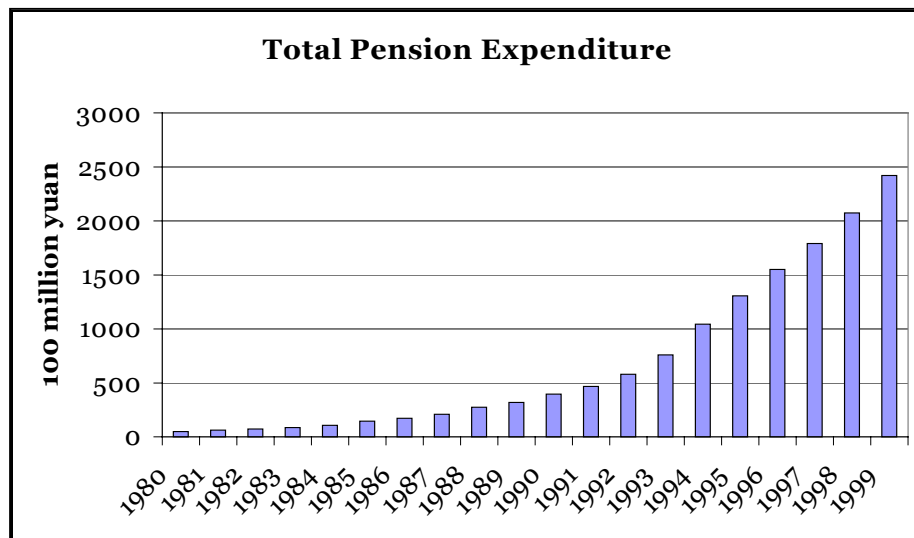
- Logan, J. R., Bian Y. and Bian F. (1999) "Housing Inequality in Urban China in the 1990s: Market and Non-market Mechanisms", *International Journal of Urban and Regional Research*, 23 March, 1999: 7-25.
- Longan, J. R. and Bian, Y. (1993) "Inequalities in Access to Community Resources in a Chinese city", *Social Forces*, 72.2: 555-76.
- Lu, X. (2002) *A Report on Contemporary Chinese Social Classes* (Dangdai Zhongguo Shehui Jieceng Yanjiu Baogao) Social Science and Literature Press (Shehui Kexue Wenxian Chubanshe)
- Ma, J. and Zhai, F. (2001) "Financing China's Pension Reform", Paper presented at the "Conference on Financial Sector Reform in China", September 11-13, 2001.
- Meng, X. (2003) "Economic Restructuring And Income Inequality In Urban China", Working paper, <http://rspas.anu.edu.au/economics/staff/meng/inequal.pdf>
- Nee, V. (1989) "A Theory of Market Transition: from Redistribution to Markets in State Socialism", *American Sociological Review*, 54:663-81.
- Nee, V. (1991) "Social Inequalities in Reforming Station Socialism: Between Redistribution to Markets in China", *American Sociological Review*, 56:267-82.
- Nee, V. (1996) "The Emergence of A Market Society: Changing Mechanisms of Stratification in China" *American Journal of Sociology*, Vol. 101: 908-949.
- Peng, Y. (1992) "Wage Determination in Rural and Urban China: A Comparison of Public and Private Industrial Sectors." *American Sociological Review*, 57: 198-213.
- Rona-Tas, A. (1994) "The First Shall Be Last? Entrepreneurship and Communist Cadres in the Transition from Socialism." *American Journal of Sociology*, 100:40-69.
- Shirk, S. (1993) *The Political Logic of Economic Reform in China*, Berkeley: University of California Press.
- Southern Net (2002) "Delayed Pay Rises for the Civil Servants; Money Used for Poverty Relief", (Gongwuyuan Jiaxin Zanhuan; Gaizhichu Jiang Youxian Kaolv Fupin Pangkun, 23-12-2002).
- State Council Office, PRC (1996) "State Council Office Notification on Re-issuance of 'Suggestions on Improving Housing Provident Funds Management' by the State Council Leading Group of Housing System Reform", (guowuyuan bangongting zhuanfa guowuyuan zhufang zhidu gaige lingdao xiaozu "guanyu jiaqiang zhufang gongjijin guanli yijian" de tongzhi, State Council Office Issue (1996), No. 35.
- State Council, PRC (1991) "State Council Notification on Continuing to Carry Out Urban Housing System Reform Actively and Steadily" (guowuyuan guanyu jixu jiji wentuo di jinxing chengzhen zhufang zhidu gaige de tongzhi, State Council Issue (1999), No. 30.
- State Council, PRC (1991) "State Council's Decision on Reforming the Enterprise Employees' Pension Security System" (guowuyuan guanyu qiye zhigong yanglao baoxian zhidu gaige de jue ding, State Council Issue (1991), No. 33.
- State Council, PRC (1994) "State Council's Decision on Deepening Urban Housing System Reform" (guowuyuan guanyu shenhua chengzhen zhufang zhidu gaige de jue ding, State Council Issue (1994), No. 43.
- State Council, PRC (1995) "Notification on Deepening the Reform of the Enterprise Employees' Pension Security System" (guanyu shenhua qiye zhigong yanglao baoxian zhidu gaige de tongzhi, State Council Issue (1995), No.6.
- State Council, PRC (1997) "State Council's Decision on Establishing Unified Basic Pension Security System for Enterprise Employees" (guowuyuan guanyu jianli tongyi de qiye zhigong jiben yanglao baoxian zhidu de jue ding, State Council Issue (1997), No. 26).
- State Council, PRC (1998) "Temporary Regulations for the Registration and Administration of Institutions" (shiyi danwei dengji guanli zanzheng tiaoli, State Council Command, No. 252, to be enforced on 25 October 1998.

- State Council, PRC (2000) "State Council Notification on Issuing the Pilot Schemes on Improving Urban Social Security System" (guowuyuan guanyu yinfa wanshan chengzhen shehui baozhang tixi shidian fangan de tongzhi, □□□□□□□□□□□□□□□□□□□□□□□□), State Council (2000), No. 42.
- Suo, Y. (1999) "Setting the Example for Housing Reform in the Whole Country--Standards and Methods for Housing Subsidies to the Employees of Central Government Agencies Have Been Issued", *Tianjin Daily*, August 21, 1999.
- Tianjin Urban Housing System Reform Office (1997) "Collection of Statistical materials, 1996--Tianjin Urban Housing System Reform", unpublished.
- Tianjin Urban Housing System Reform Office (1999a), "Implementation measures on further deepening urban housing system reform in Tianjin Jinzheng Issue [1999], No. 38, Collection of Tianjin Housing Reform Documents in 1999, pp12.
- Wang, F. and Wang, T. (2002) "Bringing Categories Back In: Institutional Factors Of Income Inequality In Urban China, 1986-1995", Paper prepared for presentation at the "All-UC Economic History Conference", Irvine, November 9, 2002.
- Wang, Y. (2000) "Housing Reform and its Impacts on the Urban Poor in China", *Housing Studies*, 15(6): 845-64.
- Wang, Z. and Zhai, F. (1998) "Tariff Reduction, Tax Replacement and Implications for Income Distribution in China", *Journal of Comparative Economics*, 26: 358-387.
- Wei, S. and Wu, Y. (2001) "Globalisation and Inequality: Evidence from Within China", *NBER Working Paper*, No.w8611, Issued in November 2001.
- Wei, S. J. (1999) "Corruption in Economic Development: Beneficial Grease, Minor Annoyance, or Major Obstacle?", *Working paper*, World Bank Institute.
- Whyte, M. K. and Parish, W. L. (1984) *Urban Life in Contemporary China*, The University of Chicago Press, Chicago.
- Wu, X. and Xie, Y. (2002) "Does the Market Pay Off? Earnings Inequality and Returns to Education in Urban China", *William Davidson Working Paper*, No. 454.
- Xie, Y. and Hannum, E. (1996) "Regional Variation in Earnings Inequality in Reform-Era Urban China", *American Journal of Sociology*, 101 (4): 950-992.
- Yang, Y. and Huang, Y. (1997) "The Impact of Trade Liberalization on Income Distribution in China", *Working Paper*, Economic Division, Research School of Pacific and Asian Studies, The Australian National University, 97/1.
- Yuan, S. and Fang, Y. (1998) *The Transition of China's Employment System, 1978-1998* (zhongguo jiuye zhidu de bianqian, 1978-1998, □□□□□□□□□□, 1978-1998□), China: Shanxi Jingji Press.
- Zhao, R. (1999) Increasing Income Inequality and its Causes in China, Institute of Economics and Statistics Oxford, *Discussion Papers*, No. 213.
- Zhou, X. (2000) "Economic Transformation and Income Inequality in Urban China: Evidence from Panel Data", *American Journal of Sociology*, 105(4): 1135-74.



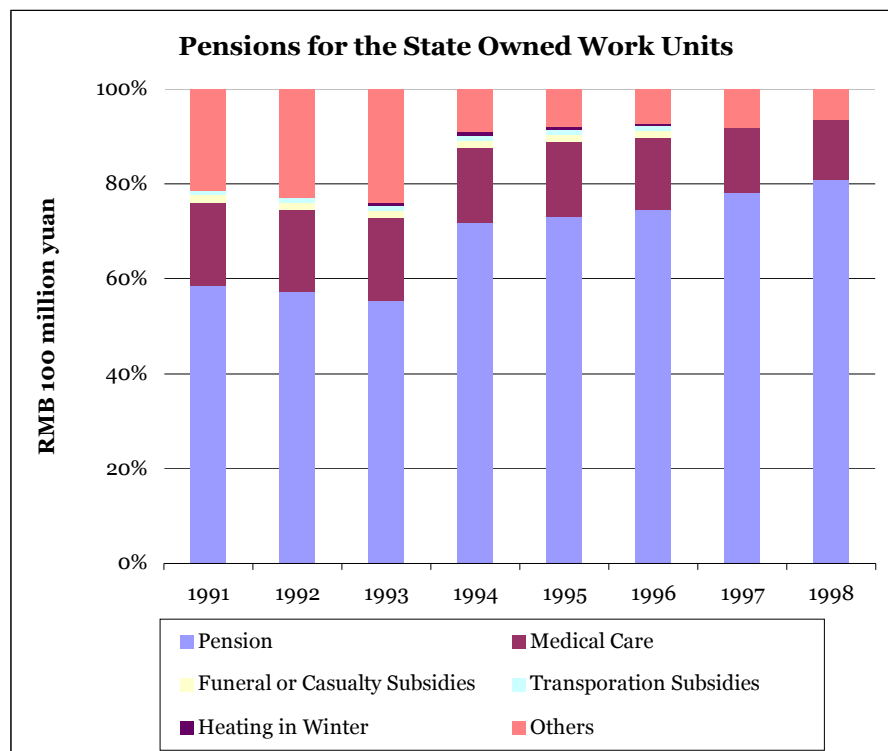
## Appendices

Figure 1



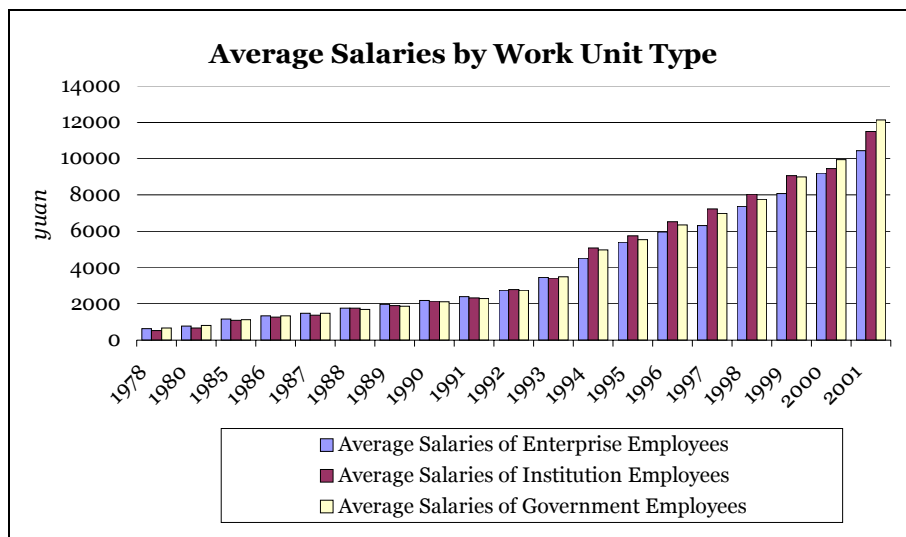
Data Source: *China Statistics Yearbook*, related issues, China Statistics Press.

Figure 2



Data source: *Finance Yearbook of China*, 2000, p509

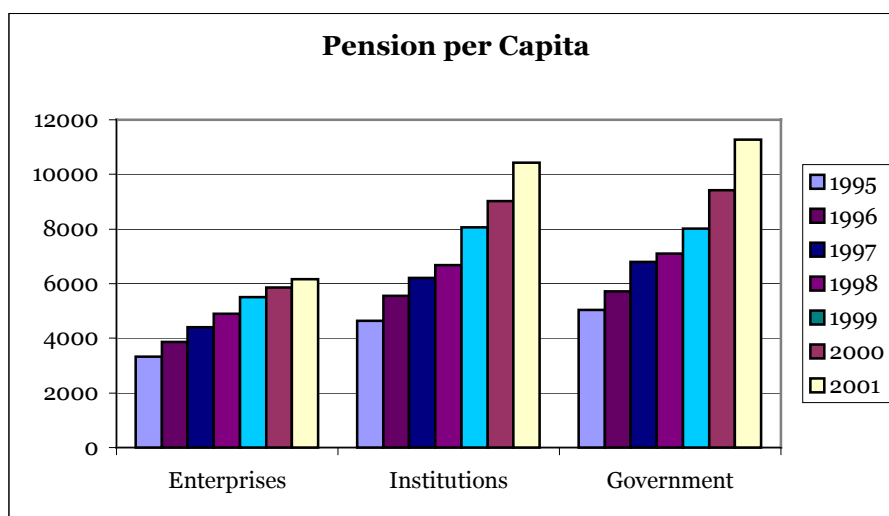
**Figure 3**



Note: The data before 1999 are calculated according to the "Average Wage of Staff and Workers by Sector in Detail" of *China Statistics Yearbook*, related issues. The average salaries are weighed according to the number of employees. The staff and employees from the "others" sections are not included. The data for 2000 is from Table 3-1 of the *China Labour Statistics Yearbook* and Data for 2001 is from *China Statistics Yearbook* 5-23.

Data Source: Calculated according to the *China Statistics Yearbook*, related issues; *China Labour Statistics Yearbook*, 2001.

**Figure 4**



Data Source: Calculated according to *China Labour Statistics Yearbook*, related issues.

**Table 1 Urban Household Expenditures**

Item	1985	1990	1995	1998	1999	2001
Food	52.2%	54.2%	49.9%	44.5%	41.9%	37.9%
Clothing	14.6%	13.4%	13.5%	11.1%	10.5%	10.0%
Household Facilities, Articles and Service	8.6%	8.5%	8.4%	8.2%	8.6%	8.3%
Medicine and Medical Service	2.5%	2.0%	3.1%	4.7%	5.3%	6.5%
Transportation and Communications	2.1%	3.2%	4.8%	5.9%	6.7%	8.6%
Recreation, Education & Cultural Service	8.2%	8.8%	8.8%	11.5%	12.3%	13.0%
Residence	4.8%	4.8%	7.1%	9.4%	9.8%	10.3%
Miscellaneous Commodities and Services	7.0%	5.2%	4.3%	4.5%	5.0%	5.4%

Data Sources: Calculated according to *China Statistics Yearbook*, related issues.

**Table 2 Structure of Rewards—A Basic Model  $R=w+b$** 

Stages of reform	Sector	Rewards
Before reform	All work organisations	$w$ (policies) + $b$ (policies)
Enterprise reform	Enterprises	$w_e$ (profits) + $b_e$ (policies)
	Non-enterprises	$w_{ne}$ (policies) + $b_{ne}$ (policies)
Welfare reform	Enterprises	$w_e$ (profits) + $b_e(w_e) = w_e$ (profits) + $W_e(w_e$ (profits))
	Non-enterprises	$w_{ne}$ (policies) + $b_{ne}(w_{ne}, policies) = w_{ne}$ (policies) + $b_{ne}(w_{ne}(policies), policies)$

**Table 3 Housing Standards for Central Government Employees**

Administrative level	Subsidised space (Sq. m.)	Skill level + working age	Subsidised space (Sq. m.)
Below section chief	60	Low and middle level skilled worker or ordinarily workers with less than 25 years' experience	60
Section chief/ Assistant section chief	70	High level skilled worker, technician or ordinary worker with more than 25 years' experience	70
Assistant director of department	80	High level technician	80
Director of department	90		
Assistant director of bureau	105		
Director of bureau	120		

Source: Suo, Y., 1999, "Setting the example for housing reform in the whole country--standards and methods for housing subsidies to the employees of central government agencies have been issued", *Tianjin Daily*, 21-08-1999.

**Table 4 Housing Standards for Local Government Employees (Tianjin)**

<b>Administrative level</b>	<b>Subsidised space (Sq. m)</b>
Below section chief	60
Assistant section chief	60-70
Section chief	70-80
Assistant director of department	80-95
Director of department	95-110
Assistant director of bureau	110-125
Director of bureau	125-140

Source: Tianjin Urban Housing System Reform Office, 1999a, "Implementation measures on further deepening urban housing system reform in Tianjin Jinzheng Issue [1999], No. 38, *Collection of Tianjin Housing Reform Documents in 1999*, pp12.