

**ENTRY INTO THE EMERGING PRIVATE SECTOR**  
**AN INSTITUTIONAL ANALYSIS OF ENTREPRENEURSHIP IN URBAN CHINA**

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## ABSTRACT

In the context of reforming China, job mobility from the state to private sectors not only indicates a significant institutional change, but also reflects changes of the mechanisms of stratification. Using life-history data on a sample from 24 provinces in urban China from 1978 to 1996, this research addresses three issues: (1) What are the period effects of the market-oriented reform reflected in job-shifts from state sector to private sector? (2) How do different types of work organizations (*Dan Wei*), which have structural segmentation, influence the cross-sector mobility? (3) Which groups inside the redistributive system are more likely to enter the emerging private sector? To guide this empirical study, a framework consisting of three interacted levels---the states, organizations and individuals---is developed. The findings show a significant path dependence nature of China's urban reform in terms of the impact of pre-existing political and economic structure. Employees in state-owned firms are more likely to transfer to the private sector than those who are in state agencies; Employees in organizations with higher rank in the bureaucratic hierarchy are less likely to transfer to the private sector. Secondly, the research sheds light on the divergence of the "dual elites"---professional and administrative elites---when facing the flourishing private sector in the transforming economy. Administrative elite are more likely to enter the private sector than professional elite in early stage of the reform era, when administrative power and connection are more important for private business success. With more established market mechanism and industrial upgrading of the private sector, professionals are catching up in more recent period.

**ENTRY INTO THE EMERGING PRIVATE SECTOR  
IN URBAN CHINA, 1978 TO 1996: AN EVENT-HISTORY ANALYSIS**

Since 1978, when China opened its door toward the outside world and launched out market oriented reforms, history has witnessed a great transformation of this society. In contrast to the *radical* reforms of postsocialist societies in Eastern Europe and the former Soviet Union, Chinese state socialism adopted a *gradualist* strategy to promote the reform from the exterior of the redistributive system to the interior. This change is manifested by the rapid growth of the private sector outside the state-owned sector. The labor force in urban private sector increased from 150 thousand in 1978, which accounted for less than .2% of urban China's labor force, to 40 million in 2000, around 30% of the total.

Confronted with these skyrocketing statistics, one cannot help but wonder who entered the private sector in these decades. What are the characteristics of these people? Which institutional factors influenced their decision? What are the implications of this kind of mobility for contemporary China's stratification system? It is worth noting that the private sector almost started from scratch, since the Collectivization Movement after the founding of state socialist China made all capital goods the property of state. Almost all the labor force worked for the state. In this context, the mobility across the boundary of state and private reflects a fundamental structural change of the socialist country. In contrast to most previous studies, which focused on income return to political capital vs. human capital, this study examines people, bearing differential political capital and human capital, "vote with their feet" in a nascent market economy. My analysis focuses on the people who shifted from the state to private sectors, between the years 1978, when the reform began, and 1996, when the data were collected.

## **ENTRY TO THE PRIVATE SECTOR: DYNAMICS UNDER INSTITUTIONAL CHANGES**

The private sector in urban China consists of three parts roughly: the self-employed individuals, private enterprises, and foreign firms (including foreign joint venture and independent foreign firms). The following figures provide some information about the growth of these subgroups in the period I examine. In 1978, the number of self-employed people in urban China was 150 thousand, which accounted for less than .2% of urban China's labor force. By 1997, it had grown to 19.2 million, which accounted for near 10% of the total. The number of employees in foreign firms increased from 60 thousand (.3% of the total) in 1985 to 5.8 million (2.9%) in 1997, and the labor force in private enterprises expanded from 570 thousand (.3%) in 1990 to 7.5 million (3.7%) in 1997. By 1997, there were 600 thousand private firms and 10.2 individual or family businesses in urban China (State Statistical Bureau 1998, p.130-131 and p.152-153).<sup>1</sup>

While family business in rural part of China has attracted much attention from students in China's market transition (Zhao 2002; Walder 2002), a systematic analysis of the private sector in urban China is still absent. By adopting the angle of examining job mobility into the private sector over time, this paper not only explores many interesting empirical questions, but also sheds light on the process of institutional changes, dynamics of stratification mechanism and the pattern of the emergence of entrepreneurship in urban China in recent two decades.

The emergence and development of the private sector is a profound institutional change in reform-era China. This dynamic process happens in an interconnected, multilevel system consisting of the state, organizations and individuals. In other words, each action-level or arena

simultaneously is a framework for action and a product of action (Holm 1995). By adopting this framework, my effort is to challenge the simplistic picture of the impact of market transition, which deems a decline of the advantage of redistributive power and higher returns to human capital as inevitable outcomes of market transition (Nee 1989). Moreover, my approach serves to specify the conditions under which the private sector and market emerge and operate, to examine the role played by the state, organizations, and individuals in this process, and how the changing institutional environments influence those actors' practices and decisions.

Embedding the mobility from public sector to private sector in the broad institutional change process highlights the point that we could not understand well such complicated phenomena observed at one level without referring to the impact and interaction with those at other levels. At the macro level, the state policies set an institutional framework in which goals and means are defined. How the reform is carried out has direct impact on economic sectors and organizations at the meso level. To what extent different economic sectors can perform well functions as “push” or “pull” force to individuals. Meanwhile, individuals at the micro level bear different characteristics, which influence individuals' choice through various ways. Vice versa, as the private sector opens alternative arena for individuals to pursue their economic needs, individuals' decision whether staying at or leaving from the public sector not only suggests relative value of the characteristics they bear in different economic sectors, but also reflects the relative status between the private sector and the public sector. Moreover, the aggregate of these moves has been changing the landscape of the economic and social structure of China as a whole.

## **Institutional Logics in China's Reform Process**

China's reform has proceeded as the outcome of interaction of different levels. On one hand, it could be perceived as a bottom-up process promoted by innovative individuals and organizations. In the late 1970s, the state launched the reform by granting legal status to the underground *family production system* in the agricultural industry, which was firstly invented by peasants in An Hui province and adopted by other regions secretly due to its obvious superiority to *collective commune system* in the sense it greatly boosted incentives of peasants hence agricultural productivity. In the mid-1980s, the state shifted reform focus from rural agriculture to urban industries. Meanwhile, urban self-employment developed quickly, from which private enterprises grew up inevitably and called for legitimate status from the state. On the other hand, the role played by the state makes the reform also a top-down process. It is the state that is defining all the rules by which new games are played and the new structural opportunities are opened. It not only defines the new institutions that will shape market action, but it also defines the incentive system, by which actors are judged and rewarded.

To chart the influence of institutional changes, I draw on arguments on institutional logic (Friedland and Alford 1991; Scott et al. 2000). Institutional logic, in my study, means overall principles that (1) direct, motivate, and legitimate the behavior of actors; (2) define the types of ends pursued and/or the means-ends chains that guide action; and (3) justify the types of action. Accordingly, I tentatively divide the years from 1978 to 1996 into three periods, each representing a predominant institutional logic prevailed. Period I (year 1978~1984), the initial stage of China's reform, focused on rural reform. Self employment was legalized, which planted the seed of the private sector. The years from 1985 to 1991 mark Period II, when the state more focused on reforming urban industries. Meanwhile, in 1988, private enterprises were granted

legal status as a *complementary* part in the socialist economy in the Constitutional Amendment. Period III is from 1992 and thereafter. In that year, Deng Xiaoping made his well-known remarks that market mechanism and socialism are compatible with each other, and the Communist Party formally proposed a "socialist market economy". Both events symbolized a new marketization stage of China's reform. The private sector became more legitimate and was formally encouraged by the state socialism for the first time. In 1999's Constitutional Amendment, it is entitled as an *important* component in the socialist market economy. While the state gradually granted the private sector legitimate status and began to promote its development, its relationship with the public sector experienced a profound change. The strategies and policies adopted by the state have differential impact on organizations at different positions in the redistributive system. While organizations play the game with new rules, they also adopt various strategies to cope with the changing institutional environment, and try to influence state policy based on their position in the redistributive system, to which I now turn.

### **Organizational Segmentation and Response**

To understand why people in the state sector would shift to the private sector, one important aspect is to examine how well organizations in the public sector can reward their employees. First of all, the position of an organization in the public sector has impact on income and welfare benefit level for their employees. Theories of economic segmentation tell us that structural segmentation is universal in any complex society or political economy. In a market economy, capital rents or high relative return to capital investment is often referred to as standards of economic segmentation (Katz and Summers 1989). In contrast, in a redistributive economy, economic segmentation is determined by property right relationship with the state and

the rank in the bureaucratic hierarchy. The state defines both explicitly. In China, the public sector can be divided into three subgroups: (1) *state agencies* (including government agencies, party agencies and social organizations), (2) *state-owned firms* and (3) *collective organizations* (including collective firms, cooperative firms, etc). Every work organization in the public sector has a rank in the administrative hierarchy according to government jurisdiction: namely in descending order, ministry (*bu*), bureau (*ju*), department (*chu*), branch (*ke*) or section (*gu*). Organizations in the public sector varied in compensation and welfare provided to their employees. As far as different subgroups are concerned, employees in state agencies and state-owned firms have higher wage (Zhou 2000; Bian and Logan 1996) than those in collective organizations. In terms of non-monetary return, the former two subgroups commonly provide housing, medical clinics, transportation, entertainment centers, schools, and other subsidized or free social services that rarely provided by collective organizations. Moreover, in contrast to life time employment and comprehensive retirement benefits in government agencies and state owned firms, collective organizations provide less secure job and few if any benefits of this sort (Bian 1994; Walder 1986, 1992; Whyte and Parish 1984). Meanwhile, wage and provision of the welfare benefits vary across administrative ranks. Organizations at higher levels of the administrative hierarchy have more access to resources from state coffers than those at lower levels of the hierarchy. Therefore, higher level organizations tend to provide better benefits for their employee (Walder 1992). The working unit based “from cradle to grave” welfare system in pre-reform China imposed huge social overhead costs to public sector work organizations, especially for those state owned firms. Nevertheless, this welfare system could sustain due to the soft budget constraints in the redistributive economy, where the state accounted it as part of production cost (Kornai 1980; Walder 1995).



As China's fiscal reforms clarified and reallocated property rights downward within administrative hierarchies (Oi 1992; Walder 1995), budget constraints have been hardened at all subgroups and all levels of organizations in the public sector. However, this transformation is dependent on the preexisting institutional structures in place before the reform (Stark 1992 1996; Walder 1995a; Guthrie 1999). In the pre-reform era, it is documented that state-owned firms enjoyed the highest income and benefits, compared with state agencies and collective organizations. In contrast, while all organizations try to cope with changing situations, it is state agencies manage to keep, even strengthen, their advantageous positions much better than state-owned or collective firms do during the reform era. Meanwhile, organizations at higher level of the administrative hierarchy face less hardened budget constraints and are still more likely acquire slack financial resources from the state (Walder 1995).

Observations have been made how state agencies try to stand out through various strategies. First of all, in order to increase revenue and extrabudgetary fund, state agencies have established their own "backyard" firms to run business since the mid-1980s. Their regulatory and administrative privileges guarantee those firms profit-making (Lin and Zhang 1999). Second, as the policy making entities, state agencies made favorable income policy for its own sake. Table 1 presents the comparison of income for state agencies with that for state-owned firms in manufacturing sector, which is the largest employer in state-owned economy (See Table 1). It shows while those in state agencies had less income than factory workers at the beginning of the reform era, they are much better off as the reform proceeds (also see Zhou, 2000). Lastly, the development of the private sector creates new resources of revenue for government agencies, sometimes in less legitimate forms of kickback and gift (Wank 1995).

[Table 1 about here]

While the state took care of budgetary and resource allocation for all state owned firms in the pre-reform redistributive system, state firms are required to take responsibility of gains and losses of their economic activities. Under tightening financial constraints, state-owned firms have tried to improve performance through property right, governance structure, taxation, and other reforms. A steady growth of total factor productivity and of labor productivity in state-owned firms had been observed in the early stage of the reform era (Jefferson and Rawski 1994). However, they have been losing the ability to generate profit as a whole since the early 1990s. At least two reasons could account for the decline of state-owned firms. First, as mentioned above, the work unit based welfare system, which provides comprehensive benefits to employees, becomes a huge burden for firms with independent financial responsibility. Another obvious reason is that as private and foreign firms are trying to increase their market share, competition has become more intense. When a loss-making firms' request for bailout or financial support is refused by the government, it has to lay off workers and even go bankrupt. In 1997, the state formally initiated nationwide privatization of small bankrupt state-owned firms. Later in 1999, the government took a further step to apply these policies to medium-sized ones. Under the state policy of "strengthening large ones, and letting go of the small ones," it is the small and medium state-owned firms suffer most from the competition of the emerging private sector (Cai, 2001).<sup>2</sup> Compared to state-owned firms, situation of collective firms are even worse. They are less likely subsidized by the state and more vulnerable to the competition from the private sector.

In a stratification system that an individual's reward depends largely on organizational characteristics (Walder 1992; Lin and Bian 1991; Bian 1994), the persistent or even strengthened

advantages held by government agencies may *pull* their employees from entering the private sector. Meanwhile, the declining economic performance and therefore relatively decreasing compensation for employees in state-owned firms and collective organizations may *push* employees shifting to the private sector. Therefore, I propose:

*Hypothesis I.* From the "core" to the "periphery" of the public sector, that is, of state agencies, state-owned firms and collective organizations, an employee's hazard rate of transferring from the state to private sector is highest in collective organization, lowest in state agencies, with state-owned firms falling in between.

In line with above argument on administrative hierarchy, organization with higher rank has more resource to compensate its employees. Higher rank also implies organization's importance to the national economy. Meanwhile, as a larger employer, higher level organization could get preferential treatment from the state even out of non-economic interests, like fulfilling its ideological promise toward working class and keeping social stability. As employees in higher level organization may get more compensation and benefits, therefore,

*Hypothesis II.* The higher the rank of a person's work organization in the redistributive system, the lower the hazard rate of transferring to the private sector.

### **Individuals with Political and Human Capital**

The marketization reform and the growth of the private sector have changed the opportunity structure and opened up a new space for individuals. How do individuals react to the alternative realm where they could also earn income and develop their career? If we could categorize people into different subgroups by some individual characteristics, such as human capital and political capital, we may ask how the effects of those characteristics on their choice

of staying or leaving for the private sector vary in the context of the institutional change. What kind of people bearing certain characteristics is more likely to be the first mover? And when may other people follow and under what circumstances?

Most studies of transitions from state socialism have focused on the relative importance of human capital vs. political capital on income to evaluate changes in stratification mechanisms (Nee 1989, 1991, 1996; Peng 1992; Walder 1995b; Bian and Logan 1996; Xie and Hannum 1996; Zhou 2000). This approach has been criticized in that it only studies the *manifest* part of economic reward and fails to capture the *latent* rewards, which link to different organizations and economic sectors (Zhou, Tuma and Moen 1997). My analysis on job transfer from the state to private sectors provides another angle. It examines how people, especially those with more human and political capital, “vote with their feet” in choosing between the public and private sectors. This contributes to the literature by providing a more dynamic account of the process and by specifying institution environments under which the process evolves over time. My study draws on Zhou, Tuma and Moen’s (1997) pioneering study in job-shift patterns in urban China. However, instead of treating the reform era as a constant as in their study, I identify different institutional logics in different periods of the reform process, and examine how the effects of different factors vary over those reform periods. This approach may capture some insights otherwise ignored.

What kind of people would enter into the private sector not only reflects the ebb and flow at sector or organization level as I discussed in the last section, but also depends on how different individual characteristics or forms of capital could be rewarded in the public and private sectors. What has been going on in both sectors need to be considered. It is worth noting that in most period of the socialist regime in China, except for during the Cultural Revolution, meritocracy

and virtuocracy function simultaneously. In other words, political credential and educational credential both have independent effect on income return (Bian 1996; Zhou 2000). Facing an alternative arena provided by the emerging private sector, those with less political or human capital therefore receiving less compensation in the public sector would be more likely to shift to the private sector in the first place. Or generally speaking, in a certain stage when the private sector can reward more to certain form of capital than the public sector does, individual carrying more this kind of capital would more likely to enter the private sector.

In terms of reward to different kind of individual characteristics, what happens in the private sector is more dramatic and variant over time than in the relatively stagnant public sectors. As far as human capital is concerned, I propose that:

*Hypothesis III.* With the development of the market-oriented reform, the effect of human capital differs across periods.

It is worth noticing that the private sector mainly consists of small business in service or retailing in the early stage. Education may not be rewarded more in the private sector than in the public sector. For instance, college education may not bring much more marginal return for a grocery store owner than others without it. Therefore, under the circumstances, it is not the private sector but the public sector provides higher return to education. Compared with those who have less education and less income, better educated people would prefer to stay in the public sector. In other words,

*Hypothesis IIIA.* The hazard rate of an individual transferring to the private sector is lower for those with better education in the first period (1978~84).

In contrast to Nee's simplistic speculation that market economy favors human capital, I argue return to human capital in a market depend on not only its relative importance comparing with

other forms of capital, e.g., political capital, but also depends on other configuration of a society, e.g., industrialization level. As the reform in China proceeds, the scope and scale of the private sector have changed a lot. Especially when more and more foreign firms and private firms begin to invest in capital or intellectual intensive industries in the 1990s, they typically offer as times of salary as their public counterparts do to attract higher educated employees. In light of these facts, it plausible that:

*Hypothesis IIIB.* The hazard rate of an individual transferring to the private sector is higher for those with better education in the third period (1992~96).

This study also addresses to Walder's (1995; Walder, Li and Treiman 2000) "dual path model," which suggests that party membership and education have different effects in administrative and professional careers. Walder finds that those who entered administrative positions were screened carefully for prior party membership and also for education, while those who entered high-level professional positions were screened even more carefully for education, but not at all for party membership. While Walder's findings shed light on how the socialist regime recruits and integrates social elite, my study would examine how this integration may no longer operate, when an emerging private sector provides alternative for those elites.

As I argued above, market opportunities brought by the growth of the private sector does not necessarily enhance returns to education or professional expertise especially at its early stage. Professionals may not be more likely to leave the public sector than those in administrative posts until a reward system with higher return to human capital is established in the private sector. Instead, previous research on the private sector in urban China documented the importance of administrative support in running a business in the 1980s, the early stage of the urban reform (Wank 1995). For example, in the two-track pricing system, where prices of commodities were

set by administrative fiat and market prices were usually much higher than administrative prices, private businesses secured the supply of scarce production materials or commodities through officials' help. In many cases they reaped large profit by selling administratively priced commodities at market prices. Therefore,

*Hypothesis IIIC.* Administrative elite is more likely to transfer to the private sector than professional elite in the first two periods (1978-91).

The dual price system dissolved in the early 1990s as prices of almost all raw materials and commodities are decided by the market. The way of gaining windfall by taking advantage of this system lost its ground. Meanwhile, as rapid industrial upgrading in the private sector calls for professional expertise,

*Hypothesis IIID.* Professional elite is more likely to transfer to the private sector than administrative elite in the third period (1992-96).

As far as political capital is concerned, after controlling for education and administrative power, party member more reflects ideological and political loyalty. Over the reform era, ideology or state policy towards private business has experienced a qualitative change. The state at first was cautious to private business, constraining and monitoring its development. As the growth of the private sector brings more blessing than menace to the socialist regime, the control has been loosed. Governments begin to encourage and facilitate private business instead. More ironically, the Communist Party in power even begins to invite private entrepreneurs to become party members since 2001. In light of the changing ideological environment, I propose:

*Hypothesis IV.* With the development of the market-oriented reform, the effect of political capital differs across periods. Specifically, compared with non-party members,

party members have a lower hazard rate of transferring to the private sector in the earlier stage, however, its deterrence effect fades away in later stage.

## **DATA**

In this study, I analyze the life histories of 3,087 urban residents in 24 provinces in China. The data were collected by interviewers of the Social Survey Center at Renmin (the People's) University of China from June to October in 1996 using a pretested questionnaire (Treiman 1998).

The sample was drawn randomly. First, with the exception of Tibet, we arrayed all county-level units (*xian*) in China containing any urban population in order of the proportion of the urban population age 20-69 with at least a junior high school education. Then, we divided this array into 25 strata of equal size (that is, containing approximately equal numbers of urban persons age 20-69). Within each stratum, two counties were selected at random with their probability of being selected proportional to the size of their urban population. In each selected county, we drew one township-level unit. In the same way we selected two resident committees (Ju Wei Hui) in each selected town. From each, we randomly selected 30 households. Lastly, using a "Kish table" (Kish 1965), we selected a single adult and conducted the interview.

The data include respondents' entire history of education and work experience. Every change in occupation, type of work organization, rank of work organization or position in work organization was recorded, as well as other information about respondents' family, living conditions, social and cultural activities.



## VARIABLES

The dependent variable is the hazard rate of job transfer from the public to private sector. I analyze and compare this process across three historical periods (1978-1984, 1985-1991, and 1992-1996), using event history analysis. There are 226 respondents who transferred to private sector in the whole sample<sup>3</sup>.

The independent variables are (1) organizational origin in the public sector, measured by *type of organization* in terms of property-rights relation to the state and *rank of organization* in the bureaucratic system, (2) human capital, measured by *education* and *occupation* (including ordinary worker, professional and administrator), and (3) political capital, measured by *party membership*. Control variables include *gender*, *age* and *family background*. Family backgrounds were officially defined class labels for every household by the state after the communist party came to power. I collapse them into four categories: “red family” (including revolutionary cadre and soldier), “worker and poor or lower middle peasant,” “petty bourgeois” (including middle peasant, small businessman, and independent craftsman), and “distrusted family” (including capitalist, rightist, rich peasant and landlord). Table 2 reports univariate analyses of covariates in selected years, 1978, 1985 and 1995.

[Table 2 about here]

## MODELS AND METHODS

My argument about different effects of structural factors, human and political capital over time implies a need for a model that allows the effects of the covariates of theoretical interest to vary across historical periods. For this purpose, I use piecewise exponential model, also known

as piecewise constant hazard model, proposed by Tuma et al (Tuma, Hannan and Groeneveld 1979). These models allow intercepts and effects of covariates to vary across time periods:

$$\log r_{jkp}(t) = \beta'_{jkp} x(t)$$

where the subscript  $p$  denotes a given historical period (e.g., 1978-84, 1984-91, 1992-96), and  $x(t)$  refers to the set of explanatory and control variables used in the analysis. Except for respondents' *gender* and *family background*, values of other variables may change over time for a given individual. And the effects of all variables may differ from period to period.

I estimated models using maximum likelihood (ML), which allows the testing of nested models (Tuma and Hannan 1984). In my analysis, I first constrain the coefficients of covariates  $x(t)$ , except for the intercepts, to be constant in every historical period, I call this "model A." Next, I let all parameters vary across the historical periods (model B). Since model A is nested within model B, therefore, I can test whether the effects of covariates vary significantly across the historical periods. Maximum likelihood handles right-censored life histories in a statistically appropriate way. An individual's history is right-censored at the interview date.

## RESULTS AND DISCUSSION

Table 3 gives the maximum likelihood estimates of the effects of covariates on transferring into the private sector. The first column presents the estimates for model A, and the next three columns give the period-specific estimates for model B. Both model A and model B significantly improve upon a null model with no covariates and intercept that vary across the three historical periods; the probability levels for the likelihood ratio  $\chi^2$  statistics for the tests are well below .00001.<sup>4</sup>

[Table 3 about here]

*Overall trend.* Consider first the pattern of effect in all years, which gives a kind of “average” effect during 1978 to 1996. Relative to those in state-owned firms (the reference category), working in collective organizations has a significant positive effect on the rate of transferring to private organizations, increasing the hazard rate of transfer by 55% ( $=100\% \times [\exp(.44) - 1]$ ). Those in state agencies are 58% less likely to transfer to the private sector than those in state-owned firms ( $=100\% \times [\exp(-.53)]$ ). The rates of transfer are significantly higher for those whose organizational origins are lower in the state administrative hierarchy. Employee in section (*gu*) and branch (*ke*) level organizations have higher hazard rates than those in department (*chu*) level (the reference category). Party membership has a significantly negative effect on the hazard rate of transfer. Occupation and education do not show any significant effects. However, this does not mean some of these factors have no effect in a specific period, as I will discuss below in more detail. As for the control variables, the rate of entry into the private sector is significantly lower for females, and it decreases as age increases. That means, in terms of demographic characteristics, young males are more likely to enter to the private sector. Family background has no significant effect.

*Organizational origin.* Central to my theoretical concerns, however, are variations across historical periods. The variations in the effects of type of organizational origin over time are especially relevant. The results shows that in the first two periods (1978-1984 and 1985-1991), the hazard rate for those in state agencies do not differ significantly from those in state-owned firms. In contrast, by the third period (1992-1996), those working in state-owned firms are near five times more likely to transfer to private sector than those in state agencies ( $=1/\exp(-1.57)$ ).

Employees in collective organizations are more likely to enter to the private sectors than those in state-owned firms in the whole reform era except for the third period. These variations imply different outcomes of state policies' impact on different organizations in the public sector. As they cope with changing state policies and institutional environment, the advantage owned by the state-owned firms in the planned economy has disappeared as the reform unfolds. Meanwhile, state agencies manage to thrive in the same period, either in legitimate ways, e.g., adjusting income policy and extracting revenue from thriving private firms, or illegitimate ways by rent-seeking. Above findings largely support the Hypothesis I.

Results show the rank of organizations in the state administrative hierarchy generally has a negative effect on transferring to the private sector. By occupying higher rank positions in the hierarchy, organizations typically control more resources, and are more powerful in influencing favorable state or local policies. For instance, higher rank firms are more likely to get government's subsidy and bailout (Cai 2001). Therefore, they are better protected from the competition from the private sector. My findings on organization rank are consistent with Hypothesis II.

*Human capital.* The overall effect of education on transferring to the private sector is negative, though insignificant. But if we stopped here without further examining its variations across historical periods, we would lose sight of some very important information. As we see in Table 3, in the first period (1987-1984), education has a significantly negative effect on transferring to the private sector. Each additional year of schooling decreases the hazard rate by approximately 12% ( $=100\% \times [1/\exp(-.11)]$ ). Interestingly, the effect turns from negative to positive in the second period, and further goes up in the third period. However, we need to treat

the results cautiously since the effects in the latter two periods fail to reach significance level. This trend shows that better educated people are entering into the booming private sector only in the later stage of the reform era. My hypotheses III and IIIA get supportive evidence here. The result relating to hypothesis IIIB, that better educated people are more likely to enter the private sector, fails to reach the significance level. Taken together, these findings imply better educated people would not shift to the private sector until a reward system in the private sector with higher return to education than in the public sector takes place. As I suggested, this process is also relevant to the changes of industrial composition of the private sector. In contrast to typically petty peddlers, grocery store owner, and family workshop runner in the early stage of the reform era, foreign multinational corporations and well-educated young generation of private entrepreneurs are playing pivotal roles in promoting China's cutting-edge industries, e.g., IT and Computer.<sup>5</sup> The industrial upgrading of the private sector calls for compatible human resources.

As far as occupation is concerned, results show administrators are much more likely to transfer to the private sector than those in professional posts in the first period (1978-1984), which is consistent with hypothesis IIIC. The gap between administrators and professionals in shifting to the private sector gets much lower and becomes insignificant in the second period (1985-1991). By the third period (1992-1996), as the direction of the coefficient suggests, professionals seem more likely to enter into the private sector. However, the coefficient is not significant, which means the hypothesis IIID can not hold. To examine my speculations concerning the dual paths model (Walder 1995b; Walder, Li and Treiman 2000), the results provide complicated evidence for the divergence of the elites in the public sector. The finding of administrative elite's higher rates entering the private sector than professionals in the early reform era implies the importance of administrative experience and political connections to run a

private business. The above finding that only in the later stage those working in state agencies are much less likely to enter the private sector is also informative here. Taken together, these analyses suggest less invested interest and opportunity cost for administrative elite in early reform period, and the emergence of an underdeveloped market brings them opportunity to capitalize their power through various mechanisms, like dual price system. This implies the coevolution of politics and markets as Zhou (2000) proposes.

It has been argued that the significance of connections with government officials is declining, when market mechanisms are getting established and the state's building of a rational legal system is carried on (Guthrie 1998). These changes may also help explain professional's catching-up with administrators to enter the private sector in the later reform era. As higher return to education or professional expertise does not exist in an underdeveloped private sector in early reform era,<sup>6</sup> those with more human capital would stay in the public sector until a favorable incentive and reward mechanisms in the private sector loom large.

*Political capital.* The overall effect of party membership is negative on the hazard rate of transferring to the private sector. However, when comparing different periods, not only do the magnitudes of the coefficients decline over time, but also change to not significant in the third period. This change effect of party membership may reflect less and less ideological constraints over time. Hypothesis IV is supported.

Though family background is not my main concern, I included in my analysis for the comparison purpose with findings in other post-socialist societies and in rural China (e.g., Szelenyi 1988; Zhao 2002). Research in Hungary showed that the persons who were most likely to become entrepreneurs in rural areas were the offspring of "bad classes" who had some

experiences in running capitalist farms before the collectivization, but were discriminated in former redistributive regime (Szelenyi, 1988). However, Zhao's (2002) study suggests it may not be the case for rural China. In contrast, I find in the first reform period (1978-1984) in urban China, compared to those from ordinary worker or peasant background, those from "petty bourgeois" families are significantly more likely to enter into the private sector.

## **CONCLUSION**

In the context of reforming China, job mobility from the state to private sector not only indicates a significant institutional change, but also implies the changes of the mechanism of stratification. Under a framework consisting of the state, organizations and individuals, I examined how different institutional logics, which direct the reform process in different stages, affect different organizations and individuals in the public sector; how organizations react to dramatic institutional changes and its impact on individuals; and how individuals with certain human capital and political capital choose between staying and leaving under these structural constraints.

My findings on organizational level effects on individual's mobility from the state to the private sector suggest the path dependence nature of the institutional change process in urban China. Facing an emerging private sector, organizations closer to the core of the socialist regime, like state agencies or organizations with higher rank in the administrative hierarchy, were better protected by the state. With more soft financial constraints, they are still able to affording higher compensation for employees. As my study suggests, while state agencies enhances their advantaged position as the reform unfolds, especially in recent years, the advantages once owned by the state-owned firms in the command economy have disappeared. Part of the reasons is the

intense competition from foreign joint ventures and growing private firms in the private sector. Meanwhile, with private sector growing up as an alternative resource of the state's revenue, the state withdraws its commitment and decreases investment on state-owned firms except for some large ones. As competition with the private sector decreases the market share of state firms, the growth of the private sector enlarges administrative realm for state agencies. The marketization and privatization process apparently does not erode the power of the state agencies. Rather, the rise of the market economy gives them greater administrative control through regulatory, taxation, licensing powers and opportunities of rent-seeking. This helps state agencies to persist and even boost their advantageous status.

Employing a conceptual multilevel model, my analyses suggest that when, where and how human capital or political capital is functioning is contingent on specific institutional environment, organizational response and individual strategies. Another important finding of this research is that the effect of human capital or political capital does change over the reform era. By contrast to the simplistic picture that the private sector and the market reward more to education and professional expertise, my study suggest the institutional settings and industrialization level where the private sector and market emerge matter. In an institutional environment, where market actually provides a new venue for capitalizing political power, the better-educated or professionals would not necessarily be better off than those with administrative power. Nor could a private sector concentrating in small traditional businesses, like retailing and restaurant. Therefore, professionals and well educated people would not enter into the market until a reward system of higher return to education and expertise is established. My analyses show administrative elite were more likely than professional elite to enter to the private sector in the early reform era, when administrative power and connection were more



important than professional expertise for running private ventures, and when the private sector is at relatively low industrialization level. The uplifting side of the findings is the better-educated and professionals are catching up to enter the private sector in a more matured market and upgraded private industries in later stage.

In general, we observe a mixed picture of people's shift from the public to the private sector in the reform era. On the one side, the "first movers" are more likely from the periphery of the state sector. Collective and state firms with lower rank in the administrative hierarchy, which are less protected and subsidized by the state, "pushed" people out of the state sector. On the other side, lucrative opportunities in a premature market "pulled" those with administrative power into the private sector in the first place. In more recent period, we observe better educated people and professionals are catching up in the process. This may suggest the development of the private sector has reached a threshold where it wins an advantageous place than the state sector in the economic realm. As I argued earlier, by observing how people, especially those with more human and political capital, "vote with their feet," we capture this significant change in stratification mechanisms of contemporary China.

The mixed picture may imply the private sector in urban China is a stratified system as in many post-socialist societies (e.g., Rona-Tas 1994). It calls for further studies to examine different mobility paths by either dividing those transferring to the private sector into self-employment, private entrepreneurs and employees, or sorting into different industries or sectors. I suspect it would turn out different patterns for different paths. Moreover, studying emerging labor markets and labor process within organizations may help provide more insights for this profound social structural change. Lastly, by comparing findings in China with those from post-

socialists countries in former Soviet Union and Eastern Europe, we could get better sense on what is general among those transforming societies and what is unique for China.

Table 1 Average Income for Employees in State Agencies and State-owned Manufacturing Firms from 1978 to 2000 (in Chinese Yuan)

| Year                            | 1978  | 1979  | 1980  | 1981  | 1982  | 1983  | 1984   | 1985  |
|---------------------------------|-------|-------|-------|-------|-------|-------|--------|-------|
| State Agencies                  | 661   | 691   | 807   | 820   | 826   | 928   | 993    | 1,133 |
| State-owned Manufacturing Firms | 663   | 726   | 821   | 820   | 835   | 847   | 1,028  | 1,190 |
| Year                            | 1986  | 1987  | 1988  | 1989  | 1990  | 1991  | 1992   | 1993  |
| State Agencies                  | 1,361 | 1,472 | 1,709 | 1,875 | 2,115 | 2,277 | 2,774  | 3,512 |
| State-owned Manufacturing Firms | 1,382 | 1,543 | 1,872 | 2,081 | 2,289 | 2,505 | 2,889  | 3,562 |
| Year                            | 1994  | 1995  | 1996  | 1997  | 1998  | 1999  | 2000   |       |
| State Agencies                  | 4,967 | 5,528 | 6,344 | 6,985 | 7,776 | 8,982 | 10,048 |       |
| State-owned Manufacturing Firms | 4,508 | 5,352 | 5,798 | 6,008 | 6,981 | 7,611 | 8,554  |       |

Source: Statistical Year Book of China 2001 (State Statistical Bureau 2001)

Table 2 Means of Covariates for Risk Sets by Selected Years \*

|                                   | 1978  | 1985  | 1995  |
|-----------------------------------|-------|-------|-------|
| Type of organizational origin     |       |       |       |
| State agency                      | .27   | .27   | .32   |
| State-owned firm                  | .51   | .49   | .49   |
| Collective organization           | .22   | .24   | .29   |
| Rank of organizational origin     |       |       |       |
| Bureau ( <i>ju</i> )and the above | .07   | .07   | .09   |
| Department level ( <i>chu</i> )   | .33   | .34   | .32   |
| Branch level ( <i>ke</i> )        | .39   | .40   | .44   |
| Section level ( <i>gu</i> )       | .21   | .19   | .15   |
| Occupation                        |       |       |       |
| Worker                            | .88   | .86   | .81   |
| Professional                      | .04   | .05   | .08   |
| Administrative                    | .08   | .09   | .11   |
| Education (in years)              | 8.36  | 9.41  | 10.49 |
| Party membership                  | .20   | .19   | .24   |
| Female                            | .44   | .44   | .43   |
| Age                               | 33.70 | 34.37 | 37.65 |
| Family Background                 |       |       |       |
| “Red”                             | .04   | .05   | .07   |
| Worker or peasant                 | .72   | .75   | .76   |
| Petty bourgeois                   | .19   | .16   | .14   |
| “Distrusted”                      | .05   | .04   | .03   |
| Number of Individuals at Risk     | 1,132 | 1,522 | 1,379 |

Source: Treiman (1998)

\*Distributions are based on those who work in the public sector in a given year and have no missing values on the covariates

Table 3 : Maximum Likelihood Estimates of Piecewise Exponential Models of Transferring from the Public to Private Sectors in Urban China in Three Historical Periods: 1978-1984, 1985-1991, and 1992-1996.

|  | Historical Period |                    |                   |           |
|--|-------------------|--------------------|-------------------|-----------|
|  | All Years         | 1978-1984          | 1985-1991         | 1992-1996 |
| <i>Independent Variables</i>               |                   |                    |                   |           |
| Type of organizational origin <sup>1</sup> |                   |                    |                   |           |
| State agency                               | -.54*             | .06                | -.61              | -1.57**   |
| Collective organization                    | .44**             | .51*               | .54*              | .04       |
| Rank of organizational origin <sup>1</sup> |                   |                    |                   |           |
| Bureau ( <i>ju</i> ) and the above         | -.15              | -1.00              | -.16              | .36       |
| Branch level ( <i>ke</i> )                 | .49**             | .65*               | .30               | .49       |
| Section level ( <i>gu</i> )                | 1.01***           | 1.03**             | .87**             | 1.20**    |
| Occupation <sup>1</sup>                    |                   |                    |                   |           |
| Worker                                     | .31               | .31                | .11               | .68       |
| Professional                               | -.27              | -11.82***          | -.35              | .74       |
| Education (in years)                       | -.04              | -.11**             | .004              | .03       |
| Party membership                           | -.76**            | -1.12 <sup>+</sup> | -.91*             | -.53      |
| <i>Control Variables</i>                   |                   |                    |                   |           |
| Female                                     | -.63***           | -.69***            | -.38 <sup>+</sup> | -.98**    |
| Age  | -.03**            | -.07***            | .001              | -.004     |
| Family Background <sup>1</sup>             |                   |                    |                   |           |
| “Red”                                      | -.29              | -1.09              | .54               | .06       |
| Worker or peasant                          | -.22              | -.58*              | .36               | -.09      |
| “Distrusted”                               | .14               | -.05               | .82               | -.71      |
| Intercept – Model A <sup>a</sup>           |                   | -3.88***           | -3.68***          | -3.13***  |
| Intercept – Model B <sup>b</sup>           |                   | -2.03*             | -5.44***          | -5.05***  |
| Number of events                           | 226               | 41                 | 98                | 87        |

Source: Treiman (1998)

<sup>a</sup> Model A has time-varying intercepts, which are listed under the historical period for which they apply.

Effects of covariates are time-invariant and are listed under “All Years.”

<sup>b</sup> Model B has time-varying effects of covariates, as well as time-varying intercepts. Time-varying parameters are listed under the historical period for which they apply.

<sup>1</sup>Notes: Reference category is State-owned firm, Department (*chu*) level, Administrator, and Petty bourgeois respectively.

+ p < .1      \* p < .05      \*\* p < .01      \*\*\* p < .001

## NOTES

<sup>1</sup>Those beginning years also indicate the expansion of the private sector, first only self-employment was permitted, then foreign joint venture, and last private firms.

<sup>2</sup> Based on the dataset I analyze, I could not distinguish voluntary from involuntary mobility, which may have important implications. Nevertheless, this issue may not be so crucial since the work history data was collected up to 1996, when large scale bankruptcy and lay-off policies had not been implemented by the state. Presumably, the mobility from 1978-1996 is more likely to be voluntary. Any similar studies, which may have a time frame beyond 1996, need to be very careful about the distinction between voluntary and involuntary mobility anyway.

<sup>3</sup> Among them, 179 people became self-employed or private entrepreneurs. I did analyses on this subgroup and got very similar results, since it accounts around four fifths of the events we observed.

<sup>4</sup> The likelihood ratio test comparing model B against A is 36.1 with 28 degrees of freedom, which has a significant  $p$  level .14. This may be due to the relatively small number of events. Another justification is I tested the proportional hazard assumptions after running a cox model using the same dataset, and the null hypothesis was rejected.

<sup>5</sup> Taking computer application industry as an example, statistics show that around 75% labor force is in the private sector in 2000. In 1997, when this statistic was first measured by the State Statistical Bureau, it was 44%, then 53%, 62% in 1998 and 1999 respectively (State Statistical Bureau 1998, 1999, 2000, 2001).

<sup>6</sup> Zhou's (2000) analyses on income panel data show that higher education does not result in higher income in 1978 and 1984, controlling for occupation and organizational type. In the year of 1960, 1965, 1975, 1987, 1991 and 1993, the opposite is true.

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