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FAMILY BUSINESS IN CHINA (1978 -1996): ENTRY AND PERFORMANCE
(ABSTRACT)

This paper examines the patterns of entry into family businesses in urban and rural China and across different stages of economic reforms. Analysis of the data from a national representative survey shows that, while both education and cadre status deter urban families’ entry into private business, they promote rural families’ entry. Class background plays a different role in involvements in private businesses. Families with private businesses before 1949 are more likely to start private businesses after 1978 in rural China but not in urban China. China’s transition trajectory has afforded increasing entrepreneurial opportunities to both urban and rural families, particularly to cadre families. As the reform proceeds, rural cadre families’ advantage in seizing entrepreneurial opportunities is enhanced; urban cadre families, though still less likely to get involved in the private business than non-cadre families, are increasingly more likely to do so over time. After the effect of negative selection is corrected, urban cadre families enjoy substantial advantages in business income.
INTRODUCTION
The emergence of a private sector is an integral and crucial part of China’s transition from a planned economy to a market economy. Private economic activity in China takes two forms: individual/household businesses (geti gongshang hu or geti hu) and private enterprises (siying qiye) (Gregory et. al. 2000). Starting from 1978, the Chinese reformers have adopted an incremental approach to expanding the private sectors. In the early 1980s, only individual/household businesses were granted legal status, and a cap of 7 was set on the number of workers a geti hu could hire. Private enterprises (siying qiye) in larger scales, not sanctioned until 1988, had been developing rapidly since 1992 after Deng Xiaoping called for further market-oriented reforms in his famous tour to southern China (Zhang 1999). The private ownership was fully legitimized in the late 1990s, and playing an increasingly important role in China’s economic growth and institutional transition (see detailed reviews in Bian and Zhang, this volume).

The historical development of the private sector in China can be confirmed with the available government statistical data. As Figures 1a and 1b demonstrate, the registered capital and revenues for both individual/household businesses and private enterprises have grown rapidly since the 1980s, particularly after 1992. Private enterprises have over-taken individual/household businesses in total registered capital since 1994 and in revenues after 1998, and become the main growth engine of China’s dynamic private sector.

[FIGURE 1A & 1B ABOUT HERE]

Notwithstanding this fact, the role of individual/household businesses in China’s economic transition should not be dismissed hastily. First, individual/household businesses
continued to outnumber private enterprises in quantity and employment size. As of 1999, there were still 31,600,000 family businesses which employ 62,410,000 workers, but only 1,508,857 private enterprises which employed 20,220,000 workers (Lan 2002; Wang 2002). Second, it was the emergence of individual/household businesses that initiated China’s market transition and fostered the development of private enterprises a quarter century ago. For most part of the reform period until the late 1990s, only individual/household businesses were legitimate to grow, and the growth had facilitated the demise of the redistributive system.

The pace of the rise and subsequent expansion of the private sector varied with different institutional contexts in rural and urban China. Economic reforms brought about the revival of private ownership first in rural areas, where the implementation of the household responsibility system since 1978 had unleashed from the agriculture a large amount of surplus labor, many of whom were involved in non-agricultural businesses (Qian 2000). Later, to solve the unemployment problems, the government also encouraged urban residents to start individual/household businesses to create jobs on their own (Gold 1991). Government statistical data from 1989 to 1999 have shown that, rural individual/household businesses were developed far ahead of their urban counterparts (Figure 2a and Figure 2b). While rural individual/household businesses continue to outnumber their urban counterparts in both quantity and employment size from 1989 to 1999, the gap had been narrowed over time, particularly since 1992.

[FIGURES 2A & 2B ABOUT HERE]

With the expansion of private sector, Chinese workers had been afforded the new market opportunities to achieve upward socioeconomic mobility (Sabin 1994). However, who had been able to take advantages of those opportunities? The issue bears great implications for the change in stratification order in post-socialist China. As entry into the private sector served as an
important bridge between the macro-level institutional transition and the change in income inequality among individuals, a close examination of the path to the private businesses, namely, the backgrounds of those who are involved in private businesses, would be of a particular interest to sociologists concerned with social consequences of China’s transition to a market economy.

In this chapter, I focus on two issues: (1) the path to family businesses, i.e., what characteristics/backgrounds determine a family’s entry into private economic activities; and (2) the performance of family businesses. I here employ the term - “family business” - to refer mainly to individual/household businesses (employed fewer than 8 workers), but also to some small-sized private enterprises which were operated in a way similar to individual/household businesses but registered as a different category under Chinese laws (Entwisle et. al. 1995). Both are run predominantly by family units, which have regained their economic functions since the reform (Entwisle et. al. 2000).

Using the data from the national survey of the Life Histories and Social Change in Contemporary China (Treiman and Walder 1996), I examine how the pattern of entry into family businesses varies between urban and rural areas and across different reform stages, and demonstrate how the divergent patterns of entry affect the economic performance of the family businesses. In the following I first explain how the rise of the private business have changed the opportunity structures that different Chinese families faced, and derive several testable hypotheses in regards to the family characteristics on the likelihood of business involvement in both urban and rural areas, and then describe the data and variables used for the analysis. I analyze the cross-sectional data from 1996 to test the hypotheses regarding the rural-urban differences, and the event history data from 1978 to 1996 to examine the temporal trend of
private business involvement. Finally, I examine how the different paths of entry affect the performance of family businesses.

MARKET TRANSITION AND ENTRY INTO FAMILY BUSINESSES
In the transition from redistributive economies to market economies, private entrepreneurship has offered an alternative avenue of social mobility. As Nee (1996:910) put it, “whereas opportunities for advancement were previously centered on decisions made by redistributive bureaucracy and within the economy controlled by it, markets open up alternative avenues for mobility through emergent entrepreneurship and labor markets.” With regards to its impact on social stratification, in such a dual structure of opportunities, “one could climb the rank order of the bureaucratic hierarchy, or one could try the market” (Szelényi 1988: 65).

A critical question in debate is who have benefited more from the newly emergent market opportunities. Some scholars suggested that the main groups involved in private businesses were from the lower tiers of the social hierarchy. In his early study of Hungarian rural entrepreneurship, Szelényi (1988) demonstrated that cadres were less likely to participate in market-oriented businesses and the new economic elite more likely to emerge from the less privileged groups. Based on the survey data collected in rural Fujian Province, Nee (1989a) claimed that cadres in China had “little or no net advantages in entering into private entrepreneurship” (p.189); instead, direct producers (i.e., ordinary peasants and workers) with more human capital benefited from the market, and what they gained would undermine the relative privileges of the communist cadres (Cao and Nee 2000; Nee 1989a, 1996).

Contrary to Nee’s market transition theory (1989, 1991), analyses of income distribution in China and other former state socialist countries reported that, as the marketization proceeded,
the advantages of redistributive power still persisted and returns to human capital did not increase (e.g., Bian and Logan 1996; Gerber and Hout 1998; Parish and Michelson 1996; Xie and Hannum 1996). Róna-Tas (1994) found that, after the collapse of the communist regime, former Hungarian cadres had been able to maintain their past advantages by successfully converted themselves into entrepreneurs. Accordingly, his “power conversion” thesis argues that cadres’ socioeconomic advantages actually would be enhanced, rather than undermined, by the growth of the private sector.

Central to the scholarly debate is the fate of the communist cadre elites, namely, how they fare compared to other social groups in the reform era (Szelényi 1996; Walder 1996). To look for answers, we need to direct our attention to the question of how different social groups (including cadres) respond to the expansion of the private sector. In other words, who have entered the private businesses? The dynamic process depends on specific institutional contexts. For example, the conversion of cadres to entrepreneurs may occur under a certain circumstance (Róna-Tas 1994: 47), whereas the entry of less privileged groups described by Szelenyi (1988) and Nee (1989) could also occur under a different circumstance. Wu and Xie (2003) point out that the entrants to the market sector in different reform stages are likely to possess different characteristics in terms of human capital, political capital, and other observable and unobservable characteristics. The crucial mediating factor is the changes in opportunity structure faced by different social groups.

Szelényi and Kostello (1996) were among the first who provided a comprehensive picture of market transition and major players in the process. They identified three types of market penetration: local markets in redistributively integrated economies, socialist mixed economies, and capitalist-oriented economies. They argued that the major social actors in the
market were fluid and dependent upon the specific type of market penetration. In the first type of market penetration when the market remained marginal to the entire economic system, most people involved in private business activities were from the lower ties of social hierarchy as participation in the market was highly risky and required little skill. In socialist mixed economies, private economic activities became legal and market competition played a greater role in economic operations, resulting in a dual system of inequality. More better-qualified people started entering the market and some early pioneers were pushed aside or even wiped out. In the capitalist-oriented economies when markets arose as the primary source of inequalities, those reliant on the redistributive mechanism completely lost advantages, but a fraction of them could manage to convert their old privileges into new ones. Hence, who wins and who loses are contingent upon the concrete institutional arrangements in which workers responded differentially to the market opportunities.

Unlike Szelényi and Kostello (1996), Walder (2003) proposed a theory of elite opportunity, focusing on how market reforms have injected new value into public properties and thereby created differential opportunities for elite insiders. Hence, the advantaged groups in the redistributive sector did not need to directly get involved in the private business. Instead, they could stay in the state sector and manage to appropriate the public assets into their own pockets (Ding 2000a, 2000b). Whether they would be able to do so depended on the extent of regime change and the legal barriers to convert public assets into private ownership. Because the combinations of these two institutional circumstances varied from countries to countries and from time to time, market transition had no generic implications on the change in elite advantage in the post-socialist era.
Both Szelényi and Kostello (1996) and Walder (2003) put emphasis on the importance of changing opportunity structures in understanding the diverse stratification outcomes in post-socialist transition. While each has captured one aspect of the transition process, the overall structure of opportunity faced by individual workers, in my opinion, was defined by both the transforming public sector and the expanding private sector simultaneously. The large-scale changes in opportunity structures driven by the institutional transition were reflected not only within the public sector or within the private sector, but also in the relative strength between the two sectors. Hence, to understand Chinese workers’ different responses to private economic activities, we need to pay close attention to the overall opportunity structure they encounter. Individuals and their families make choices and decisions in adjusting themselves to the changing political and economic environments, and consequently shape the making of new stratification order in the post-socialist era.

Market transition in China’s urban and rural areas started with the different pre-existing institutional legacies and followed different paths. Under the household registration (*hukou*) system, implemented in 1955 and still in place today, all Chinese citizens had to be registered in a place and categorized as rural or urban status (Chan and Zhang 1999:821–22). In the pre-reform era, rural residents, which accounted for the majority of the national population, were prohibited from moving into cities without government approvals, and entitled to few rights and benefits (e.g., permanent employment, medical insurance and pensions), which the socialist state conferred to the urban residents (Wu and Treiman 2004). Without an urban *hukou* status, even most cadres at village and township levels were not part of the state bureaucratic system, thus not as privileged as urban ordinary workers. Despite the fact that geographic mobility and employment changes became relatively easier, the social concomitants of *hukou* status still
persisted. For instance, rural migrant workers in cities were still classified as “peasant-workers” and discriminated in the urban labor market (Wang et al. 2002).

Hence, the emergence of the private sector opened up a new window of opportunity, but the social implications were different for rural and urban residents. Soon after the rural reform started, the collective farming system was sweepingly dismantled (Oi 1999), whereas the urban redistributive sector continued to exist to date (though it has shrunk substantially). Consequently, in rural areas, the private entrepreneurship provided a major avenue of mobility for those deprived of socioeconomic opportunities under socialism (Entwisle et. al. 1995). Making money was the only way that rural household/residents (including cadres) could reduce their disadvantages. In urban areas, a dual opportunity structure gradually evolved in the labor market. With the state still remaining as the predominant employer in providing social security, fringe benefits, and political advancement, the private sector only offered an alternative, though increasingly attractive, path for social mobility (Davis 1999).

HYPOTHESES

Given the opportunity structures they faced, rural and urban families engaged in private businesses may differ in social backgrounds. Indeed, early studies have reported that rural entrepreneurs were mainly from production team cadres, staying sent-down urban youth, urbanities who returned to their villages, discharged soldiers, who possessed more human capital or political capital than the general rural population (Nee 1989b). In urban areas, according to several small surveys conducted in the mid-1980s, most urban family businesses were owned by some marginal social groups – that is, migrant peasants, unemployed youth, returning sent-down
youth, dismissed employees, and retirees, who had little to lose but more to gain by entering into private businesses (Gold 1991; Young 1995:37).

Therefore, I expect different patterns of entry into family businesses in urban and rural areas: *the urban families engaged in private businesses are more likely to come from disadvantaged backgrounds, whereas rural families engaged in private businesses are more likely to come from those with relative advantages.*

I define a family’s advantage/disadvantage mainly in terms of its possession of human capital (education) and political capital (cadre status).¹ In urban areas, both educated people and cadres would also have other opportunities in professional or political careers (Walder, Li and Treiman 2000). However, this is not the case in rural areas. Rural people’s career opportunities were much limited unless they officially moved into cities along with the change of *hukou* status through a highly selective process (Wu and Treiman 2004). Those who stayed in rural areas (even as village cadres or managers in rural enterprises) were not as privileged as their urban counterparts, thereby had more motivations to venture into private businesses. Hence, education and cadre status would play different roles in families’ private business involvement between urban and rural areas. Specifically, I test the following two hypotheses:

¹ To be sure, as involvement in the private economy expands, strong social capital (strong connections to help access to financial capital) also becomes an important requisite of success (Gold et. al. 2002; Wank 1999). However, the role of social capital in family business entry is not analyzed here for two reasons. First, family cadre connections indeed capture a part of social capital that a family owns. Indeed, political capital can be seen as an institutionalized form of social capital (Eyal, Szélényi and Townsley 1998). Second, there is no specific measure of social capital that is different from the measure of cadre connections in the survey data analyzed here.
Hypothesis 1: families with higher education are less likely to be engaged in private businesses in urban areas, but are more likely to do so in rural areas.

Hypothesis 2: cadre families are less likely to be engaged in private businesses than non-cadre families in urban areas, but more likely to do so in rural areas.

Family backgrounds play an important role in private business involvement. In sociological literature, scholars argue that entrepreneurial spirits connoted in private economic activities can be inherited. For instance, Szelényi (1988) found that in rural Hungary, those from pre-communist entrepreneurial families were more likely to start family businesses when economic reform started. In the recruitment of new economic elites in post-1989 Eastern Europe and Russia, “reproduction” rather than “circulation” dominated the process (Szelényi and Szelényi 1994). During the first 30 years of the People’s Republic of China, such an embougeoisement process was also interrupted by the implementation of state socialism. As the “interruption” was more complete in full-fledged socialist urban than in rural China, family entrepreneurial history may play different roles in the revival of the private sector: social reproduction of new economic elites may be more prominent in rural than in urban areas. Hence,

Hypothesis 3: families’ business activities before 1949 may not help them be engaged in private businesses in urban areas, but may help in rural areas.

Entry into family businesses is a dynamic process associated with China’s economic transition. The opportunity structures not only differed between rural and urban labor markets, but also changed across different reform stages. When the private economy was restricted only as peripheral to the redistributive economy, people involved in private economic activities mainly came from the socially marginal groups who had little to lose. However, as the market gained more legitimacy and played a greater role in economic operations, not only the market

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opportunities were expanded substantially, but also people’s perception of the private sector was altered significantly. In China, with the Communist Party still holding power, the private economy had gained full legitimacy since 1992, and the entry into private sector was accelerated, therefore, the following hypothesis can be tested:

**Hypothesis 4:** the rate of entry into family businesses will increase over time in both urban and rural China.

With the expansion of the market opportunities and the decline of political risks, more capable people, had been giving up their career opportunities within the redistributive sector and “jumping into the sea” (xia hai) (Wu and Xie 2003). Consequently, the social components of families involved in private businesses have changed. For instance, a research conducted by Chinese Academy of Social Science reported that former cadres accounted for 11 percent of private entrepreneurs in 1997, 14.4 percent in 2000, and 15.3 percent in 2002 (Lu 2004: 253). Since a large body of sociological literature has been devoted to the debate on whether the (former) communist cadres have benefited from the market transition and become the winners, I propose a specific hypothesis in regard to cadres or their family members:

**Hypothesis 5:** cadre families are more likely to be engaged in private businesses over time in both urban and rural areas.

Hypotheses 1 and 2 suggest that the patterns of entry into family businesses differ diametrically between urban and rural areas, because the dual opportunity structure exists only in urban areas, which deters urban families with more human capital and political capital from involvement in private businesses. Hypothesis 3 implies that class backgrounds also play different roles in determining entry into family businesses between urban and rural areas.
Despite the differences, urban and rural transitions in China share some similarities. With the market-oriented reform proceeding further, the urban duality of opportunity is shifted more towards the private sector. As hypotheses 4 and 5 suggest, more family businesses were emerging, and cadre families were particularly active in seeking new entrepreneurial opportunities. Although urban cadre families were still less likely to be engaged in private businesses, they were more likely to do so over time. Urban-rural patterns of entry into family businesses eventually may approach a convergence.

Data and Variables

The above hypotheses are tested with the data from the survey of “Life Histories and Social Change in Contemporary China” (1996), a multi-stage stratified national probability sample of 6,090 adults aged 20-69 from all regions of China (except Tibet). Samples from rural and urban areas were drawn separately, yielding 3,003 rural cases and 3,087 urban cases (Treiman 1998: Appendix D). The questionnaires covered many questions about the respondent’s family, thus each individual can be treated as representing a family. The unit of analysis in this research is households/families rather than individuals.

I investigate the process of entry into family businesses in both urban and rural China during the period 1978 to 1996. The dependent variable is defined on the basis of the following questions: “Do you or your family earn income from any non-agricultural business (for example, handicrafts, manufacturing, transport, a restaurant, or a store)?” It is coded as 1 if the answer is yes and 0 otherwise.

As a loosely defined term, family businesses include quite diverse economic activities, ranging from street peddling to running manufacturing private enterprises. Family businesses can be categorized into three types: single-person business without employees, business with other
family members, and business with non-family-member employees. As Table 1 shows, there are
21.3 percent Chinese families involved in private businesses, among which 9.0 percent are
single-person businesses, 8.7 percent are businesses with other family-member employees, and
only 3.6 percent are businesses that hires non-family members. While the population survey
demonstrates that most Chinese private businesses are quite small in size\(^2\), urban and rural areas
differ slightly in the type of family businesses: more urban private businesses than rural private
businesses hire non-family employees (20.08 percent vs. 13.67 percent); only about a third of
urban private businesses are run by single persons, whereas this type of private businesses
accounts for more than half in rural areas. Moreover, in terms of net business income in 1995,
urban families earn 18,657 RMB yuan on average, whereas rural families earn less than half of
that (8125 RMB yuan).

**[TABLE 1 ABOUT HERE]**

The year of entry into family businesses is also reported in the survey, and recoded as a
dummy variable of reform stage, which marks the significant changes in opportunity structures
in regards to the development of the private economy. From 1978 to 1991 is the first reform
stage, during which the private sector emerged as a marginal element of the redistributive
economy. Since 1992 a substantial expansion of the private economy has prompted a new wave
of private business startups (jump into the sea, or *xiahai*), as suggested by the growth trend in
Figures 1a, 1b, 2a, and 2b. In Table 1, 27.52 percent of urban private businesses and 26.41

\(^2\) Among 1288 reported family businesses, 42.2 percent have no employee; 51.5 percent employ
1 to 7 workers, and only 5.3 percent employ 8 or more workers. In other words, about 94.7
percent are categorized as individual/household businesses (*geti hu*), and private enterprises
(*siying qiye*) account for only 5.3 percent of all family businesses.
percent of rural private businesses were started from 1992 to 1996. Based on the survey data, Figure 3 plots the annual rate of entry into private business from 1978 to 1996 in urban and rural China: prior to 1992, the annual entry rate was maintained around 1 percent for most years; in 1992 and aftermaths, the entry rate jumped to 2 to 4 percent per year.

[FIGURE 3 ABOUT HERE]

The independent variables of family characteristics in the following analyses include the mean years of schooling and age for all adult family members (20-69) living in the household, whether it is a cadre family (1 if yes and 0 otherwise); whether the respondent’s parents or grandparents owned any a family business before 1949 (1 if yes and 0 otherwise); and the number of family members under age 18.

The family mean years of education, calculated from schooling for all adult family members, measure human capital a family possesses. It is a continuous variable. Whether a family has a cadre member captures its both political capital and social capital necessary for starting a private business. Cadre status here is coded slightly differently for the urban and rural samples. For the urban sample, I code those who reported that they ever held occupations as “middle-rank manager/ administrator” and “high-rank manager/administrator,” or that their position at the rank of section chief (gu ji), as “cadre”; rural cadres include both township cadres and village cadres, which are directly reported in their career history by respondents. The family with at least one cadre member is coded as a cadre family.

Family class background is defined based on the respondent’s parents or grandparents’ economic activities before 1949 when communist seized the power. I create a dummy variable, which equals 1 if the respondents’ parents/ grandparents owned land, hired someone to farm the
land or rented the land to others, or owned shop or other businesses before 1949, and 0 otherwise.

The remaining variables – standard family demographic characteristics - are included in the analyses as controls. The family mean age is constructed based on the information of all adult members. Although age is often used to approximate experience, it may not be favorable to the involvement in the private entrepreneurial activities since starting a business requires more risk-taking spirit than accumulated experience. Instead, old people may be more risk-averse (Gerber 2002b). Meanwhile, to capture family age structure, I include another variable – the number of children under age 18 – in the model. The lower panel of Table 1 presents the descriptive statistics for all the independent variables mentioned above.

In the following I first test the hypotheses regarding the rural-urban differences in entry into family businesses, using the cross-sectional data from 1996, and then examine how the pattern changes over the two reform stages in both urban and rural areas, using the event history data from 1978 to 1996. Finally, I examine how the pattern of entry into family businesses affects their net income.

Because the samples are clustered within 100 city districts/counties (see details in Treiman 1998), an adjustment on standard errors is needed in both logit models, hazard models, and linear selection models. All the models reported were estimated using Stata 8.0, with robust standard errors to correct the clustering on sampling units (districts/counties) (Stata Corp. 2001).

RESULTS

Cross-sectional Analysis

I estimate binary logit models on whether a family is engaged in private businesses in 1996,
separately for the urban and rural samples. The results in Table 2 show the diametrically different patterns of entry into family businesses in urban and rural areas. First, while the effect of education on the likelihood of entry is significant both in urban and in rural areas, the direction of the coefficients is opposite. In urban areas, families with higher education are less likely to be involved in private businesses. One year of schooling decreases the odds of entry by 11 percent \( (=e^{-0.117}-1) \) \( (p<.001) \), holding constant of the others. In rural areas, in contrast, families with higher education are more likely to start private businesses. One year of schooling increases the net odds of business startup by 19.0 percent \( (e^{0.174}-1) \) \( (p<.001) \). For families with higher education, the members have more career options in urban areas, such as employed professionals or managers in large organizations and officials in government agencies, which may “pull” them away from private businesses. Rural families with relatively higher education have few other alternatives if they are unable to move into cities, and private businesses provide them with an important path of socioeconomic mobility. Hence, the evidence supports to Hypothesis 1.

\[ \text{TABLE 2 ABOUT HERE} \]

Second, the effects of cadre family on the likelihood of entry into private business in urban and rural areas are also in opposite direction. In urban areas, cadre families are significantly less likely to start a private business than are non-cadre families. The net odds of doing so for cadre families are only 52 percent \( (=e^{-0.734}-1) \) of the odds for non-cadre families, holding constant of the others \( (p<.001) \). In rural areas, the scenario is different: indeed, cadre families are significantly more likely than non-cadre families to get involved in private businesses. The net odds for the former are more than doubled \( (=e^{0.713}) \) than the odds for the latter \( (p<.001) \). The difference can be better understood in the perspective of the opportunity structure that cadre families face in urban and rural areas. Hypothesis 2 is supported.
Third, class background also plays a different role in driving a family’s entry into private businesses. In urban areas, the effect of family background is statistically insignificant. However, in rural areas, families with any business before 1949 are more likely to revive after 30 years of socialist collective farming system. The net odds of starting a family private business after 1978 for those families with a business before the People’s Republic are 18 percent more ($=e^{0.167}-1$) than the odds for those without ($p<.001$). The finding on the intergenerational reproduction of private entrepreneurs in rural areas is a bit surprising since the “normal” mechanisms of inheritance of capital and land has been blocked for 3 decades under socialism. Based on similar findings in rural Hungary, Szelényi (1988) proposed a Weberian explanation of social origins of entrepreneurship: the culture capital - the values and skills related to entrepreneurship - can be transferred across generations. Such values and skills remained relatively intact in rural areas, but largely destroyed in the full-fledged socialist programs in urban areas.

Family mean age and the number of children under 18 are included in the models as the standard demographic variables. Their effects are similar in both urban and rural areas: mean age is negatively associated with the likelihood of entry into private business, suggesting that families with older members are more risk-averse since they may have invested in skills specific to socialist redistributive economies. A one-year increase in mean age reduces the net odds of by 5.5 percent ($=e^{-0.055}-1$) in urban areas and by 2.5 percent ($=e^{-0.025}-1$) in rural China. The number of children under age 18 has a positive effect on family business involvement. For urban families, one additional child increases the net odds of getting involved in family private business by 42.2 percent ($=e^{0.352}-1$) ($p<.001$); for rural families, it increases the net odds by 13.7 percent ($p<.01$). The presence of young children may affect the likelihood of a
family’s business involvement in two ways. On the one hand, young children require substantial supervision (especially time) thus discourage families from running a small business. On the other hand, the presence of young children demand for more economic resources, thus push Chinese families to get involved in private businesses to earn money for the future of their children (see also Short and Zhai 1996). The 1996 survey data support the latter proposition and consistent with previous findings by other scholars (e.g., Entwisle et. al. 1995).

To further examine the effects of education and cadre status on entry into different types of family businesses, Table 3 present the results of multinomial logistic regression of entry into three types of family business – the single-person businesses without employee, the business with family employees only, and the business with other non-family employees. The comparison group is the families not involved in any type of private business. The first three columns of the table show that, although education deters the entry into the family business without employee or with family employees only in urban China, it has no significant effect on the entry into the private business with non-family employees (indeed, the coefficient becomes positive). An additional year of education significantly reduces the net odds of entering in the single-person business by 12.9 percent (\(e^{-0.138}-1\)), and the net odds of entering in the business with family-member employees by 15.2 percent (\(e^{-0.168}-1\)), but increases the net odds of entering the business with non-family employees by 1.3 percent (\(e^{0.013}-1\)). Similarly, while urban cadre families are significantly less likely to start the private business of the first two types, they do not show significant difference from non-cadre families in the likelihood of entry into the private business with non-family employees. The odds of entry into the private business without employees for cadre families are only about 50 percent (\((e^{-0.696})\) of those for non-cadre families, holding constant of other factors (p<.01); the net odds of entry into the private business with
family employees for cadre families are only about 36 percent (e^{-1.031}) of those for non-cadre families (p<.01). As to the entry into the business with non-family employees, the corresponding figure increases to 71 percent.

**[TABLE 3 ABOUT HERE]**

In rural areas, education facilitates entry into all three types of family business. An additional year in education will significantly increases the net odds of entering in the single-person business by 21.5 percent (e^{0.195-1}), in the business with family-member employees by 14.1 percent (e^{0.132-1}), and in the business with non-family-member employees by 22.5 percent (e^{0.203-1}). Cadre families’ advantages over non-cadre families in entry into the private businesses with non-family employees are particularly prominent. Holding constant of the others, the odds of getting into the third type of business for cadre families are 4.8 times (e^{1.576}) of the odds for a non-cadre family (p<.001). In comparison, the net odds of getting into the single-person business for cadre families are 1.7 times (e^{0.523}) the odds for non-cadre families (p<.001); and the odds of getting into the business with family employees for cadre families are 1.6 times (e^{0.460}) the odds for non-cadre families.

Figures 4a and 4b plot the effects of education on the probabilities of entry into the three different types of family business in both urban and rural areas, setting the rest of variables at their respective sample means. Although the patterns of entry into the private businesses without employees or with family employees are completely different, the relationship between education and entry into the business with non-family employees to some extent is similar between urban and rural China. Figure 3 plots the adjusted odds ratios between cadre families and non-cadre families on entry into the different types of private business. Again, the odds ratio of entry into the business with non-family employees is the highest both in urban and in rural
areas, suggesting that among those involved in private businesses, cadre families are most likely to get involved in the businesses with non-family employees.

[FIGURES 3A, 3B, AND 4 ABOUT HERE]

Among the three types of business, the second type – with family employees only - is closest to the ideal type of “family business.” The inheritance of cultural capital works better in this type of business than in the others. Indeed, the family inheritance of entrepreneurship previously observed in rural areas (Table 2) is found only for this type of business (p<.05). Interestingly, even in urban areas, family background has a positive - though insignificant effect - on the involvement in the private business with family employees only (for the other two types, the coefficients are negative and statistically insignificant).

With respect to the effects of the two demographic variables, family mean age has negative and significant effect, and the number of children under 18 has positive and significant effect, on the likelihood of involvement in all three types of private business in urban areas. In rural areas, the effects of the two demographic variables vary with the type of private business a family is involved in: family mean age has no significant effect on the likelihood of involvement in the business with non-family employees; the positive effect of the number of children under age 18 is not applicable to entry into the single-person business. Since I do not have any substantive research hypotheses regarding these demographic variables, the difference found here is left for future research.

To summarize, results in Tables 2 present two quite different patterns of entry into private businesses between urban and rural areas, and confirmed the hypotheses regarding the effects of education, cadre status, and family class background. Overall speaking, families of higher socioeconomic status i.e., those with less human capital and political influence, are less likely to get involved in private economic activities. Family entrepreneurial history before 1949
provides on help to start a family business in the reform era. On the contrast, in rural areas, where few alternative opportunities were available, the entrepreneurial opportunities are more likely to be seized by families of advantaged status and entrepreneurial skills. The multinomial logistic regression results in Table 3 further clarify that urban-rural difference in the effects of human capital or political influence seem smaller on the entry into businesses that hire non-family employees than on the entry into the single-person business and business with family employees only. Class reproduction of entrepreneurship in rural areas is found only for families involved in the business with family employees.

**Event History Analysis**

As cross-sectional analyses cannot address temporal variations in the pattern of entry into family businesses, I employ discrete hazard models in event history analysis to examine how the entry pattern changes over time. A discrete hazard model involves a shift of the unit of analysis from respondent to family event (i.e., entry into private business) at a specific time (i.e., year). In this case, all families without non-agricultural sideline businesses are considered “at risk” of entry into private business in each year starting from 1978. Those who had not yet done so by 1996 are right-censored. After restructuring the data, a discrete-time hazard model can be fitted via conventional procedures for estimating binary logit models (Allison 1982). The dependent variable is whether the family entered into sideline business in a specific year between 1978 and 1996.

Concerning Hypotheses 4 and 5, the effect of timing and cadre status are the focus in the models. Mean education, whether the family was involved in business before 1949, mean age, and the number of children under age 18, remain in the model. To gauge the temporal variations
of entry rate the timing of entry is coded into two periods (1978-1991 and 1992-1996) that reflect the significant changes in opportunity structures in regards to the development of the private sector. It is included as a dummy variable in Model 1 for the urban sample, and in Model 3 for the rural sample.

Results from the two models in Table 4 are consistent with what have been found in cross-sectional analysis in Table 2. In urban areas, both education and cadre status deter families from entering into private business: one year increase in education reduces the odds of entry into business by 7.2 percent \((=e^{-0.072}-1)\), holding constant of the others \((p<.05)\). The net odds of entry into private businesses for cadre families are only 48.3 percent \((=e^{-0.727})\) of the odds for non-cadre families \((p<.001)\). In rural areas, the effect of education is positive and statistically significant. One year of schooling increases the net odds by 19.6 percent \((=e^{0.179}-1)\) \((p<.001)\), and the net odds of entry into private businesses for cadre families are only 58.6 percent \((=e^{0.461}-1)\) higher than those for non-cadre families \((p<.001)\). Hypotheses 1 and 2 thus are re-confirmed with the event history data.

The hazard rate of involvement in family businesses increases with the proceeding of the economic reform. In urban China, compared to the first stage of reform (1978-1991), the net odds of involvement increase by more than 3 times \((=e^{1.406}-1)\) in the second stage (1992-1996) \((p<.001)\). In rural areas, the net odds also increase by more than 2 times \((=e^{1.113}-1)\) \((p<.001)\). This is consistent with the pattern in Figure 3 plotted based on descriptive statistics. Hence, Hypothesis 4 is supported here.

To test hypotheses concerning how the effect of cadre status on business involvement changes over time, I run models with interaction between cadre status and reform stage,
separately for the urban sample (Model 2) and the rural sample (Model 4). Cadre families are more likely to enter into private businesses in the second reform stage than in the first. In urban areas, the deterring effect of cadre status on entry into private business diminishes in the second stage. In the first stage (1978-1991), the odds of entry for cadre families are only 32.5 percent ($=e^{-1.125}$) of the odds for non-cadre families; in the second stage, the odds for cadre families are 59.8 percent ($=e^{-1.125+0.610}$) of the odds for non-cadre families, controlling other variables. Statistical tests show that such a change is marginally significant (p<.010). In rural areas, a similar pattern can be found: cadre families’ advantages in private business involvement are enhanced as the reform proceeds. While the odds of entry into private business for cadre families are only 8.3 percent ($=e^{0.083-1}$) higher than the odds for non-cadre families in the first stage (1978-1991), the gap increases substantially in the second stage (1992-1996), by 16 percent ($=e^{0.083+0.692-1}$) (p<.05). Figure 6 plots the change in the effects of cadre families on entry into private business across the two reform stages.

[FIGURE 4 ABOUT HERE]

To sum up, the event history analysis reveals a somewhat similar pattern behind the divergence between urban and rural areas. As the reform proceeds, both urban and rural Chinese families are more likely to be involved in private businesses. Cadre families are particularly more likely to take advantages of the expanding opportunities as the private economy has gained more legitimacy. While urban cadre families are less likely than non-cadre families to be involved in private businesses in the first reform stage, they are increasingly more likely to do so in the second reform stage (1992-1996) than in the first reform stage (1978-1991). In rural China, cadre families only enjoy a slight advantage over non-cadre families in entrepreneurial
activities before 1992, but the advantage has been significantly enhanced since then. The urban and rural patterns tend to approach a convergence.

**FURTHER ANALYSIS: THE PERFORMANCE OF THE FAMILY BUSINESS**

In urban China, cadre families are less likely to get involved in private business than non-cadre families; but in rural China, they are more likely to do so. How the different paths of entry affect their business performance in the market? In this section, I examine the performance of family business by taking into account the effect of selection into the private business, which could bear direct implications on the fate of cadres and the change in social stratification in the reform-era.

In the survey, the respondents were asked “how much net income did you or your family members receive from this business activity last year?” Those not involved in any business are censored on this question. I use this variable to measure business performance in relation to family income. On average, in the year of 1995, urban family businesses received about 18,657 RMB yuan, whereas rural family businesses received less than half of that (8,125 RMB yuan).

To account for the unobserved heterogeneity that may underlie both business entry and business income, I employ Heckman selection models to first deal with the selection into family businesses from the full sample and then the determination of net business income among those with family businesses. Two equations are involved in the selection model. The first equation is a standard probit model for the process of selection into family businesses is formulated as follows:

$$Z^* = \gamma' X_1 + u$$  \hspace{1cm} (1)

where $Z^*$ is the latent variable for $z=1$ (entry) if $Z^*>0$, and $z=0$ if $Z^* \leq 0$. $Z^*$ is specified as a linear function of a set of explanatory variables plus a residual term $u$, which is assumed to follow a standard normal distribution ($u \sim N[0, 1]$).
The second equation is a linear function of business income determination:

$$\ln (Y) = \beta' X_2 + \epsilon \quad \text{observed only if } z=1. \quad (2)$$

Eq. (2) is restricted only to families with private businesses. This equation may not be estimated via OLS regression since

$$E[\epsilon \mid Y \text{ is observed}] = E[\epsilon \mid z=1] = E[\epsilon \mid Z^* > 0] = E[\epsilon \mid u > -\gamma'X] = 0$$

holds true only when the correlation ($\rho$) between the residual terms $\epsilon$ and $u$ is equal to zero. OLS estimates will be biased if the residual terms in two equations are correlated.

Allowing for a potential correlation between the two residual terms (i.e., $\rho$ is not equal to zero), Eq. (2) is estimated by adding to OLS regression an additional predictor $\lambda$, calculated using the fitted values of $Z^*$ from the estimation of Eq. (2). The estimated coefficient for this term will be equal to $\rho F$, where $\rho$ is the correlation between two residual terms $u$ and $\epsilon$, and $F$ is the standard deviation of $\epsilon$ (Greene 2000; Winship and Mare 1992). Since $F$ is always positive, a negative correlation ($\rho < 0$) between the two residual terms means a negative selectivity: those families who entered into private business have lower potential income than those who actually choose not to enter into private business. In contrast, a positive correlation ($\rho > 0$) would suggest a positive selectivity.

To estimating the probit model of selection into family businesses, I include the variables used in cross-sectional and event history analysis, i.e., family members’ mean education, cadre status, whether parents or grandparents owned business before 1949, mean age, and the number of children under age 18. For the income equation, I include three variables: family members’ mean education, cadre status, and mean age and focus on the effect of cadre status on business performance.
Table 5 presents the maximum likelihood estimation of coefficients for the two equations for both urban (Model 1 and Model 2) and rural samples (Model 3 and Model 4). Consistent with what have been found in cross-sectional analysis and event history analysis, Model 1 shows that both education and cadre status strongly deter families from entry into private business in urban China; and Model 3 also shows that the two factors facilitate the entry into private businesses in rural China. Other things being equal, one year of schooling decreases the probit coefficient by 0.069 in urban China (p<.001), but increases the probit coefficient by 0.098 in rural China (p<.001); being a cadre family decreases the probit coefficient by 0.393 in urban China (p<.001), but increases the probit coefficient by 0.352 in rural China (p<.05).

The significant coefficient for $\lambda$ indicates that the OLS estimates for the income equation are biased for the urban sample. The estimated value of $\rho$ (-0.467) for the urban sample indicates a strong negative selectivity (i.e., higher business income potential is associated with a lower likelihood of entry into the business). Model 2 and Model 4 of Table 5 present the unbiased estimates of OLS parameters in income equations respectively for both urban and rural samples. In urban China, the net return to cadre status is significantly positive. After correcting the effect of negative selection, cadre families enjoy a net income return of 61.5 ($=e^{0.479}-1$) percent higher than non-cadre families, and the difference is statistically significant (p<.05). In the Ordinary Least Square regression (not reported here), the advantage enjoyed by cadre families is not only far less (about 30 percent) but also statistically insignificant. Thus the evidence indicates that, urban families with observed characteristics (e.g. education and cadre status) and unobserved characteristics related to higher income potentials are less likely to get involved into private businesses. The effect of cadre status on business performance is underestimated, and so is the
effect of education. In rural areas, the selection effect is found insignificant, and the OLS regression results are not much biased.

A crucial point in the market transition debate is pertaining to the fate of cadres or former cadres in post-socialist stratification (Bian and Logan 1996; Nee 1989; Róna-Tas 1994; Zhou 2000). Scholars have debated on whether the stratification mechanism has been shifted from redistribution to markets, with the evidence about the effect of political attributes (such as cadre status) on income. The example demonstrated here suggests that the market mechanism per se does not grant any advantage or disadvantage to cadre families (Gerber 2002a; Walder 2002, 2003; Wu and Xie 2003). The conversion of political advantage to economic advantages in the process of market transition essentially depends on the opportunity structures faced by different social groups and their route of access to the market opportunities.

**SUMMARY AND CONCLUSION**

To sum up, in this paper I examined the patterns of entry into private businesses in urban and rural China and across different reform stages, and paid particular attention to cadre families’ action in the process of China’s transition to a market economy. Results from urban and rural areas present almost diametrically different patterns: while both education and cadre status deter urban families’ entry into private business, they promote rural families’ entry (Hypotheses 1 & 2). Families with private business before 1949 are more likely to get involved in private businesses in rural areas (specifically, the businesses with family members only) but not in urban China during the reform era (Hypothesis 3). Furthermore, among a variety of businesses they

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3 The net return to education is about 7.4 percent (the result is available upon request), lower than the return after correcting the selection effect (11.4 percent in Model 2 of Table 5).
entered in both urban and rural areas, families with more human capital and political influence are more likely to get involved in the type of business that hires non-family employees, which is presumably in a larger scale with formal structures than the single-person business or the business that hires family members only.

There is clear evidence that China’s transition trajectory has afforded increasing entrepreneurial opportunities to its people in both urban and rural areas (Hypothesis 4), and particularly to cadres or their families (Hypothesis 5). In urban areas, although cadre families are still less likely to enter into the private businesses than non-cadre families, they are increasingly more like to do so over time. In rural areas, cadre families’ advantage in seizing entrepreneurial opportunities is further enhanced in the late reform stage (1992-1996).

Given the different opportunity structures and selection processes in urban and rural areas, families involved in private businesses may possess certain characteristics (observable or unobservable) that are also pertaining to their business performance. In urban areas, because families that are more likely to succeed in the market would have many other options thus less likely to get involved in the private business, those who have entered actually earn less than they would have earned if there were no such a selection effect. In rural areas, cadre families enjoy a substantial advantage in business earnings, which are likely to last for a quite long time as the reform proceeds.

Similar results have been reported in post-1989 Hungary and theorized as an ongoing process of “power conversion” in the post-socialist transition (Róna-Tas 1994). This paper has demonstrated that the conversion process is conditioned upon the opportunity structures that the cadre elites/their families face. Whether certain social groups could manage to maintain their advantage varies with different reform strategies and transition paths as well as their responses.
Those who can better situate themselves in the changing structures would prevail, remaking themselves and regenerating a new social order.

The present analysis covers the period only up to the mid-1990s. Since the late 1990s some fundamental changes have been undergoing in China’s private sector. On the one hand, in the course of the property rights reform, many managers in the public sector (such as township and village owned enterprises) have legally converted themselves into private entrepreneurs (Oi 1999); cadres may illicitly strip state assets and set up their own enterprises (Ding 2000a 2000b). The entry of the incorporated firms with limited liability into the private sector has been re-shaping social landscapes of Chinese private economy, and possibly affecting the destiny of Chinese family businesses. Moreover, as the further reform in state-owned enterprises has been leading to mass layoffs and rising unemployment rate, small-scaled family-run private businesses provide “a refuge from poverty” rather than “a road to riches” (Hanley 2000). On the other hand, once a family gets involved in the private business, whether it will stay and grow bigger becomes even more problematic. As the market competition intensifies, the exit rates of private businesses increased simultaneously with the growth of entry rates.4 Even though these small businesses can survive, they are most likely to stay small. Findings on these developments have been reported in post-socialist Eastern Europe (Hanley 2000; Rona-Tas 2002). Whether the development of Chinese private businesses will follow a similar trajectory, and subsequently shape the process of class formation should be an interest for further explorations.

4 The government statistical data show that, for the private enterprises, the number of exits increases by 10.8 times, from 12,689 in 1993 to 136,407 in 1999. The exit rate increase from 5.1 percent to 8.3 percent with 7 years (Lu 2004: 246). The 1996 survey data contain no information on private business exits.
REFERENCES


Table 1. Summary Statistics for Variables in the Logit Models on Entry into Non-Agricultural Family Businesses: Rural and Urban China, 1996

<table>
<thead>
<tr>
<th>DEPENDENT VARIABLES</th>
<th>Overall</th>
<th>Family with sideline business</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>National</td>
<td>Urban</td>
</tr>
<tr>
<td>Family sideline business %</td>
<td>21.25</td>
<td>21.27</td>
</tr>
<tr>
<td>Without employees</td>
<td>8.98</td>
<td>7.82</td>
</tr>
<tr>
<td>With family employees only</td>
<td>8.68</td>
<td>9.18</td>
</tr>
<tr>
<td>With other employees</td>
<td>3.60</td>
<td>4.27</td>
</tr>
<tr>
<td>Income from family business (RMB yuan)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Income from family business (logged)</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Entry after 1991 (yes=1)</td>
<td>27.57</td>
<td>26.41</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>INDEPENDENT VARIABLES</th>
<th>Overall</th>
<th>Family with sideline business</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean years of schooling</td>
<td>4.05</td>
<td>5.00</td>
</tr>
<tr>
<td>Cadres family %</td>
<td>12.82</td>
<td>22.09</td>
</tr>
<tr>
<td>Pre-1949 family business %</td>
<td>39.07</td>
<td>33.83</td>
</tr>
<tr>
<td>Mean age</td>
<td>45.69</td>
<td>46.40</td>
</tr>
<tr>
<td>Number of children under age 18</td>
<td>0.78</td>
<td>0.58</td>
</tr>
<tr>
<td>Number of cases</td>
<td>6061</td>
<td>3065</td>
</tr>
</tbody>
</table>

Notes: The figures in the parenthesis are standard deviation for the continuous variables.
<table>
<thead>
<tr>
<th>Variables</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family mean years of schooling</td>
<td>-0.117***</td>
<td>0.174***</td>
</tr>
<tr>
<td></td>
<td>(0.032)</td>
<td>(0.033)</td>
</tr>
<tr>
<td>Cadre family (yes=1)</td>
<td>-0.734***</td>
<td>0.713**</td>
</tr>
<tr>
<td></td>
<td>(0.163)</td>
<td>(0.236)</td>
</tr>
<tr>
<td>Family business before 1949 (yes=1)</td>
<td>-0.028</td>
<td>0.167*</td>
</tr>
<tr>
<td></td>
<td>(0.121)</td>
<td>(0.083)</td>
</tr>
<tr>
<td>Mean age</td>
<td>-0.055***</td>
<td>-0.025***</td>
</tr>
<tr>
<td></td>
<td>(0.008)</td>
<td>(0.007)</td>
</tr>
<tr>
<td>Children under age 18</td>
<td>0.352***</td>
<td>0.128**</td>
</tr>
<tr>
<td></td>
<td>(0.083)</td>
<td>(0.056)</td>
</tr>
<tr>
<td>Constant</td>
<td>1.656***</td>
<td>-0.985**</td>
</tr>
<tr>
<td></td>
<td>(0.401)</td>
<td>(0.356)</td>
</tr>
<tr>
<td>2 log-likelihood</td>
<td>-2984</td>
<td>-3001</td>
</tr>
<tr>
<td>Number of cases</td>
<td>3065</td>
<td>2996</td>
</tr>
</tbody>
</table>

Notes: Figures in parentheses are robust standard errors adjusted for clustering on principal sampling units (districts/counties).  
*** p<.001 ** p<.01 * p<.05 (two-tailed tests)
Table 3. Coefficients Estimates for Multinomial Logit Models of Entry into Different Types of Nonagricultural Family Business in Urban and Rural China, 1996

<table>
<thead>
<tr>
<th></th>
<th>Without employee</th>
<th>With family employees only</th>
<th>With non-family employees</th>
<th>Without employee</th>
<th>With family employees only</th>
<th>With non-family employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean years of schooling</td>
<td>-0.138*** (0.014)</td>
<td>-0.165*** (0.038)</td>
<td>0.013 (0.045)</td>
<td>0.195*** (0.039)</td>
<td>0.132* (0.053)</td>
<td>0.203** (0.066)</td>
</tr>
<tr>
<td>Cadre family</td>
<td>-0.696** (0.231)</td>
<td>-1.031*** (0.221)</td>
<td>-0.337 (0.301)</td>
<td>0.523* (0.231)</td>
<td>0.460 (0.497)</td>
<td>1.576*** (0.432)</td>
</tr>
<tr>
<td>Family business</td>
<td>-0.159 (0.173)</td>
<td>0.163 (0.183)</td>
<td>-0.242 (0.177)</td>
<td>0.043</td>
<td>0.310* (0.121)</td>
<td>0.258 (0.238)</td>
</tr>
<tr>
<td>before 1949</td>
<td>-0.036*** (0.009)</td>
<td>-0.077*** (0.010)</td>
<td>-0.042* (0.016)</td>
<td>-0.021* (0.010)</td>
<td>-0.035*** (3.00)</td>
<td>-0.016 (0.016)</td>
</tr>
<tr>
<td>Mean age</td>
<td>0.348*** (0.096)</td>
<td>0.356** (0.121)</td>
<td>0.367** (0.121)</td>
<td>0.054</td>
<td>0.141† (0.079)</td>
<td>0.349** (0.121)</td>
</tr>
<tr>
<td># children under 18</td>
<td>0.054 (0.052)</td>
<td>0.141† (0.079)</td>
<td>0.180† (0.452)</td>
<td>-1.516*** (0.475)</td>
<td>-3.876*** (0.928)</td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-0.145 (0.514)</td>
<td>2.042*** (0.487)</td>
<td>-1.171 (0.811)</td>
<td>-1.801*** (0.454)</td>
<td>-1.516*** (0.475)</td>
<td>-3.876*** (0.928)</td>
</tr>
</tbody>
</table>

Notes: 1. the comparison group is family without any sideline business. The figures in the parentheses are standard errors adjusted for clustering on principal sampling units (districts/counties).
2. *** p<.001 ** p<.01 * p<.05 † <.10 (two-tailed tests)
Table 4: Coefficient Estimates for Discrete-Time Hazard Models on Entry into Non-agricultural Family Business: Urban and Rural China (1978-1996)

<table>
<thead>
<tr>
<th></th>
<th>Urban Model 1</th>
<th>Urban Model 2</th>
<th>Urban Model 3</th>
<th>Urban Model 4</th>
<th>Rural Model 1</th>
<th>Rural Model 2</th>
<th>Rural Model 3</th>
<th>Rural Model 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean Years of schooling</td>
<td>-0.072 *</td>
<td>-0.072*</td>
<td>0.179***</td>
<td>0.179***</td>
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<tr>
<td></td>
<td>(0.030)</td>
<td>(0.029)</td>
<td>(0.028)</td>
<td>(0.028)</td>
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<tr>
<td>Cadre family</td>
<td>-0.727***</td>
<td>-1.125***</td>
<td>0.461**</td>
<td>0.083</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td></td>
<td>(0.152)</td>
<td>(0.243)</td>
<td>(0.170)</td>
<td>(0.227)</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Family business before 1949</td>
<td>-0.027</td>
<td>-0.027</td>
<td>0.158*</td>
<td>0.157*</td>
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<tr>
<td></td>
<td>(0.109)</td>
<td>(0.109)</td>
<td>(0.074)</td>
<td>(0.074)</td>
<td></td>
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</tr>
<tr>
<td>Mean age</td>
<td>-0.051***</td>
<td>-0.051***</td>
<td>-0.024***</td>
<td>-0.024***</td>
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<tr>
<td></td>
<td>(0.007)</td>
<td>(0.007)</td>
<td>(0.006)</td>
<td>(0.006)</td>
<td></td>
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<td></td>
</tr>
<tr>
<td># of children under 18</td>
<td>0.259***</td>
<td>0.257***</td>
<td>0.087†</td>
<td>0.087†</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>(0.070)</td>
<td>(0.070)</td>
<td>(0.047)</td>
<td>(0.047)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reform I 1978-91 (omitted)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reform II 1992-96</td>
<td>1.406***</td>
<td>1.338***</td>
<td>1.113***</td>
<td>1.076***</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>(0.102)</td>
<td>(0.109)</td>
<td>(0.090)</td>
<td>(0.089)</td>
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<td>Interaction</td>
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<td></td>
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<tr>
<td>Reform II*cadre family</td>
<td></td>
<td>0.610†</td>
<td></td>
<td>0.692*</td>
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<tr>
<td></td>
<td></td>
<td>(0.341)</td>
<td></td>
<td>(0.313)</td>
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<tr>
<td>Constant</td>
<td>-2.296***</td>
<td>-2.258***</td>
<td>-4.523***</td>
<td>-4.497***</td>
<td></td>
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<tr>
<td></td>
<td>(0.352)</td>
<td>(0.350)</td>
<td>(0.320)</td>
<td>(0.319)</td>
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<tr>
<td>-2 log-likelihood</td>
<td>6095</td>
<td>6090</td>
<td>6085</td>
<td>6082</td>
<td></td>
<td></td>
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<tr>
<td>Family-year at risk</td>
<td>47137</td>
<td>48035</td>
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</tbody>
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Notes: Figures in parentheses are standard errors adjusted for clustering on counties.

*** p<.001; ** p<.01; * p<.05; † p<.010 (two-tailed tests).
<table>
<thead>
<tr>
<th></th>
<th>Model 1 (probit model)</th>
<th>Model 2 (linear model)</th>
<th>Model 3 (probit model)</th>
<th>Model 4 (linear model)</th>
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<tr>
<td>Mean years of schooling</td>
<td>-0.069*** (0.018)</td>
<td>0.108*** (0.021)</td>
<td>0.098*** (0.020)</td>
<td>0.057 (0.042)</td>
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<tr>
<td>Cadre family (yes=1)</td>
<td>-0.393*** (0.092)</td>
<td>0.479* (0.203)</td>
<td>0.352* (0.152)</td>
<td>0.168 (0.263)</td>
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<td>Family business before 1948</td>
<td>-0.027 (0.070)</td>
<td>-</td>
<td>0.098* (0.048)</td>
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<tr>
<td>Mean age</td>
<td>-0.029*** (0.004)</td>
<td>-0.006 (0.005)</td>
<td>-0.015*** (0.004)</td>
<td>0.002 (0.011)</td>
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<tr>
<td># of children under 18</td>
<td>0.225*** (0.042)</td>
<td>-</td>
<td>0.075* (0.037)</td>
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<tr>
<td>Constant</td>
<td>0.701** (0.249)</td>
<td>9.230*** (0.323)</td>
<td>-0.668** (0.222)</td>
<td>8.530*** (0.588)</td>
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<tr>
<td>Lamda (λ)</td>
<td>-0.572*** (0.133)</td>
<td>-</td>
<td>-0.452 (0.334)</td>
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<tr>
<td>Rho (ρ)</td>
<td>-0.467*** (0.081)</td>
<td>-</td>
<td>-0.365 (0.241)</td>
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<tr>
<td>N</td>
<td>3065</td>
<td>-</td>
<td>2996</td>
<td>-</td>
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<td>Censored cases</td>
<td>2483</td>
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<td>Model $\chi^2$</td>
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<td>D. F.</td>
<td>3</td>
<td>3</td>
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</tbody>
</table>

Notes: Figures in parentheses are standard errors adjusted for clustering on counties.  
*** p<.001; ** p<.01; * p<.05; † p<.010 (two-tailed tests).
Figure 1a: Total Registered Capital: Individual/Household Businesses and Private Enterprises
Data Source: Zhang & Ming (1999, 2002)

Figure 1b: Total Revenues: Individual/Household Businesses and Private Enterprises
Data Source: Zhang & Ming (1999, 2002)
Figure 2a. Number of Individual/Household Businesses in Urban & Rural China
Data Source: Zhang & Ming (2002)

Figure 2b. Total Employment of Individual/Household Businesses in Urban & Rural China
Data Source: Zhang & Ming (2002)
Figure 3. Rate of Entry into Family Business: Urban and Rural China, 1978-1996
Notes: Since the data were collected in the middle of 1996, the rate of 1996 only covers half a year.
Figure 4a: Entry Probability vs. Education - Urban China

Figure 4b: Entry Probability vs. Education - Rural China
Figure 5. Adjusted Odds Ratios between Cadre-Families and Non-Cadre Families on Entry into Different Types of Businesses: Urban and Rural China

Notes: The other variables are set to the values of their respective sample mean in calculating the odds ratios. When the odds ratio is 1, this indicates that cadre families and non-cadre families are equally likely to be involved in a business.
Figure 6. Adjusted Odds Ratios between Cadre-Families and Non-Cadre Families on Entry into Businesses in Two Reform Stages: Urban and Rural China

Notes: The other variables are set to the values of their respective sample mean in calculating the odds ratios. When the odds ratio is 1, this indicates that cadre families and non-cadre families are equally likely to be involved in a business.