Micro-Level Experiences of Macro-Level Change: A Cohort Perspective on Urban China's De-emphasis of State Sector Employment

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Abstract

Based on occupational histories collected from a nationally representative sample (2003 Chinese General Social Survey), we examine micro-level experiences of macro-level change in the form of variations in attainment of a state-sector first job and shifts from state to private sector jobs across four cohorts in China who entered the labor market in distinct historical (and often tumultuous) periods from 1949 to 2003. We find more recent cohorts have increasingly higher odds of having a first job in the private sector and higher propensities to shift to private-sector jobs, compared to earlier cohorts. The Cultural Revolution cohort (labor market entry 1966-77) was most likely to enter into agricultural work. Cohort variations are also reflected in the changing impact of structural location (education, party affiliation, and housing benefit receipt) in predicting first-job sector and sector shifts across cohorts. For example, a high school degree offers the least advantage of entering the state sector for members of the Cultural Revolution cohort, while the disincentive to leave state employment provided by housing benefits was gradually weakened for both Cultural Revolution and the Late Reform (labor market entry 1992-2003) cohorts. The relative propensity to shift sectors of three elite groups – educational elite (associate college educated, with no political credentials), political elite (less than associate college educated, with political credentials), and dual elite (associate college educated with political credentials) – is contingent on cohort membership. Our life course approach captures different cohorts' career/life stages and corollary experiences at the time of macro-level political/economic changes.

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Introduction

Chinese society experienced profound, extensive, and rapid social changes over the latter half of the twentieth century. Economically, it has gradually transitioned from a planned redistributive economy to a still controlled but more open market economy. Nothing illustrates such a fundamental transition better than changes in the labor market, where the traditional allocation of workers to state sector employment is gradually being replaced as increasing proportions of workers obtain employment in the private sector (Cai, Park, and Zhao 2008).[1]

Although China is not the only country experiencing such large-scale structural change, what is unique about China is that these transitions occurred under the same political regime and took place over a long time period (Dong and Xu 2009; Qian 1999) in two broad stages. Prior to the early 1990s, emphasis was placed on encouraging the establishment of private firms, stimulating waves of state employees to move into the market sector. It was not until the mid-1990s that ownership reform was launched, accompanied by large-scale labor shedding in the state sector (Qian 1999).

China's prolonged labor market reform timeline allows us to examine in detail the social processes through which this macro-level transformation from predominantly state employment to a majority of the labor force in private-sector employment shaped the labor market experiences of individuals. Previous research has provided valuable insights into historical trends around China's shrinking state sector and expanding private sector (e.g., Cai et al. 2008; Li 2013; Meng 2012). Not captured in these macro-level accounts of social change, however, is the degree to which different cohorts contributed to and were impacted by this development. Inspired by the life course paradigm (Elder, Johnson and Crosnoe 2003), we argue that cohort (Ryder 1965) – persons who share some critical experience in approximately the same time period – is a theoretically important concept that needs to be incorporated into the economic transition literature to shed light on the dynamics underlying the intricate relationships between the macro-level social changes and micro-level job mobility. Our goal is to demonstrate how cohorts operate as engines of social change (Ryder 1965). The utility and conceptual validity of cohort analysis in studies of Chinese society is further strengthened in view of Communist China's tumultuous history since its establishment in 1949 (Zhou 2004), given that a life-course, cohort framing is

[1] Most Chinese organizations can be divided into: (1) government agencies, (2) public institutions, (3) state-owned enterprises (SOEs), (4) collective enterprises, (5) private firms, and (6) hybrid firms; there is also another employment option: (7) self-employment. Our analysis distinguishes state sector (the first three groups) and private or market sector (the last four groups), recognizing that some literature excludes (4) collective enterprises (owned by government units below the city/county levels) from the private sector. See Wu (2013, 12) for a discussion.

uniquely positioned to capture the distinctive influences occurring during people's youth, influences that leave an indelible mark on their characteristic modes of thought and experience (Alwin and McCammon 2003; Elder, Johnson, and Crosnoe 2003).

We examine two processes by which individuals were diverted into the private sector – through a change in first job sectors or through subsequent job shifts from state to private sectors. We show that for each of these two mechanisms, cohort membership captures the observed secular change of state-to-private sector movement. We also demonstrate that key structural positions emphasized in previous scholarship (Li 2013; Meng 2012) – education, party membership, and housing benefit receipt – have intrinsic cohort components shaping the odds of the two outcomes (initial entry into versus subsequent shifts to private sector).

This study makes several contributions. First, we extend previous literature on China's labor market transition in particular and job mobility in general by bringing cohort membership to the fore. Second, our case illustrates a basic assumption of the life course perspective, that is, the extent to which exposure to historical events shapes life pathways depends on the timing of that exposure in individual biographies, in other words, the particular juncture of history with age and life/career stage (Elder et al. 2003). Third, our research highlights the role of the state as an active force in (re)shaping the life course across cohorts. Fourth, existing literature on China's job mobility mostly focuses on exits due to unemployment. We fill a major research gap by examining voluntary shifts away from the state sector, an important consideration, given the distinction between voluntary shifts and involuntary exits (unemployment).

Related Literature

Evolution of China's Labor Market and Formation of Historical Cohorts

We construct identifiable cohorts according to the historical circumstances at the times individuals entered the labor market (see Figure 1 for an illustration). The earliest cohort began their first jobs during the Consolidation period, spanning from Communist China's establishment in 1949 to the eve of the Cultural Revolution in 1965. Shortly after 1949, the Chinese government installed a planning system under which prices were set by the state and production factors including labor were allocated by the central administration. The Bureau of Labor and Personnel matched workers to work units (Lin and Bian 1991; Walder 1986), and once a match was made, there were virtually no moves in and out of organizations (Bian 2002; Cai et al. 2008). Moreover, from 1956 until the mid-1980s, wages and benefits followed nationally established salary grades, determined by one's ranking (usually increasing automatically with age) instead of productivity

levels (Bian 1994; Davis 1992). The private sector barely existed in this period, accounting for only a tiny proportion of the whole economy – especially when the 1955 nationalization policy transformed most private enterprises into state assets. The cohort entering the labor market during this period (1949-65), the *Consolidation cohort*, therefore, came of age when the private sector was essentially non-existent and great emphasis was placed on centralized power and self-sacrifice for communal interests (Egri and Ralston 2004; Rosen 2000).[2]

[Figure 1 about here]

The Cultural Revolution era (1966-77) was a time of paralysis in the educational system, industrial development, and bureaucratic apparatus. All levels of schools were closed from 1966 to 1968, and colleges were not reopened until in 1972, when only a select few persons with "good" family backgrounds (workers, farmers, and soldiers) were permitted to attend. In addition, the *Cultural Revolution cohort* who entered the labor force during this period (1966-77) was also subject to large-scale state-induced migration: an estimated 17 million urban youths were sent to the countryside (Zhou and Hou 1999) partly in response to the urban unemployment problem due to the sheer size of this cohort (Davis-Friedmann 1985). Upon their return to urban areas in the 1970s, many were shunted into lower paid private-sector jobs given the absence of vacancies in the state sector (prized for the housing and other benefits they offered) (Davis-Friedmann 1985).

From the early 1980s on, economic reforms were launched and private-sector jobs became lucrative. In 1986, the State Council terminated lifetime employment and introduced labor contracts for new employees, giving state firms the freedom to select their own workers. Meanwhile, the share of private enterprises increased from 22 percent to 57 percent between 1978 and 1993, due entirely to the start-up of new firms, not the privatization of state firms (Qian 1999). Taken together, these reform policies encouraged individual achievement, materialism, and entrepreneurship. Those who entered the labor market during this period (1978-91), the *Early Reform cohort*, have been described as individualistic, materialistic, and entrepreneurial (Rosen 2000).

Following Deng Xiaoping's famous tour of southern China to mobilize local support for more radical reform in 1992, economic restructuring intensified. An aggressive SOE restructuring program was put into practice in 1997 that laid off millions of redundant workers (Naughton 1997), heralding the end of guaranteed employment and benefits for China's urban workers. The vast government bureaucracy was also streamlined, with 8 million civil servants cut to 4 million

[2] Labor market cohorts are different from cohorts defined strictly on a set coming-of-age period. Our analysis focuses on the former, because we believe the largest driving force of our outcomes is structural changes in the labor market (e.g., the relative size of the state and private sectors). But, given our broader categorization of cohorts (consisting of people who entered the labor market more than ten years apart), our cohort measure overlaps with what could be seen as a coming-of-age period.

(Qian 1999). The *Late Reform cohort* who entered the labor market during this era (1992-2003) was exposed to an economic environment characterized by ever-shrinking and increasingly precarious state employment, but was also among the first to have more freedom in job selection.

In sum, these four cohorts encountered labor markets marked by distinct opportunity, constraint, and incentive structures that not only directly affected the number of posts available in the state sector, but also shaped the very meaning of state employment as well as the degree of individual choice in locating jobs. These historical contrasts in the political/economic environment confronting different cohorts constitute the basis of our argument, but before proposing cohort-related hypotheses, we first review existing studies on first-job sector and cross-sector job mobility in China, and discuss why a cohort perspective is a fruitful approach.

Urban China's Job Assignment and Mobility: Prior Studies and Limitations

First job has been central for life chances in China, especially prior to the 1978 economic reforms, a time when job mobility was extremely low (Knight and Yueh 2004). Somewhat similar to the dual labor market in the United States (Piore 1975), the type of work unit – ownership sector in particular – mattered more than the specific job (Bian 1994; Lin and Bian 1991; Walder 1986; Wu 2010; Wu and Xie 2003). Based on a 1985 sample, for example, Lin and Bian (1991) showed that entering the state sector was much more important than other job dimensions in terms of status attainment. First job in China is heavily shaped by state policy (Zhou 2004; Zhou and Hou 1999) and social networks (*guanxi*) (Bian 2002).

As an indicator of social stratification and market integration, China's labor shift across differentially defined boundaries has been the focus of much sociological (Li 2013; Wu and Xie 2003; Zhou and Moen 2001; Zhou, Tuma, and Moen 1997) and economic (Cai et al. 2008; Knight and Yueh 2004) investigation, concluding that cross-sector job shifts remained low throughout the 1990s (Knight and Yueh 2004; Zhou and Moen 2001; Zhou, Tuma, and Moen 1997). A recent study using the 2008 Chinese General Social Survey finds that job mobility showed an ever-increasing trend only after 1992 – the year when economic reform began to intensify in urban China, and was driven mainly by within-private-sector and state-to-private-sector shifts (Li 2013).

In sum, existing studies have yielded much insight into first job sector entry as well as job mobility shifts from state to private sectors. However, an explicit cohort perspective is severely lacking, limiting understanding of the linkage between individual job transitions, institutional configurations and social change (Elder et al. 2003). Individuals from different cohorts experience large-scale social changes differently because (1) social transformations at

different historical periods bring opportunities and risks that are age-based (Zhou and Moen 2001), (2) people of different ages occupy different positions in society and bring distinct resources to situations, resulting in diversified ways of adapting to new conditions, and (3) coming of age in a particular political/socio-cultural milieu orients people to adopt distinctive habits or value priorities that often persist throughout their lives (McCrae et al. 2002). All of these processes suggest that it is virtually impossible to understand micro-level implications of macro-level political/economic changes on first job sector and state-to-private sector shifts in the turbulent Chinese context without incorporating a life-course, cohort perspective. For example, research on voluntary job mobility typically uses a reward-resource framework, theorizing that workers change jobs to maximize their earnings and benefits given the resources they possess (Sørensen 1977). This model offers a succinct explanation for job shifts occurring in a stable society, but might be insufficient for the Chinese experience absent a consideration of cohort membership, because what constitutes "resources" and the criteria determining who gets "rewards" have changed markedly over time, as we elaborate.

Two notable exceptions to the general paucity of a cohort framing are Davis-Friedmann (1985) and Zhou and Moen (2001). In a series of papers, Davis-Friedmann (1985) and Davis (1988, 1990) argued that the Chinese bureaucratic allocation created a reward system that favored "first-comers" – the cohorts already in the labor structure (the Consolidation cohort) – at the expense of later cohort members (the Cultural Revolution cohort). Zhou and Moen (2001) applied a life course approach to examine job transitions between different work units of three cohorts, who entered the labor force between 1949 and 1966, during the Cultural Revolution (1966-1979), and during the era of economic transformation (1980–1994), respectively. They found that the earliest cohort was more entrenched in the state sector in terms of both their first-jobs and the jobs they held in 1993, while subsequent cohorts experienced increasing job shifts, with the third cohort having the highest rates.

These studies provide important information on the distinct job shift patterns across cohorts. Nevertheless, they were based on interviews or surveys conducted in the 1980s and early 90s, when the economic reform in urban China was not yet full-fledged. A set of new economic phenomena emerged in the 1990s with important implications for both first-job sector entry and sector mobility. Our paper builds on and extends this research evidence by including the cohort entering the labor force in the era of deepening economic reform (1992-2003). In addition, samples in these prior studies were limited to a few cities. Our more nationally representative data are essential to capture sector shift patterns that are valid at the national level.

Cohort Variations in First-Job Sector and Sector Shifts: Hypotheses

Recall we constructed four cohorts to capture the distinctly different labor markets when members began their first jobs, reflecting variations in opportunity, constraint, and incentive structures across historical periods. The Consolidation cohort entered the labor force when state enterprises were in their formative stages and in urgent need of young workers. The situation deteriorated for the Cultural Revolution cohort, who faced the quandary of a still weak private sector while state sector jobs had been taken by the "first-comers" from the Consolidation cohort. A large proportion of the Cultural Revolution cohort were sent to farms, and upon return to urban areas they were diverted into lower paid jobs in collective (non-state) enterprises through state allocation processes (Davis-Friedmann 1985). With the expansion of the private sector and an emerging functioning labor market in the 1980s, the private sector had become an important employer by the time the Early and Late Reform cohort members entered the labor market. Further, the 1990s social welfare reforms gradually extended many benefits previously enjoyed only by those employed in the state sector to employees in the private sector, even as massive layoffs accompanying state-sector restructuring rendered state employment more precarious. Therefore, our first hypothesis states that:

Hypothesis 1: The four cohorts have different propensities of locating their first job in the state sector, with the earliest Consolidation Cohort most likely while the latest Late Reform Cohort least likely to have a first job in a state-sector organization. Further, members of the Cultural Revolution cohort are most likely to enter agricultural work as a first job.

Turning to the second micro process of change – job shifts from state to private sectors, our second hypothesis posits that the timing in which social changes occur in the life course of members of different cohorts matters in predicting their work-sector trajectories. First, using the language of the reward-resource framework, whether sector shifts can be interpreted as an enhancing "rewards" fluctuates over time. There was little incentive to shift to private-sector employment before the 1980s, when state workers enjoyed greater privileges (Bian 2002; Walder 1986). But sector shifts became a lucrative endeavor after the 1978 reforms when private/hybrid firms and self-employment provided ample opportunities to make money and achieve personal aspirations (Wu and Xie 2003). Second, the four cohorts differ from each other in their responses to private-sector opportunities from the 1980s on, reflecting their distinctive life course/career stages when these social changes occurred, favoring more recent cohorts' shift jobs to the private sector. For example, the Consolidation cohort and the Cultural Revolution cohort members were in their 40s, 50s, and 60s at the time of the 1978 economic reforms, a life stage when most individuals prefer stability over risk-taking. Third, prior experiences matter (Zhou and Moen

2001). The Consolidation Cohort members were socialized to respect authority and to sacrifice for communal interests (Egri and Ralston 2004), while members of the two Reform cohorts grew up in a society whose economy was transforming to a market system stressing entrepreneurship and individual accomplishment. Therefore, more recent cohorts could be more ambitious, more likely to take risks in terms of entering the private sector.

Hypothesis 2: Given their different ages and life stages, members of the four cohorts have different rates of shifting from state to private sector jobs, with the Consolidation Cohort the least likely and the Late Reform Cohort most likely to shift to the private sector.

We expect cohort variations as well in predictors of first job sector and sector shifts. That is, persons occupying the same positions in the social structure or possessing similar resources may exhibit distinct responses to new opportunities depending on when they first enter the labor market. We examine three measures reflecting structural location and/or resource availability: education, party affiliation and housing benefit receipt. These factors may have different implications for first-job sector and for sector shifts in different cohorts because of the shifting meaning of these resources over time as well as the cumulative advantages/disadvantages these cohorts possess at a given life stage.

Education as a predictor of first-job sector. We hypothesize that educational credentials elevate the odds of entering the state sector, facilitated by the job-assignment (state) bureaucracy (Walder 1995); but its effects attenuate across cohorts, given China's education expansion, different views of the meaning of education, state-sector contraction, and the abolition of job assignment. The Consolidation cohort entered the labor market when tensions existed between the state's need for highly educated workers to build the new China in the face of low average educational levels; thus for members of this cohort having a higher education should lead to the greatest odds of entering the state sector. Over time, however, the combined effects of a rising supply of more educated workers and decreasing availability and rewards of state-sector employment should mean educated people from later cohorts were less likely to have a first job in the state sector. Note that members of the Cultural Revolution cohort entered the labor market when education was not appreciated, and even worse, was considered a dangerous asset (Zhou 2004), which suggests a non-significant or even negative effect of education on having a first job in the state sector.

Hypothesis 3a: Education is associated with higher odds of entering into state-sector work units, but this positive relationship is attenuated for the reform cohorts, with educational credentials the least relevant for first-job sector of members of the Cultural Revolution cohort.

Educational and political credentials predicting sector shifts. We consider the joint effects of educational and political credentials in estimating sector shifts out of state jobs. For brevity, we refer to those with political but no educational credentials as the *political elite*, those with educational but no political credentials as the *educational elite*, and those with both credentials as the *dual elite*. Previous studies uncovered a twin career path into the urban Chinese elite with college education a persistently vital prerequisite for a professional position even as party membership was always a prerequisite for top administrative posts (Dickson and Rublee 2000; Walder 1995; Walder et al. 2000). Therefore, both credentials are valued in the state sector but for different occupations. The same cannot be said of the private sector, however, where political credentials (as a reflection of membership in and loyalty to the Party) are generally valued less than in the state sector, especially when educational credentials are lacking. Although anecdotal evidence exists that some party members or cadres (officials holding positions of political or administrative leadership) "plunged into the sea" of the market sector in the early 1990s to obtain higher incomes drawing on their prior political connections, it is more likely that many exploited their strategic positions in the state hierarchy as regulators, profiting by receiving stock shares or being paid as advisors in private sector companies (Holbig 2002). Therefore, of the three elite groups, the political elite should be least likely to shift sectors. It is unclear, however, about the sector shifting of the educational elite, given that education has been equally valued in both sectors since the 1978 reforms. As for the dual elite, being both Red (loyal to the Party) and experts – the type of bureaucratic leaders that the Communist Party has long promoted (Andreas 2009) – should provide more incentives to remain in the state sector. As hinted by Bian, Shu, and Logan (2001), among party members already working in the private sector, the rate of moving into a managerial position is *lower* for the college-educated than for those with less education, whereas this pattern is reversed in government agencies and non-significant in SOEs, suggesting that the state sector has more appreciation for this dual elite group than the private sector.

The relative propensities to shift sectors among members of the three elite groups are expected to be contingent on their cohort membership. The educational elite from more recent cohorts might be more poised to shift sectors because they came to the labor market during the later stages of economic reforms making their education more valued (Szelenyi and Kostello 1996; Wu 2002, 2010). Moreover, their comparatively low seniority (given their ages) suggests that they have less to give up when shifting sectors. It is also possible that education may exert a stable force across cohorts, given the converging earnings regimes between the state and private

sectors following government policies adopted in the 1980s placing greater emphasis on education in job promotions and wages (Zhao and Zhou 2002).

In contrast, we expect the political elite in more recent cohorts to be less likely to shift sectors than political elites in earlier cohorts, given that a lack of educational credentials has become a liability in the private sector in light of the expansion of higher educational attainment across cohorts. As a result, the political elite from more recent cohorts may be less able to move outside the state sector compared with their counterparts in earlier cohorts.

In terms of the dual elite, consider how the four cohorts differ in their attainment of both credentials. Was it mainly a process of the political incorporation of the already highly educated or party-sponsored returning-to-school of party members (Li and Walder 2001)? To quickly develop personnel that were both Red and experts, party members or cadres were sent back to school in the early years of the Communist power to upgrade their human capital (Li and Walder 2001). During the Cultural Revolution, the only group eligible to attend college were "worker-peasant-soldier" students, nominated by work units based on their political performance. Over time, however, with the increase in education level, a political incorporation model gradually dominates; for example, Bian, Shu, and Logan (2001) found that education predicts higher odds of joining the party only during the post-1978 reform period. Taken as a whole, the dual elite from earlier cohorts are more likely to obtain educational credentials based on their political credentials, whereas the opposite is true for later cohorts. Consequently, the dual elite in earlier cohorts are more closely tied to the state sector and less likely to leave it, compared with more recent cohorts. We further hypothesize that the dual elite in the Cultural Revolution cohort are least likely to shift outside the state sector because the higher education they received was of low quality and widely stigmatized, translating into lower human capital, both actual and perceived (Broaded 1991; Jiang and Ashley 2000, 93-94, 130). Taken together, our hypothesis is:

Hypothesis 3b: Both the political elite and the dual elite are less likely to shift sectors compared with ordinary workers. The educational elite from more recent cohorts are more likely, while the political elite from more recent cohorts are less likely, to shift to the private sector, compared with their counterparts from earlier cohorts. The odds of shifting sectors for the dual elite are lowest for the Cultural Revolution cohort.

Housing benefits predicting sector shifts. One widely recognized obstacle to movement of labor into the private sector is the unequal benefit provision between sectors (Xie and Wu 2008). Until the 1978 economic reforms, leaving state employment was costly, since it was tied to a range of benefits, the most important being highly subsidized housing. Iyer and his colleagues (2013) found individuals were significantly more likely to work in the private sector after cities

implemented urban housing reforms, accounting for 30 percent of the increase in private-sector employment over the 1986-2005 period. Therefore, our last hypothesis predicts that recipients of housing benefits are less likely to shift from state-sector jobs into the private sector.

We also expect cohort variations in the relationship between housing benefits and sector shifts, given that the housing reform initiated in 1986 greatly loosened workers' dependence on work units but in a cohort-stratified fashion. Following the reform, new state-sector workers were no longer eligible for state housing, and replacing the abandoned housing allocation system was the Housing Provident Fund initiated in 1991 and extended nationwide in 1995, shared by employers and employees from both state and private sectors. The new system therefore decouples state workers' attachment to their work units, especially for the two reform cohorts whose early careers coincide with the new housing policies. The final hypothesis therefore predicts that:

Hypothesis 4: Working in a unit providing housing benefits lowers the rate of job shifts into the private sector, but this association is attenuated for the Early and Late Reform cohorts.

Data, Measures, and Methods

Data and Sample

We use data collected from the 2003 Chinese General Social Survey (CGSS). The CGSS, initiated in 2003, is an annual or biannual survey that monitors socioeconomic changes in Chinese society and provides rich information on individuals' social positions, socioeconomic achievement, attitudes, and quality of life. The 2003 CGSS is a multistage stratified sample that is nationally representative of urban residents in China and its main advantage for our study lies in its detailed occupational history. The sample consists of 5,317 individuals aged 18-69 whose household residence were registered in urban areas.

Models predicting first-job sector are based on a sample of 4,237 respondents, after removing respondents who entered the labor force before 1949 (n = 23), who never had a paid job (n = 517), who joined the army when entering the labor market (n = 113), and who had missing values for the variables used in our analysis (n = 427). We exclude respondents who were soldiers because they follow a different occupational trajectory than the civilian population, given the distinct state policies applicable to their job placement after demobilization. For analysis of sector shift, we use proportional hazards models, with data constructed in person years. Respondents enter into the sample when beginning their first job, and exit when retired, but those who leave the labor force only temporarily (e.g., those who return to school) are retained. This set of

analysis relies on a further restricted sample of those whose first job was in a state-owned work unit (n = 3,153).

Measures

Outcomes

First job in a state-sector work-unit. One complication in considering first job is whether or not to count "farm work," especially when it is imposed on sent-down youth. On one hand, several work characteristics are not applicable to farm work; indeed, the 2003 CGSS did not ask any further questions regarding this particular job experience. Ignoring farm work experience, however, might miss important job patterns, especially for the Cultural Revolution cohort, for whom many were sent to rural areas to begin their work careers. Therefore, we constructed two versions of first job. We first investigate a three-category first-job sector: state-sector (government agencies, public organizations and state-owned enterprises), private-sector (collective enterprises, private firms, hybrid firms and self-employment), and agriculture. Second, we confine first job to the first non-agricultural job (state or private sectors); this dichotomy also allows us to examine the type of jobs the sent-down youth obtained when they returned to cities.

Job shifts from state to private sectors. We focus here on sector shifts from state to private sectors. Given that we do not know the type of work unit for those reporting their jobs to be farmers, we made a conservative decision assuming that these respondents did not shift sectors, either from their previous jobs or to their next jobs. We distinguish person-level job shifts from organizational-level ownership transformations. For example, one may stay in the same organization even as the previously state-owned organization becomes privatized. Such measurement error is minimized through one variable asking whether respondents worked in the same work unit as of the prior occupation. If respondents answered "yes," they are not counted as having experienced a sector shift even if the ownership of their current work unit is different from that of the previous one (there are 13 such cases). Respondents who did not experience any sector shift by the time of the survey are right-censored.

Key Predictors

Cohort. Recall, we define cohort based on the historical period of labor force entry. *Consolidation Cohort* members entered the labor force between 1949 (when the People's Republic of China was established) and 1965, *Cultural Revolution Cohort* members began their first job during the Cultural Revolution era (1966-77), *Early Reform Cohort* members entered the labor market during the initial stage of China's economic reform (1978-91), while members of the *Late Reform Cohort* entered the labor market during the reform deepening stage (1992-2003).

Educational Attainment. In predicting first-job sector, we use respondents' education upon labor force entry, coding three levels: (1) lower than high school; (2) high school (including vocational high school); and (3) associate college or higher.

Joint Educational and Political Credentials. We examine a four-category measure that takes into account both educational attainment and political credentials. Political credentials equal 1 if respondents are party members or administrative cadres (bureaucratic administrators at the rank of department level, *ke ji*, or above). Note that both credentials are time-varying measures; for example, 639 (15.1%) respondents returned to school after labor force entry. We distinguish four groups of people: (1) less than associate college and no political credentials (reference), (2) the educational elite, associate college educated but no political credentials, (3) the political elite, less than associate college but with political credentials, and (4) the dual elite, associate college and political credentials. In preliminary analysis we included a separate category for high school but no political credentials, but this group of people turned out not to differ from ordinary workers in terms of their sector shifts.

Housing benefit recipients. Whether or not respondents were provided with a housing subsidy by their work unit is dummy coded.

Covariates

We control for demographic characteristics including *age*, *age squared*, *gender* (women = 1), and *marital status* (married = 1). Family background such as *father's education* and *father's party membership* is also adjusted for. When predicting sector shifts, we contrast workers who were previously in state-owned enterprises (= 1) with those in party/government agencies or public institutions (Wu 2013). *Professional* level occupation (versus administers, clerks, service workers, and production workers) is also adjusted. Lastly, structural changes over time are captured by *percentage of industrial output in collective enterprises* and *percentage of industrial output by private/hybrid firms*, measured for each province-year. *Province* dummies are used to control for region-specific variations, but their estimates are omitted in tables for simplicity.

Analytic Strategy

We first use multinomial and dichotomous logit regressions to predict whether or not respondents' first job was in the state sector. Next, job shift from state to private sectors is estimated using the semi-parametric Cox proportional hazards model. We set up the analytic time using a time clock based on labor force experience, because it fits well with our cohort construction that is based on labor force entry, and by comparing sector shifts of different cohorts at the same career stage, this time clock holds more potential to reveal cohort effects.

Valid estimates from the Cox model require satisfaction of the proportionality assumption, that is, the hazard rates for different values of a given covariate are proportional over time. For example, the ratio of the rates to shift sectors between men and women should be constant over time. This is usually a methodological nuisance, but can be used to test interesting theoretical issues regarding whether the role of certain predictors varies over time, due to secular trend or career-stage dependence. We use the scaled Schoenfeld residuals to test this assumption, and when violated, we include relevant variables as time-dependent measures whose associations with the outcome vary over time (shown in the bottom of tables).

Sector shifts are recurrent events. In our sample, two respondents experienced sector shifts twice and one respondent three times. This rareness is expected, because it requires one to shift from private sector back to state sector at least once, which is extremely unlikely in China (Li 2013). We adopt the counting process to deal with recurrent events (Kelly and Lim 2000), in which respondents are not at risk of the *k*-th event until they have experienced the (*k*-1)th event; robust standard errors are then used to correct for within-individual clustering of events (Rabe-Hesketh and Skrondal 2012). All analyses are weighted to represent the Chinese general population.

Results

Descriptive Analysis

We present means and standard deviations in Table 1, first for the whole sample and then disaggregated by cohort. More recent cohorts are more likely to encounter a labor market composed of stronger private-sector forces, as measured by industrial output produced by collective enterprises or private/hybrid firms. The only exception is for the Consolidation cohort, who saw a higher proportion of private/hybrid firms upon labor force entry (13%) than the Cultural Revolution and Early Reform cohorts (1%), reflecting the transient stage of the Consolidation period when transformation of ownership from the private to the state sector was occurring.

[Table 1 about here]

We describe the joint measure of educational and political credentials at two time points, upon labor force entry and during the survey year in 2003. Not surprisingly, earlier cohorts are more likely to have neither resource upon labor market entry (83%, 77%, 62%, and 45%, $p <$ .001). This situation changes over time when some upgrade their education while others join the party; importantly, these changes occurred unevenly across cohorts, such that by 2003, the

Cultural Revolution cohort lagged behind the others in terms of their possession of either educational or political credentials (62% had neither, vs. 42%-56% of the other three, $p < .001$). When it comes to those with educational but no political credentials, more recent cohorts tend to be overrepresented ($p < .001$) at both time points. Conversely, there is little difference across cohorts in the proportion of political elites at labor force entry (2%-4%), but a new pattern emerges by 2003, when 30% of the Consolidation cohort, 16% of the Cultural Revolution, and 7% and 3% of the Early and Late Reform cohort belonged to this group. Lastly, for all cohorts very few people held both credentials when beginning their careers or by 2003, but it took less time to move into this group for more recent cohorts.

The sector of the first job differs greatly across cohorts, with the largest breakaway from entering state-sector jobs occurring for members of the Late Reform cohort. For example, 21% of this cohort chose self-employment as their first job, compared with only 2%-6% for other cohorts; another 21% of this cohort entered work in private/hybrid firms, while the corresponding figures were 4%-6% for other cohorts. The Cultural Revolution cohort is particularly disadvantaged, as evidenced by both their overrepresentation in the "farm work" category (12% vs. 1%-3% for the two reform cohorts), and their underrepresentation in more prestigious government agencies or public organizations (12% vs. 14%-19% of the other cohorts), probably due to the paralyzed apparatus of government during the Cultural Revolution decade.

Estimating First-Job Sector

Table 2 presents two sets of models. Model 1 is a multinomial logit model predicting whether respondents' first jobs are in private-sector organizations or agriculture work, relative to being in state-sector organizations (reference). Models 2-6 adopt a more restricted job definition counting only non-farm jobs; logistic regression estimates predicting entering private versus state sector are then reported for the whole sample as well as for each cohort.

[Table 2 about here]

As expected (Hypothesis 1) and not surprising given secular trends, we find more recent cohorts are more likely to enter the private sector (Models 1 and 2). Compared with the Consolidation cohort, the odds of having a first job in the private versus a state sector are more than double ($\exp[.782] = 2.186$, $p < .001$) for members of the Cultural Revolution cohort, almost three times as high ($\exp[1.075] = 2.930$, $p < .001$) for members of the Early Reform cohort, and over six times as high ($\exp[1.931] = 6.896$, $p < .001$) for Late Reform cohort members. Wald tests further suggest that the odds of entering the state sector are significantly different for any two of the four cohorts – not just when the Consolidation cohort is the reference group. Results

do no change when farm jobs are excluded (Model 2). But cohort differences are observed when contrasting the odds of entering into agricultural work versus state-sector jobs; members of the Cultural Revolution cohort have more than double the odds (compared to the Consolidation cohort) of beginning their careers on farms rather than in the state sector (exp[.884] = 2.421, $p <$ .001), while the two reform cohorts are far less likely to hold a farm job. These results indicate 1) macro-level state-sector shrinkage and private-sector expansion means every cohort has experienced a fundamental break from their predecessors in terms of their first-job sector, and 2) discontinuities occur, such as when members of the Cultural Revolution cohort entered into farm work in large proportions due to the "sent-down" policy.

We next consider the role of educational credentials in predicting a first job in the private sector. Models 1 and 2 show that more educated persons are less apt to have a private-sector first job, with a high school degree more than halving the odds (1 - exp[-.812] = .556, $p <$ .001) while an associate college degree lowers the odds by 84% (1 - exp[-1.841] = .841, $p <$ .001). The negative association between education and a first job in the private-sector exhibits a high degree of stability across cohorts, as evidenced in Models 3-6 where the coefficients for education are similar, except for the Cultural Revolution cohort. For members of this cohort, high school graduates had no advantage over those with less education in being assigned a state-sector job (Model 4). Wald tests suggest that the high school education coefficient is significantly different between the Cultural Revolution and Consolidation cohorts ($p <$ .05), and between the Cultural Revolution and Late Reform cohorts ($p <$ .01). Therefore, Hypothesis 3a is partly supported. Note that there is no estimate of an associate-college degree for the Cultural Revolution cohort; this is because all of the 47 persons with associate-college credentials from this cohort had their first jobs in the state sector, suggesting that only those with moderately high education but not an associate-college degree were discriminated against in job assignments during the Cultural Revolution, at least with respect to the sector of their first job.

Shifts from State to Private Sectors

As with movement into first jobs, we also find cohort differences in the propensities of shifting from working in a state to a private sector job. Only 5% of the Consolidation cohort members in state sector jobs subsequently moved to private-sector jobs, while 9.4% of the Cultural Revolution cohort, 11.6% of the Early Reform cohort, and 8% of the Late Reform cohort did so. These descriptives do not take into account censoring, with earlier cohorts at risk of sector shifts over a longer time period; even so, we see higher propensities of shifts among more recent cohorts. Do these cohort differences disappear when adjusting for other covariates and censoring

is explicitly accounted for? Table 3 shows estimates from proportional hazards models. In Model 1 we present results for the overall sample using cohort membership as a predictor, and Models 2-5 show estimates for each cohort to test whether structural locational markers predict sector shifts differently across cohorts.

[Table 3 about here]

Cohort variations in sector shifts. The four cohorts differ greatly in their hazard rates of shifting from state to the private sector, even after adjusting for relevant covariates. As expected in Hypothesis 2, more recent cohorts are characterized by considerably higher rates of sector shifts from state to market sector jobs. Compared with the Consolidation cohort, the rates of sector shifts are more than four times as high ($\exp[1.461] = 4.31$, $p < .001$) for members from the Cultural Revolution cohort, more than seven times higher ($\exp[2.151] = 8.593$, $p < .001$) for members of the Early Reform cohort, and seventeen times as high ($\exp[2.842] = 17.15$, $p < .05$) for the Late Reform cohort members. Wald tests indicate that, except for the contrast between the Early Reform and Late Reform cohorts, any two of the four cohorts are significantly different from one another in sector shift rates. This is shown in Figure 2 where, based on Model 1, predicted survival functions (i.e., proportions of individuals who have not yet experienced a sector shift at the beginning of each year since their labor force entry) are plotted for each of the four cohorts.

[Figure 2 about here]

Effects of educational and political credentials across cohorts. Looking at all cohorts combined, neither the educational elite nor the dual elite differ from ordinary workers in terms of their state-to-private sector shifts; but as per Hypothesis 3b, the political elite are far less likely to shift sectors ($1 - \exp[-.909] = .597$, $p < .05$) compared with respondents with neither educational nor political credentials.

Among the educational elite who were associate-college educated but with no political credential, those in the Early Reform cohort follow a pattern different from that of other cohorts: while in their early career they shifted sectors at similar rates as those with neither credential, they became increasingly more likely to shift sectors over time, as indicated by the time-varying coefficients (bottom, Model 3). For the political elite, members of the Late Reform cohort differ most from that in other cohorts, in that they are the least likely to shift sectors and the extremely large coefficient is a reflection of the fact that nobody experienced such an event (Model 5). Lastly, for the dual elite who were both associate-college educated and with political credentials, those from the Cultural Revolution cohort are particularly notable in terms of their significantly lower shift rates (Model 2). Although the lower rates are attenuated by 25.5% ($\exp[.227] - 1 =$

.255) annually, even 26 years following their labor market entry (years 1992-2003), the dual elite from the Cultural Revolution cohort still lag behind those with neither credential in shifting to the private sector (-7.429 + 26 * .227 = -1.523, $p < .05$).

Housing benefits as attenuating disincentives. As per Hypothesis 4, the ability of the state sector to provide housing benefits discourages shifts, reducing the rate by 40.4% (1 – exp[-.515] = .402, $p < .05$, Model 1). Housing benefits persistently discourage sector shifts for the Early Reform cohort (-.718, $p < .01$, Model 4), while such benefits matter less over time for the Cultural Revolution and the Late Reform cohorts. For example, 23 years following their labor force entry (around year 1989-2000), housing benefits cease to discourage shifts among the Cultural Revolution cohort, possibly reflecting the influence of the (1990s) Housing Provident Fund that came to facilitate transfer of benefits across sectors.

Discussion

China in the latter half of the twentieth century experienced dramatic social changes, epitomized in a major economic shift in the form of a transfer of labor from the state to the private sector. Taking a life course and cohort theoretical framing and drawing on nationally representative survey data, we addressed the ways this macro-level change played out in the lives of individuals. In particular, we investigated whether members of particular cohorts entering their first jobs at different historical junctures were differentially impacted by political and economic changes in the labor market. We also examined the effects of educational and political credentials as well as housing benefits on the odds of different cohorts moving into state or private sectors for their first jobs and/or shifting from state to private sector jobs over the course of their work life.

First, we find both entry into the private sector and subsequent sector shifts over the life course increased dramatically from the earliest to the most recent cohorts, as the relative size of state versus private sectors shrunk and it became more precarious (and less rewarding) over time to work in the state sector. The only exception to this general pattern is that the Early Reform cohort (labor force entry 1978-91) shares similar rates of sector shifts as the Late Reform cohort (labor force entry 1992-2003), indicating that economic reform beginning in 1978 marks an important watershed, fundamentally changing the opportunity and incentive structures of shifting sectors. The unique experience of the Cultural Revolution cohort (labor force entry 1966-77), with a large proportion sent to rural areas, is also captured in our cohort analysis, as evidenced by their significantly higher odds of entering farm work. That both outcomes – first-job sector and

sector shifts – are shaped by cohort membership points to the theoretical importance of applying a cohort perspective in understanding the processes underlying the transformation of the Chinese labor market, echoing Ryder's (1965) argument that population turnover – the continuous succession of new cohorts into the adult population and the exit of older cohorts – operates as an engine of social change. Importantly, these cohort differences are not simply a reiteration of the secular trends detected in prior literature, but provide a useful point of departure for speculating about sources of aggregate social change and its sustainability.

For example, we find later cohorts are more likely to move outside the state sector, but will this pattern continue into the future? Today, the state sector is unlikely to surpass the private sector in terms of absolute size, but state employment might become lucrative and attractive yet again, thus transforming the incentive structure once more. Indeed, given that the state continues to hold the most important (and mostly monopoly) enterprises (oil, telecommunications, etc.), and as state sector pay increased substantially from 2002 on to reduce corruption (Meng 2012), future cohorts may well have lower rates of shifting sectors than that of the two reform cohorts.

Our second finding shows that education reduces the odds of entering the private sector across cohorts, the only exception being high-school graduates from the Cultural Revolution cohort, who had no edge over those who had not been to high school. The lost advantage of the high school educated may have to do with the particular political climate when members from this cohort were assigned their jobs. Massive state intervention during the Cultural Revolution created a society where higher education was perceived as a liability, so educational credentials were either irrelevant or played a negative role in job assignment. Further, with the expansion of high schools during that period seeking to level class differences (Andreas 2009), a high school diploma may have had less of a differentiation role as compared with other cohorts. Note, however, that the college educated from this cohort still had higher chances of getting a state-sector job, probably because they were children with "good" family backgrounds, the only eligible group to attend college during that tumultuous era. Future studies with better measures, such as the class designation assigned by the state that was widely used in job assignment until the late 1970s, should attend to the mechanisms underlying the positive role of a college degree in entering state sector jobs, even for the Cultural Revolution cohort.

Third, relationships between social location and sector shifts are shaped by cohort membership, such that people occupying the same location have different state-to-private sector shift rates depending on their cohort membership. Some of these cohort contrasts are driven by transforming state policies, such as the gradual extension of housing benefits to the private sector decoupling state workers' dependence on their work units especially for later cohorts. The null

association between housing benefits and sector shifts in the Consolidation cohort is surprising, but may be explained by this cohort's first-comer status. Housing reform allowed current workers to buy their house, with pricing determined largely by job tenure (Wang and Murie 1999), favoring those in the Consolidation cohort. Given that workers who left their state jobs could keep their homes if they purchased them (Iyer et al. 2013), housing benefits may have become irrelevant for sector shifts for the Consolidation cohort (because they are mostly likely to own their residences).

Other cohort differences preclude a simple explanation based on life stage or historical trends alone, as in the case of different life course patterns of sector shifts for the three elite groups – educational, political, and dual – across cohorts, pointing to the unevenness of change processes. We believe this is a particularly illuminating case of key life course principles, given the shifting meanings of education, of political credentials, and of sector shifts over the past decades, as well as the unique processes of obtaining these credentials for each cohort. The educational elite from the Early Reform and Cultural Revolution cohorts are a case in point. Only among the Early Reform cohort did we find increasing rates of the educational elite shifting sectors over time, suggesting that, compared to their counterparts in other cohorts, the educational elite from the Early Reform cohort spent their early career in the context of the initiation and intensification of economic reforms, and are therefore uniquely positioned to be more responsive to rising opportunities in the private sector (in general having greater appreciation of human capital than in the state sector). The Late Reform cohort did not exhibit the same pattern, however, perhaps because it is still too early for such a pattern to emerge, given that we only have at most 11 years of data for this cohort. In comparison, the educational elite from the Cultural Revolution cohort showed the highest rates of shifting sectors, which might have to do with their early-life experience, including the opportunity to eventually return to school. A college degree with no political credentials suggests that most of the educational elite from the Cultural Revolution cohort received their higher education after the college entrance examination was reinstalled in 1977, which was more likely to be valued in the private sector than the type of degree offered during the Cultural Revolution. Their lost opportunities when they came of age due to the send-down policy could have alienated the educational elite in this cohort from the state.

The political elite in the Late Reform cohort are the least likely to shift sectors. This is understandable, considering China's expansion of higher education and increased value attached to a college degree, which increasingly marginalizes those with only political credentials who face poor prospects in the private sector. Further, the limited job experience of the political elite

in the Late Reform cohort (as of 2003) suggests they have yet to establish political connections that would give them an edge in the private sector. Lastly, the dual elite in the Cultural Revolution cohort has significantly lower rates of shifting sectors than those from other cohorts. As we theorized earlier, unlike other cohorts, many of the Cultural Revolution dual elite obtained higher education through the recommendation policy implemented during the Cultural Revolution decade, with such degrees perceived as of low value (Broaded 1991; Jiang and Ashley 2000). Another possibility is that some of the Cultural Revolution dual elite actually went to college after the Cultural Revolution, either through passing tests or party sponsorship. These then became the first beneficiaries of Deng's policy that dismantled Mao's practice of the Red-over-expert power structure, replacing cadres recruited in Mao's era (Andreas 2009). The advantages of the first-comers also apply here; given their vested interest and entrenched attachment to the state, it is likely that the dual elite from the Cultural Revolution cohort has little incentive to leave.

Our study has some important limitations. First, we rely on retrospective work histories, which might yield some recall bias. Second, we do not have a good measure of the changing meanings of state versus private employment. Future studies could investigate to what extent observed cohort differences are due to value changes versus pure structure changes (i.e., relative size of state versus private sectors). Third, the sample size of the elite is small, which is expected given the very nature of this group, but may have rendered our analysis less stable. Studies based on larger samples could rectify this issue.

Taken together, our study contributes to sociologists' and economists' interest in first job and job mobility by examining cohort differences and their intersection with social location in a country that has experienced one of the most profound economic transitions in human history. We show how macro-level political/economic changes touch the lives of individuals differently in different cohorts, shaping the course of their entry into and subsequent experience in the labor market.

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Table 1: Means and Standard Deviations of Analytic Variables, Overall and by Cohort

	Total (N = 4219)		Consolidation Cohort (N = 659)		Cultural Revolution Cohort (N = 1095)		Early Reform Cohort (N = 1693)		Late Reform Cohort (N = 772)		
	Mean	**Std Dev**	**Mean**	**Std Dev**	**Mean**	**Std Dev**	**Mean**	**Std Dev**	**Mean**	**Std Dev**	
Female	0.46	0.5	0.39	0.49	0.44	0.5	0.46	0.5	0.51	0.5	***
Age (2003)	40.2	13.2	62.97	4.63	51.24	5.99	38.05	6.13	26.67	5.53	***
Age	20.03	4.52	18.57	3.84	20.32	4.84	19.79	4.51	20.79	4.44	***
Married (2003)	0.87	0.34	0.98	0.13	0.99	0.09	0.98	0.15	0.59	0.49	***
Married	0.14	0.34	0.19	0.4	0.17	0.37	0.13	0.34	0.1	0.3	
Less than high school, no political credentials	0.62	0.48	0.83	0.38	0.77	0.42	0.62	0.48	0.45	0.5	***
High school, no political credentials	0.28	0.45	0.1	0.31	0.15	0.36	0.32	0.47	0.39	0.49	***
Associate college, no political credentials	0.06	0.24	0.03	0.18	0.03	0.16	0.04	0.19	0.12	0.33	***
Less than associate college, with political credentials	0.03	0.16	0.03	0.18	0.04	0.21	0.02	0.13	0.03	0.16	***
Associate college, with political credentials	0.01	0.09	0	0.07	0	0.05	0.01	0.07	0.01	0.12	***
Less than high school, no political credentials (2003)	0.53	0.5	0.56	0.5	0.62	0.48	0.56	0.5	0.42	0.49	***
High school, no political credentials (2003)	0.24	0.43	0.08	0.27	0.11	0.31	0.26	0.44	0.36	0.48	***
Associate college, no political credentials (2003)	0.08	0.26	0.03	0.17	0.04	0.2	0.05	0.23	0.15	0.35	***
Less than associate college, with political credentials (2003)	0.11	0.31	0.3	0.46	0.16	0.37	0.07	0.26	0.03	0.18	***
Associate college, with political credentials (2003)	0.05	0.21	0.04	0.18	0.06	0.24	0.05	0.22	0.04	0.19	
Professional (2003)	0.13	0.34	0.05	0.22	0.14	0.34	0.13	0.34	0.15	0.36	***
Father junior high school	0.4	0.49	0.12	0.33	0.21	0.41	0.41	0.49	0.62	0.49	***
Father party member	0.25	0.43	0.05	0.22	0.2	0.4	0.29	0.45	0.29	0.46	***
Work unit government agency	0.04	0.19	0.07	0.25	0.02	0.15	0.03	0.18	0.04	0.2	***
Work unit public institution	0.12	0.32	0.11	0.32	0.1	0.3	0.11	0.31	0.15	0.36	***
Work unit SOE	0.45	0.5	0.5	0.5	0.51	0.5	0.53	0.5	0.29	0.45	***
Work unit collective enterprise	0.14	0.35	0.12	0.32	0.18	0.38	0.17	0.38	0.1	0.3	***
Work unit self-employment	0.09	0.29	0.02	0.16	0.02	0.14	0.06	0.24	0.21	0.41	***
Work unit private/hybrid firm	0.1	0.3	0.05	0.21	0.04	0.2	0.06	0.24	0.21	0.41	***
Work unit not applicable (farm work)	0.05	0.22	0.13	0.33	0.12	0.33	0.03	0.18	0.01	0.07	***
Receive housing benefits from work unit	0.23	0.42	0.22	0.41	0.22	0.42	0.24	0.43	0.22	0.41	
%Industrial output in collective enterprises	0.26	0.15	0.16	0.13	0.17	0.07	0.27	0.11	0.36	0.18	***
%Industrial output by private/hybrid firms	0.11	0.21	0.13	0.23	0.01	0.03	0.01	0.05	0.28	0.28	***
Consolidation cohort	0.12	0.33	--	--	--	--	--	--	--	--	
Cultural Revolution cohort	0.18	0.38	--	--	--	--	--	--	--	--	
Early Reform cohort	0.41	0.49	--	--	--	--	--	--	--	--	
Late Reform cohort	0.29	0.45	--	--	--	--	--	--	--	--	

Notes: 1. Unless specified otherwise in the parentheses, all time-varying variables refer to the year when respondents entered the labor force. All statistics are weighted.
2. The last column reports results from ANOVA testing cohort differences. *** p<0.001, ** p<0.01, * p<0.05
Source: 2003 Chinese General Social Survey.

Table 2: Multinomial and Dichotomous Logit Models Predicting First-Job Sector

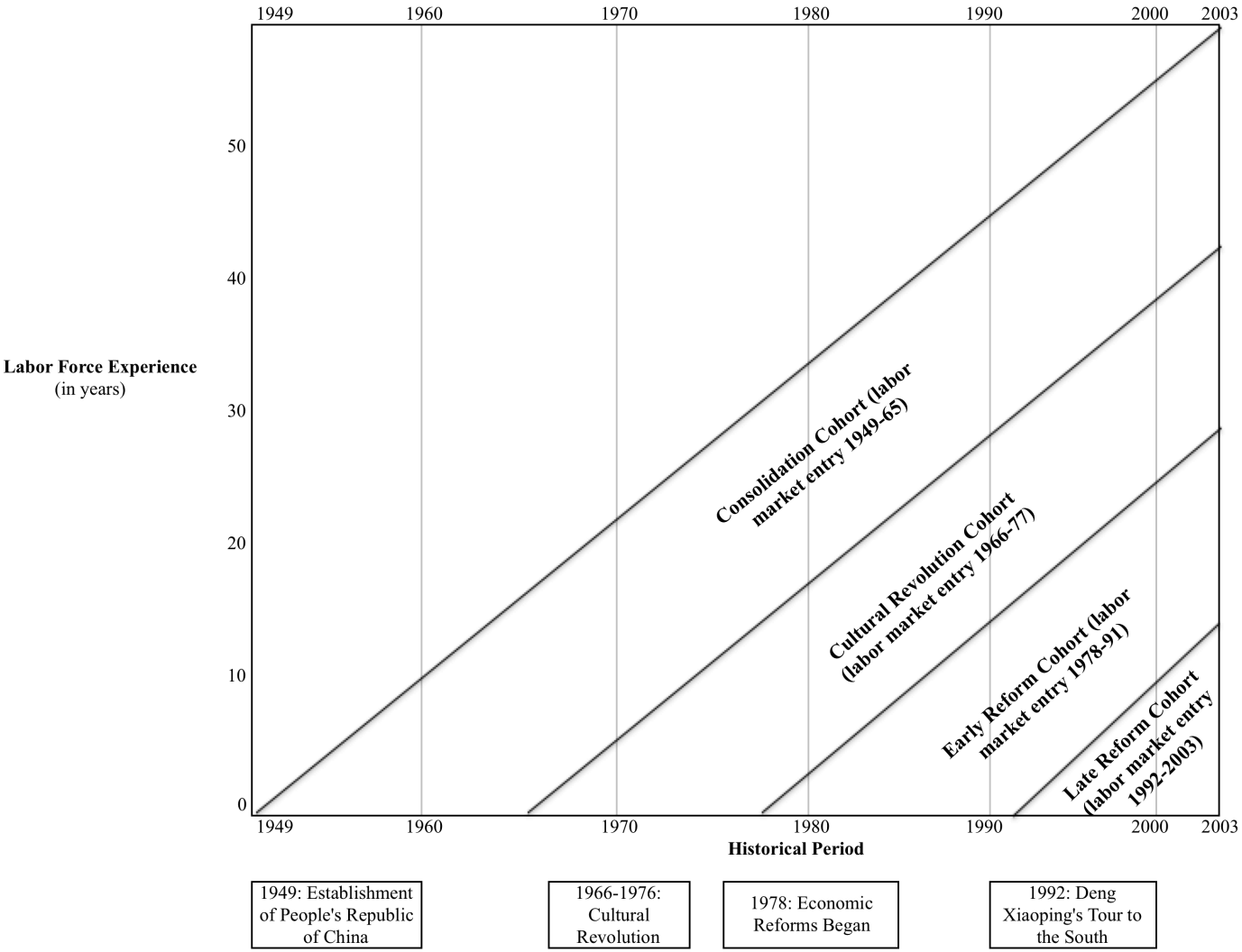
VARIABLES	Model 1: Multinomial Logit (Ref. = State Sector)		Logistic Regression Predicting First Non-Farm Job in Private-Sector				
	Private Sector	Farms	Model 2: Overall	Model 3: Consolidation Cohort	Model 4: Cultural Revolution Cohort	Model 5: Early Reform Cohort	Model 6: Late Reform Cohort
Cohort (Ref. = Consolidation cohort)							
Cultural Revolution cohort	0.782***	0.884***	0.777***				
	(0.194)	(0.263)	(0.190)				
Early Reform cohort	1.075***	-0.652*	1.025***				
	(0.190)	(0.330)	(0.193)				
Late Reform cohort	1.931***	-1.578	1.855***				
	(0.253)	(0.837)	(0.258)				
Education (Ref. = less than high school)							
High school	-0.815***	-0.316	-0.812***	-1.460**	-0.248	-0.680***	-1.265***
	(0.123)	(0.241)	(0.120)	(0.454)	(0.229)	(0.156)	(0.264)
Associate college or more	-1.865***	-1.230	-1.841***	-2.134	--	-1.703***	-2.313***
	(0.233)	(1.074)	(0.229)	(1.423)	--	(0.393)	(0.383)
Female	0.183	0.115	0.209*	0.242	0.206	0.247	0.226
	(0.106)	(0.198)	(0.103)	(0.355)	(0.196)	(0.153)	(0.222)
Age	-0.169**	-0.536**	-0.185**	0.134	-0.373**	-0.123	-0.156
	(0.063)	(0.177)	(0.059)	(0.260)	(0.141)	(0.089)	(0.164)
Age squared	0.003*	0.005	0.003**	-0.007	0.007*	0.002	0.003
	(0.001)	(0.005)	(0.001)	(0.007)	(0.003)	(0.002)	(0.003)
Married	0.547**	1.312**	0.551**	0.629	0.297	0.541	0.729
	(0.182)	(0.428)	(0.178)	(0.459)	(0.362)	(0.281)	(0.420)
Party member	-0.529	1.318	-0.458	--	-0.433	-0.258	-0.733
	(0.345)	(0.881)	(0.334)	--	(0.599)	(0.600)	(0.545)
Father junior high school	0.171	-0.794**	0.1	0.174	0.246	0.076	0.229
	(0.122)	(0.257)	(0.119)	(0.475)	(0.225)	(0.162)	(0.271)
Father party member	-0.301*	-0.020	-0.275*	-0.208	-0.587*	-0.405*	-0.059
	(0.125)	(0.280)	(0.122)	(0.516)	(0.248)	(0.174)	(0.245)
%Industrial output in collective enterprises	-0.708	0.931	-0.497	-0.649	4.519	1.031	-2.000
	(0.640)	(1.289)	(0.631)	(2.092)	(2.471)	(1.511)	(1.222)
%Industrial output by private/hybrid firms	1.766***	0.100	1.683***	-0.451	-2.553	-8.099	2.252***
	(0.361)	(0.990)	(0.349)	(0.796)	(7.825)	(5.194)	(0.538)
Constant	-0.142	6.023***	0.227	-1.446	2.157	0.306	2.003
	(0.810)	(1.726)	(0.738)	(2.457)	(1.657)	(1.137)	(2.192)
Observations	4,237	4,237	4,208	619	1,024	1,687	773

Notes: 1. The combined sample size of Models 3-6 differs from Model 2 due to perfect prediction given cerntain covariates (party membership, college, and province). For example, an associate-college degree predicts perfectly entering the state sector for the Cultural Revolution cohort, so these observations are dropped automatically from Model 4.
2. Province fixed-effects are included in models but are not shown here.
3. Models are weighted. Standard errors in parentheses.
4. -- No estimates due to perfect prediction.
Source: 2003 Chinese General Social Survey.
*** p<0.001, ** p<0.01, * p<0.05

Table 3: Cox Proportional Hazards Models Predicting Job Shift from State-Sector to Private-Sector

VARIABLES	Model 1: Overall	Model 2: Consolidation Cohort	Model 3: Cultural Revolution Cohort	Model 4: Early Reform Cohort	Model 5: Late Reform Cohort
Cohort (Ref. = Consolidation cohort)					
Cultural Revolution cohort	1.461***				
	(0.330)				
Early Reform cohort	2.151***				
	(0.356)				
Late Reform cohort	2.842***				
	(0.537)				
Educational and Political Resources (Ref. = ordinary workers)					
Educational elite	-0.188	-0.980	-0.127	-1.192	-0.479
	(0.282)	(1.181)	(0.534)	(0.673)	(0.530)
Political elite	-0.909*	0.117	-0.765	-0.985	-37.738***
	(0.358)	(0.951)	(0.467)	(0.658)	(0.709)
Dual elite	-0.461	1.620	-7.429*	-0.236	-0.716
	(0.363)	(1.260)	(2.908)	(0.541)	(0.947)
Recipient of housing benefits from current wor	-0.515*	0.224	-3.201***	-0.718**	-2.554**
	(0.242)	(0.698)	(0.763)	(0.243)	(0.830)
Female	-0.390*	0.601	-0.313	-0.195	-0.919*
	(0.169)	(0.481)	(0.309)	(0.245)	(0.397)
Age	-0.003	-0.159	0.288	0.175	0.039
	(0.085)	(0.146)	(0.183)	(0.118)	(0.275)
Age squared	-0.001	0.003	-0.004	-0.004	0.000
	(0.001)	(0.002)	(0.003)	(0.002)	(0.005)
Married	0.337	0.789	0.159	0.175	-0.604
	(0.296)	(0.788)	(0.482)	(0.313)	(0.536)
Father junior high school	-0.041	0.219	0.190	0.085	-0.365
	(0.191)	(0.844)	(0.326)	(0.246)	(0.320)
Father party member	-0.270	-0.031	-0.399	-0.223	-0.016
	(0.185)	(0.934)	(0.364)	(0.217)	(0.417)
Professional	-0.420	-1.514	-0.092	-0.402	-0.137
	(0.250)	(0.870)	(0.364)	(0.320)	(0.536)
Working in SOEs	0.610**	-0.272	-0.022	-0.075	0.458
	(0.215)	(1.275)	(0.400)	(0.461)	(0.476)
%Industrial output in collective enterprises	3.241**	-3.171	-3.220	2.821	3.901*
	(1.149)	(3.733)	(1.742)	(1.441)	(1.597)
%Industrial output by private/hybrid firms	-0.409	-2.548	10.133*	-0.245	0.491
	(0.461)	(1.783)	(4.934)	(0.743)	(0.863)
Variables whose "effects" vary over time					
Educational and Political Resources (Ref. = ordinary workers)					
Educational elite				0.119*	
				(0.059)	
Dual elite			0.227*		
			(0.110)		
Recipient of housing benefits from current work unit			0.107**		0.994***
			(0.035)		(0.241)
Married	-0.057*				
	(0.028)				
Working in SOEs		0.084*		0.177***	
		(0.041)		(0.050)	
%Industrial output in collective enterprises	-0.117*				
	(0.050)				
%Industrial output by private/hybrid firms			-0.408*		
			(0.192)		
Number of events	305	28	86	153	38
Observations	64,738	18,304	22,876	20,500	3,058

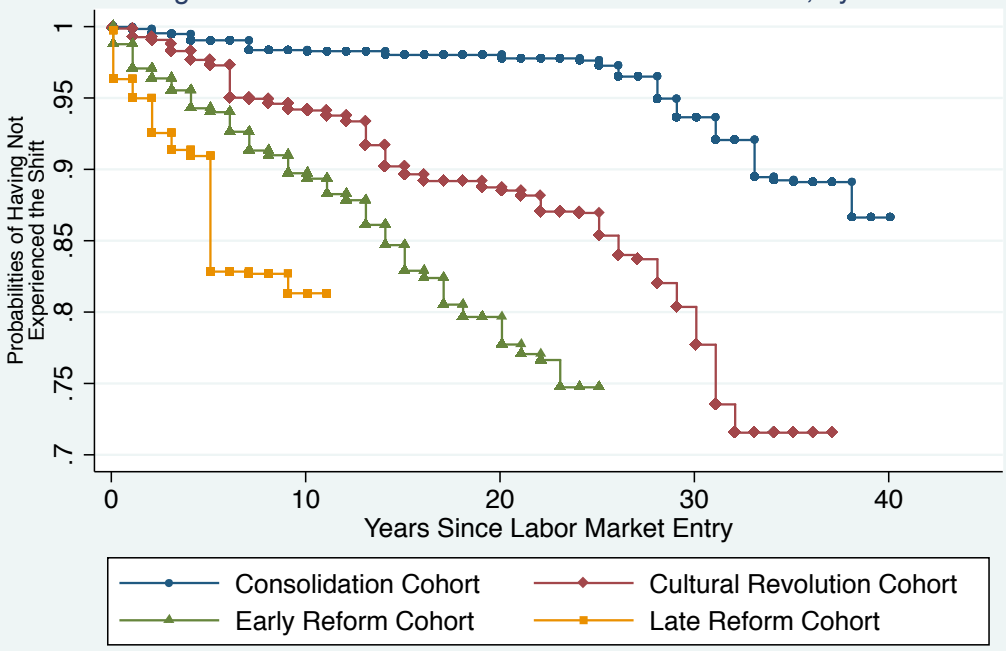
Notes: 1. Province fixed-effects are included ir
2. Models are weighted. Robust standard errors in parentheses.
Source: 2003 Chinese General Social Survey.
*** p<0.001, ** p<0.01, * p<0.05



	1949-65	1966-77	1978-91	1992-2003
Overarching Goal	Establish a new political-econo	Maintain the power of a political segment	Develop a modern economy	Privatization
Private Sector	Virtually non-existent	Virtually non-existent	Emerge	Expand
Job Attainment	Assigned by the state	Assigned by the state	Mostly assigned by the state	Obtained by oneself
Lifetime Employment	Yes	Yes	Abolished in 1986	No
Wage Determination	Job ranking	Job ranking	Mostly on job ranking	Increasingly on productivity
Benefits Provision by the state	Yes	Yes	Gradually abolished	Gradaully extended to the private sector
Roles of Education	Irrelevant	Negative	Positive	Positive

Figure 1: Life Course Stages and Historical Events in the Post-1949 China: An Illustration of Four Cohorts

Figure 2: Predicted Survival Curves of Sector Shifts, by Cohort



Source: 2003 Chinese General Social Survey.