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The Influence from the Past: Organizational Imprinting and Firms' Compliance with Social Insurance Policies in China

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Abstract Using a nationwide survey of randomly selected manufacturing firms in representative Chinese cities, we examine how firms' compliance with social insurance policies is shaped by their historical imprinting, by their founding ownership structures, as well as by massive institutional changes. Our empirical results suggest that firms founded in the state socialist era and firms founded as Chinese state-owned enterprises (SOEs) were infused with socialist institutional logics of labor relations, and they tended to comply with social insurance policies even in the present market socialist era. Chinese SOEs restructured into private and joint-ventured firms attenuated the lingering effect of organizational imprinting and provide social insurances for fewer workers. This research is among the first to probe the historical influence on labor protection in contemporary society. Through studying the stability and changes of socialist institutional logic of labor relations, our research leads to a better understanding of the situation of labor relations in contemporary China.

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Introduction

Scholars have long recognized that organizations' founding conditions have an imprinting effect and play an important role in shaping their subsequent managerial ideologies, strategies, and organizational structures (Stinchcombe 1965). They implicitly assume that founding institutional environments remain relatively stable over time and constrain organizations' further development. However, this assumption does not hold in emerging markets, where both the economy and society are changing rapidly. Societal changes have an influence on firms' "institutional logics"—the organizing principles that furnish actors with guidelines on how to behave within a given institutional setting (Friedland and Alford 1991). Changes in institutional logics generate new constraints and opportunities that render prior institutional logics irrelevant. For example, in China, the current institutional logic of market competition gave rise to a rational discourse of labor relations that views firms as efficient assemblages of various factors and labors as an input for transforming raw materials into finished products, which is different from the former institutional logic of labor relations that was to build firms as fief and clan-like organizations, and to incorporate social insurances within business organizations to protect the local interests of employees with strong government supervisions (Boisot and Child 1996; Walder 1986). This former institutional logic lasted for decades and it has been a target of China's economic reform. In the present time, when market competition is introduced and government supervision is often absent, will the former institutional logic still have an effect on the current practices of Chinese firms?

The institutional logics of labor relations in China have changed from normative to rational discourses, with the former emphasizing firms as social units whereas the later emphasizing firms as economic units that serves production and growth purposes. We apply perspectives of organizational imprinting to study labor protection activities of Chinese firms in a changing environment. The shifting pattern of labor relations provides a research setting for an examination of whether and how organizations founded under a given institutional logic reproduce their founding characteristics. Moreover, firms founded earlier in China's modern history have experienced subsequent changes in institutional logics but have responded in different ways; this firm-level variation therefore provides a great opportunity to examine whether and how firms founded in the same period might be imprinted by their founding environments and react to subsequent institutional changes differently.

There are many aspects of labor protection; social insurance provision is among the most important because it tended to benefit all the employed workers and yet it failed to reach a large proportion of workers for many reasons, especially in a transitional economy like China. Since the 1990s when China's economic reforms were intensified, a number of laws and regulations have been enacted, including the Company Law (adopted in 1993), the Labor Law (adopted in 1995), and a number of social insurance regulations.[1] All these laws and regulations helped to form a social insurance system for workers, nowadays known as the "five insurances and one fund" system: retirement insurance (adopted in 1991 and modified in 1997), medical insurance (specified in the Company and Labor laws), unemployment insurance (adopted in 1990s), injury insurance (adopted in 2004), fertility insurance (adopted in 1995 and modified in 2004), and the "one fund" is an accumulation fund for housing purchases (adopted in 1999 and modified in 2004). These various sorts of insurances and fund were introduced into the state's formal program of labor relations separately; the regulations also leave firms with room for their own explanations, e.g., firms are allowed to hire temporary and contracted workers whose welfares are not regulated by relevant laws and policies.

In this study, we focus on the first three insurances, since injury and fertility insurances were enacted selectively based on individual employees with work-related injuries or female workers who choose to give birth to kids. In contrast, the other three insurances are universal for all employees, and were implemented earlier. Our dataset was collected in 2006, which is too recent to observe the implementation of those regulations on injury and fertility insurances, enforced in 2004. With respect to the fund for housing purchases, because we do not have information in the dataset on housing and recent inflation in China's residential housing market, we decided to leave it out from the current research.

Although the *Labor Law* implemented in 1995 requires firms to offer retirement, medical, and unemployment insurances to all employees, in practice many firms have failed to comply with this law (Lee 2007). Researchers have found that a large proportion of blue-collar workers in China are not covered by basic social insurances (Croll 1999; Gallagher 2005; Lee 2007), partly because it is very costly for firms and the government. The social insurance expenditure of Chinese governments was found to top other fiscal expenditures in 2005 (Frazier 2010, p. 91). Those firms that do provide some basic social insurance tend to provide welfare benefits to technicians and administrative members while leaving blue-collar workers without coverage. In this respect, we use a firm's provision of basic social insurance for blue-collar workers as an indicator of its labor relation management practices.

Drawing on a nationwide survey of Chinese firms' labor relations practices and supplemented by rich archival documents, our research contributes to literature of labor relations in transition economies through probing historical factors that may influence firms to provide social insurance for workers. Previous research on labor relations in transition economies focused more on the influence of industrial sector factors and institutional factors (Locke et al. 2007; Frazier 2010), they left historical factors largely neglected and thus failed to explain a large sum of variations in labor relations practice within these countries. We test the effects of imprinting while controlling for other factors to show the importance of historical influence on the current practices of firms.

Our research also contributes to the literature of organizational imprinting. Prior research on organizational imprinting focused exclusively on the factors that help to reproduce the stability of organizations (Baron et al. 1999; Burton and Beckman 2007), factors that may change the imprints received insufficient considerations in this line of studies. We analyze factors that may strengthen or weaken the imprinting effects within a single research to provide a more comprehensive picture of corporate change. Prior research on organizational imprinting also tend to treat a cohort of organizations founded in the same era as homogenous group (Marquis 2003; Lounsbury 2007). Through taking into consideration the founding ownership

[1] For details, see the official website of the China Insurance Association, which is affiliated with the Ministry of Human Resources and Social Security of the People's Republic of China, available at http://www.csia.cn/sbfg.

structures of firms, we reveal that the same cohort of organizations may react to institutional forces differently, thus they bring heterogeneity, not homogeneity of practice that was predicted by institutional theorists (DiMaggio and Powell 1983).

The important implications of the above theoretical contributions are also discussed after reporting our research findings.

Theories and Hypotheses

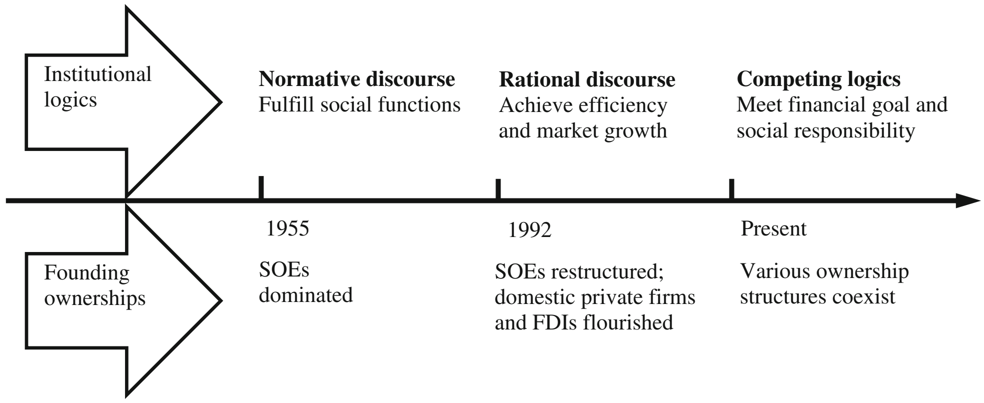
Stinchcombe (1965, p. 168) argues that organizations are historically contingent on their founding conditions and that they "must construct their social systems with the social resources available" at that time they were founded. Later in their development and maintenance, firms reproduce founding characteristics because of inertial forces such as tradition, vested interests, ideology, or lack of competition (Stinchcombe 1965, p. 169). Following Stinchcombe's organizational imprinting hypothesis, subsequent research has confirmed the prevalence of this imprinting mechanism in a wide variety of contexts and has specified social mechanisms that explain why and how the past continues to influence the present (Baron et al. 1999; Burton and Beckman 2007; Kriauciunas and Kale 2006; Marquis 2003). However, neither Stinchcombe's hypothesis nor subsequent studies have fully addressed the effects of institutional transformations on organizational imprinting. Institutional changes are usually accompanied with shifts in institutional logics (Friedland and Alford 1991). Once founding institutional logics are replaced by emerging alternatives, an organization has to comply with new institutional logics by replacing its outmoded characteristics, such as strategies and identities that were shaped by founding conditions. Institutional logics are part of the broader societal culture (Thornton and Ocasio 2008). According to Swidler (1986, p. 273), "Culture influences action not by providing the ultimate values toward which action is oriented, but by shaping a repertoire or 'tool kit' of habits, skills, and styles from which people construct 'strategies of action'." Competing institutional logics serve as the toolkit of organizations' practices. Organizations in different fields, e.g., industry, location, and ownership, select different elements from a shared "toolkit." The initial differences in their selection can lead to differences in their later management practices, such as the ways they treat their employed workers.

Over the past three decades, economic growth has accelerated in China. Yet, at the same time workers' working conditions have steadily deteriorated, as revealed by overtime work, unpaid salaries, hazardous work environments, and a decline in the provision of welfare benefits. This new trend was supported by a rational discourse of labor relations that treats labor both as a commodity and as an input by which firms may maximize their profits (Gallagher 2005; Lee 2007). Situating this period of deteriorative labor protection in a historical perspective, we have specified two distinctive eras of labor relations that have emerged since the Chinese Communist Party (CCP) took power in 1949, with two institutional logics—normative and rational discourses of labor relations—dominating in each era (Frazier 2002, 2010; Gallagher 2005; Guthrie 1999; Lee 2007; Walder 1986). Figure 1 briefly summarizes the co-evolution of institutional logics of labor relations and the founding (or transformation) of firms with diverse ownership structures.

In this study, we refer to the period from 1955 to the early 1990s as the "state socialist" era (Lee 2000). This era was dominated by a normative discourse of labor relations that was characterized by low wages but highly functional welfare systems: workplaces provided employees lifetime employment, medical insurance, and welfare benefits. Since taking power in 1949, the CCP has implemented a series of reforms intended to build an industrial system to fulfill its socialist goals. All firms became either state- or collectively owned by 1955 (Frazier 2002). These firms were known as "work units" through which workers received a wide variety of welfare benefits, such as subsidized housing, free childcare and education for their children, free medical care for the family, and a guaranteed pension (Walder 1986). Starting from the late 1970s, when China started to adopt an open-door policy, privately and foreign-owned enterprises flourished. By the early 1990s, there were already many non-state-owned enterprises (SOEs).

The second era of labor relations began in the early 1990s and continues to the present, a time in which a rational discourse of labor relations has gained prominence. Although China's economic reforms began in 1978, it was not until 1992, the year of Chinese political leader Deng Xiaoping's famous address to the nation in the city of Shenzhen, that the market economy gained its legitimacy from the government. Firms have gained managerial control over workers and have adopted workplace policies that are designed to maximize economic gains. The dissipation of SOEs' monopoly rent caused the decline of their profitability (Lin, et al. 1998, p. 425). At the same time, a majority of blue-collar workers have lost access to firm-sponsored medical coverage, retirement plans, and other types of basic insurances (Croll 1999; Gallagher 2005), which caused massive protests in Northeastern China and in cities where SOEs dominated (Lee 2000, 2007). However, within the SOE firms that did survive the mass restructuring and the aftermaths, the general welfare provisions that had been established during the socialist era remain in place to varying extents in the market era

Fig. 1 Co-evolution of institutional logics and firms of different ownership structures



(Guthrie 1999). We refer to this period as the "market socialist" era in our study (Lee 2000).

A number of scholars argued that organizations (either transnational nonprofit organizations or business firms) in affluent countries would bring their institutions and standards to developing countries in globalization processes, and they assumed that firms influenced by rational discourse would treat workers better (Locke et al. 2007) as they realized the importance of human resources. However, in developing countries like China, instead of diffusing good practices, many global investors were attracted by low labor costs and some *raced to the bottom* to exploit from loose labor policies (Frazier 2010, p. 38).

Stinchcombe (1965) suggested that organizations founded at a given time would reflect the social conditions of the time, and that elite groups and labor forces would either provide opportunities or construct constraints for the organizations. Organizations may preserve their founding structures and management models long enough for us to see the stability of organizational types over time. Organizations founded in different eras develop different practices due to the fact that they are rooted differently in their historical eras, even if they face the same institutional environment now. Because of the enduring influence from the former institutional logic of labor relations in China, it is likely that some of the older domestic firms may carry on the historical legacy and learning from their past experiences. We hypothesize that:

Hypothesis 1 Chinese firms founded in the state socialist era provide social insurances for more workers than firms founded in the market socialist era.

Ownerships may serve as agencies of organizational imprinting. Stinchcombe (1965, p. 158) used industries developed in different historical eras as examples. Marquis (2003) analyzed the networks of institutions within local communities. Lounsbury (2007) examined the importance of business cultures in American major cities. Both industries and geographical locations may serve as systems for imprinting, as may ownership structures. In China, diverse ownership structures are a relatively new phenomenon; until a half century ago, most firms were either state- or collectively owned. Since China adopted a policy of gradual economic reform, many domestic private firms and joint ventures were also established. Many SOEs established in the state socialist era underwent systematic restructuring and some were transformed into private and joint-venture firms. Firms of different ownership structures have come to contribute significantly to China's industrial economy.

Firms of different ownerships would incorporate organizational imprinting differently. At the organizational level, SOEs might inherit more of normative discourse of labor protection whereas non-SOEs might take a more rational discourse. In a study of firms in the city of Shanghai, Guthrie (1999) finds that an ethic of paternalism, fairness, and protection of workers continues to prevail, especially among those that were founded in the socialist era. This phenomenon, which Guthrie terms the "socialist residuals," stands in contrast to the principle of the capitalist production system which advocates profit maximization. Similarly, Gallagher (2005) also reports that SOEs, usually those founded in the state socialist era, offer better labor protection than do firms of other ownership structures even after waves of restructuring efforts during the market socialist era.

The state socialist era laid a solid foundation for China's industrial tradition. Many SOEs were founded in this era. Some SOEs founded in the market socialist era may, nevertheless, follow a normative discourse of labor relations because doing so is a long-established tradition with SOEs. Furthermore, as a legacy of pre-restructuring labor policies, SOEs "bear a heavy burden from retirement pensions, other social-welfare costs, and redundant workers…The SOE's were responsible for their employees' retirement pensions, housing, medical cares, and other needs," which is referred as a "policy burden" imposed by the state policy upon SOEs (Lin et al. 1998, p. 425). Although at the cohort level firms founded in the market socialist era will provide social insurances to fewer workers (as stated in Hypothesis 1), at the firm level, the ownership structure of firms can moderate this effect.

More domestic private firms and joint ventures were founded in the market socialist era than in the state socialist era. For newly founded joint ventures, labor practices were affected by the pressure of global production from the very beginning. Driven by the pressures of rising wages, foreign investment came to China for its lower labor costs. Similarly, suppressing the cost of labor became as critical to domestic private firms as well. For both private and joint-venture firms founded in this pro-market environment, the local governments' incentives associated with attracting investment and export markets have "led to an overwhelming emphasis on firm autonomy and flexibility at the expense of workers' safety, health, and rights" (Frazier 2010, pp. 37–38; Gallagher 2005, p. 65). In this context, we address variations in firms' provision of social insurances for workers by hypothesizing:

Hypothesis 2.1 For SOEs, firms founded in the market socialist era have the same level of social insurance provision for workers as those founded in the state socialist era.

Hypothesis 2.2 For non-SOEs, firms founded in the market socialist era provide social insurances for fewer workers than those founded in the state socialist era.

The second era of labor relations was also marked by extensive SOE restructuring. Under the pressure of substantial redundant labor and low productivity resulting from the accumulated effects of soft budget constraints and the socialist government's full employment goals in the first era (Guthrie 1999; Steinfeld 1998), a new wave of intensive SOE reforms was implemented. Waves of mergers, acquisitions, and restructuring were accompanied by massive layoffs of SOE workers, who were forced into early retirement, to receive reductions in wages, and to accept the loss of a variety of compensations and benefits. In sharp contrast to the cradle-to-grave welfare benefits provided in the socialist era, the massive layoffs and deteriorating labor relations were interpreted as a rule of market competition. The shifting institutional logics of labor relations therefore provide an opportunity to examine the contingency of organizational imprinting for SOEs. As mentioned before, changes in institutional logics might reshape an established pattern of how organizations behave, which undermines organizational imprinting by diverting the reproduction process. SOEs provided workers with generous material, social, and political resources before intensified reforms took place in the early 1990s. However, after waves of mergers and acquisitions accompanied massive layoffs, some SOEs were infused with a rational discourse of labor relations in their employee management practices.

According to Kriauciunas and Kale (2006), during the transition from a socialist economy to a market economy, firms sought out knowledge and learned from the experiences of firms in other countries. The different learning sources therefore either reinforced or alleviated the effects of founding characteristics. In the second era, through restructuring, some Chinese SOEs have remained state owned while others have transformed into private or joint-ventured firms; in either case, the purpose of restructuring was to relieve firms from welfare burdens and to model them after the so called "modern enterprise system" as defined by the Company Law. For SOEs that remained state owned, they may preserve their organizational imprinting by following their traditions. For SOEs that reformed into private firms or joint ventures, however, learning how to comply with market environments has been crucial for their survival and growth. The diverse learning experiences and different institutional logics therefore lead to the following two hypotheses:

Hypothesis 3.1 For SOEs that were restructured in the 1990s, firms that remained state owned have the same level of social insurance provision for workers as those without restructuring experience.

Hypothesis 3.2 For SOEs that were restructured in the 1990s, firms that emerged as private or joint-ventured firms provide social insurances for fewer workers than those without restructuring experience.

Data and Measures

Our main dataset is from a national survey[2] conducted in 12 Chinese cities. Department and line managers in charge of different functions were asked to provide information on their firm's practices and policies in various dimensions of corporate social responsibility (CSR), including labor and environmental protections. Labor protection questions were answered by human resource managers. In labor protection module of the survey, particular interest was on social insurance provision for blue-collar workers, since social protection of laborers is an important part of CSR as defined by ISO 26000—documental guidance on social responsibility by International Organization for Standardization.[3] Our analyses were based on questions about social insurance provision for workers in 2005. We lagged each independent variable 1 year by using information from

2 The main dataset is from a national survey conducted by researchers at the China Survey Data Network, a joint institute run by the China Center for Economic Research at Peking University and the China Data Center at University of Michigan. Further information about the dataset may be found at http://www.chinasurveycenter.org/csdn_en/DownLoadChannel_new/detail.aspx?ClassID=4&DataID=8.

3 More information on descriptions of guidance document ISO 26000 may be founded at http://www.iso.org/iso/home/standards/iso26000.htm.

2004. The dataset contains firms in mining, utility, service, and manufacturing sectors, with the majority firms from manufacturing industries. Because the manufacturing firms represented 89.3 % of the sampled firms, we selected only those firms, which yielded 1,131 firms. Of these 1,131 firms, 19 failed to provide information on their ownership structures (i.e., a primary independent variable), and 75 did not report information on social insurance provision (i.e., our major dependent variable). Therefore, we used the remaining 1,037 firms for our statistical analyses. The sample comprises manufacturing firms with an annual sales volume larger than 5 million RMB. We also collected relevant archival documents from firms' official websites on their founding years and founding ownership structures to complement the survey data.

Dependent Variable

Social Insurance Provision. In the survey, managers were asked to check one of five categories (1: 0–20 %, 2: 20–40 %, 3: 40–60 %, 4: 60–80 %, and 5: 80–100 %) to indicate the percentage of blue-collar workers covered by each type of social insurances: retirement, medical, and unemployment insurances, among others. As we have mentioned in the "Introduction" section, these insurances have been adopted selectively and differently by various firms. We use these three ordinal variables as our dependent variables in this research. Rather than merging them into one variable, we examine them separately: if our main independent variables show the same patterns on each of the three dependent variables, then the results are robust and highly reliable.

Independent Variables

Founding_year. We collected the information on the founding year of each firm and used it to create a dummy variable, *Founding_year*, denoting a firm founded in the state socialist era from 1955 to 1992 when it equals 1; otherwise denoting a firm founded in the market socialist era from 1993 to the present when it equals 0.

Founding Ownerships. Firms' ownership structures in the survey are characterized by three dummy variables: SOEs, domestic private firms, and joint ventures. Among 1,037 firms with identifiable information on ownership structures in 2004, 237 were founded as SOEs, 570 as domestic private firms, and 230 as joint ventures.

SOE Restructuring. Of the 237 firms that were founded as SOEs, 98 did not undergo restructuring, and a dummy variable (*Reform_Not*) was used to refer to these firms (when the dummy variable equals 1). Another 60 SOEs underwent restructuring yet remained state owned. For these SOEs, we created a dummy variable (*Reform_SOE*) to indicate that a restructured SOE had kept its SOE status, which we hypothesize, will lead to the same level of social insurance provision in comparison to SOEs without restructuring experiences. The remaining 79 SOEs underwent dramatic institutional changes and became private or joint-venture firms. We created a dummy variable (*Reform_Private*) for these firms, which we hypothesize will have lower level of social insurance provision compared to SOEs without restructuring experiences.

Control Variables

Legitimacy. Neo-institutional sociology advanced our understanding of diffusion of organizational ideologies and practices by taking non-material factors into consideration (DiMaggio and Powell 1983; Edelman 1990; Meyer and Rowan 1977; Tobert and Zucker 1983), which extended Stinchcombe's organizational imprinting insight that focuses mainly on material resources (Marquis and Huang 2010). In this study, we take firm's present external environment factors—coercive and normative legitimacy—into consideration (DiMaggio and Powell 1983; Meyer and Rowan 1977; Tobert and Zucker 1983). With respect to coercive legitimacy, as shown in a large body of literature, government regulation is usually a strong force in shaping firms' behaviors. We therefore include the number of government inspections of labor protection practices per year (*Gov_Inspect*) to capture the state regulation. It has long been argued that firms are under pressure to comply with labor standards set up by their clients (Locke et al. 2007, 2009). We include a dummy variable (*Client_Pressure*) to indicate whether a firm's clients have required it to meet labor protection standards including social insurance provision. In the absence of data directly measuring the extent of professionalization, an indicator of normative isomorphism, we use an alternative proxy—the percentage of managers with at least a college education—to capture of its effect on labor protection (*Manager_Edu*). This is an ordinal variable with four values ranging from 0–20 %, 20–40 %, 40–60 %, to above 60 %. In line with research on firms' behaviors in China (Ma and Parish 2006), we generate a dummy variable (*CEO_Political*) to indicate a CEO's political status, where 1 indicates that a firm's CEO is either a member of People's Congress or a representative of People's Political Consultative Conference—two most important ways for Chinese entrepreneurs to engage in political decision makings.

Economic Performance. Scholars have argued that economic performance is the basis for CSR activities (Campbell 2007), thus we include firms' profits (logged) in 2004 as a control variable (*Profit*). Studies have also pointed to the importance of a firm's size in capturing public attention. For example, Bartley and Child (2010) find that large firms are more likely to be noticed and criticized by "anti-sweatshop" movements. In line with this strand of research, we include firm size as a control variable (*Employee*), measured by the number of employees (logged) in 2004.

Public Relations. We generate a variable (*Marketing*) indicating a firm's marketing expenditures (logged) in the past 3 years (unit: 10,000 RMB) to control the effect of a firm's brand and public image on labor protection.

Regional Institutional Environments. Because the firms in the dataset are from 12 cities that represent diverse local institutional environments, we also control for the firms' city locations.

Models and Findings

Basic descriptions of variables used in our data analysis and their correlations are shown in Appendix—Tables 4 and 5. We begin by testing the effects of organizational imprinting on each of the three dependent variables, demonstrated in Table 1. Model 1 presents the result of ordered logistic estimates of retirement insurance provided by all firms. The positive sign of the coefficient of *Founding_year* indicates that firms founded before 1992 are more likely to provide retirement insurance to their workers, compared with firms founded after 1992 (i.e., the reference group). Model 2 and Model 3 use the same independent variables to predict firms' provision of medical insurance and unemployment insurance, respectively. The pattern is consistent: a firm founded before 1992 is very likely to provide medical insurance and unemployment insurance. Confirming Hypothesis 1, firms founded in the state socialist era will offer more workers with social insurances than firms founded in the market socialist era.

In addition, the percentage of managers with at least a college degree is positively related to firms' provision of insurance. However, the effect of government inspections is not significant. When a firm's clients require it to comply with labor standards, we find that while a firm is more likely to offer employees retirement and medical insurance, the effect on unemployment insurance is not significant. In addition, a CEO's engagement in political activities has no significant impact on social insurance provisions. Another firm-level factor, firm size, measured as number of employees, is positively related to firms' provision of basic insurances. Firms' marketing expenditures are positively related to medical and unemployment insurance but not retirement insurance. In addition, the negative signs of the coefficients of *Private* and *Joint-venture* indicate that domestic private firms and foreign direct investments are less likely to provide social insurance to their workers, compared with SOEs (i.e., the reference group). The results are consistent across all three kinds of insurances.

Table 1 Ordered logistic estimates of social insurance provision by all firms

Independent variables	Model 1 Retirement	Model 2 Medical	Model 3 Unemploy
Founding_year	0.773***	0.777***	0.870***
	(0.186)	(0.196)	(0.197)
Private	−1.369***	−0.817***	−1.233***
	(0.222)	(0.229)	(0.235)
Joint-venture	−0.964***	−0.514**	−0.840**
	(0.264)	(0.270)	(0.277)
Client_Pressure	0.277*	0.436**	0.172
	(0.154)	(0.168)	(0.167)
Gov_Inspect	0.01	0.024	−0.022
	(0.022)	(0.026)	(0.024)
CEO_Political	0.075	−0.094	0.195
	(0.165)	(0.179)	(0.177)
Manager_Edu	0.423***	0.331***	0.355***
	(0.065)	(0.067)	(0.068)
Marketing (logged)	0.061	0.139**	0.079*
	(0.046)	(0.048)	(0.048)
Employee (logged)	0.152**	0.040	0.230**
	(0.076)	(0.08)	(0.081)
Profit (logged)	0.069	0.071	0.085
	(0.186)	(0.176)	(0.194)
LR test	−932.884***	−781.851***	−778.713***
N	1,024	935	948

Unemploy unemployment

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Reference group for *Founding_year* are firms founded after year 1992; reference group for variables *Private* and *Joint-venture* are firms founded as SOEs. SD in parentheses. LR test compares full models with models having only control variables. City effects are controlled in all statistical models but their coefficients are not included in the table. Constants of ordered logistic models are not shown in the table

Our descriptive analyses also show that Chinese firms founded as SOEs tend to provide more workers (in percentage) with social insurances, and the variances of their social insurance provision is lower than firms founded as privately owned and joint ventures. Figure 2 describes the general pattern of provision of retirement, medical, and unemployment insurances by various firms in our dataset.

Using samples of firms founded as SOEs, domestic private firms, and joint ventures, respectively, we further examine how firms' founding ownership structures moderate the effects of socialist-era imprinting. The results in Table 2 show that SOEs founded in the market socialist era (the reference group) are systematically as likely to provide workers with social insurances as SOEs founded in the

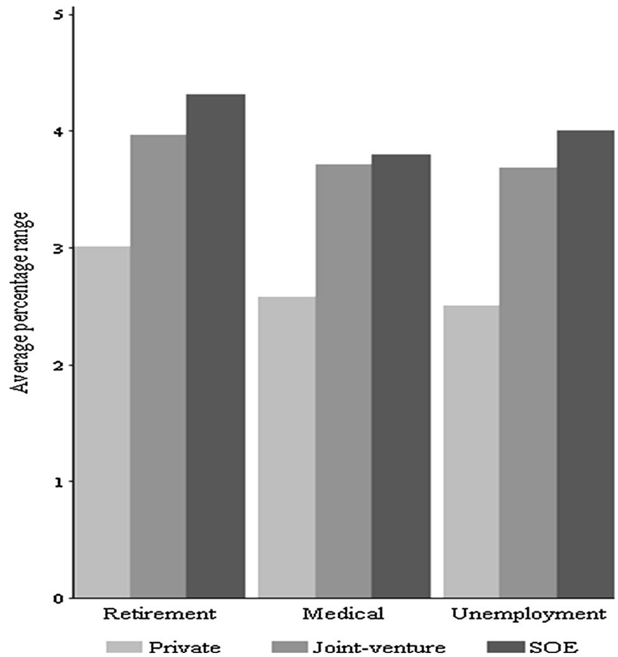


Fig. 2 Social insurance provision for workers by firms of different founding ownership structures. *Notes*: Percentage range of workers provided with social insurances: 1: 0–20 %, 2: 20–40 %, 3: 40–60 %, 4: 60–80 %, 5: 80–100 %

state socialist era, other factors controlled. The coefficients of the dummy variable *Founding_year* in models 4–6 are not significant, supporting Hypothesis 2.1. In comparison, domestic private firms and joint ventures founded in the market socialist era (the reference group) are less likely to provide social insurances than their counterparts founded in the state socialist era, as shown by the positive signs and significance levels of the coefficients of the variable *Founding_year*, thus lending support to Hypothesis 2.2. In addition, when a higher percentage of a firm's managers receive at least a college degree (*Manager_Edu*), that firm is more likely to offer social insurance to a higher percentage of its workers. However, state regulation (*Gov_Inspect*) does not show significant effects other than for unemployment insurance of domestic private firms, which may suggest that domestic private firms which provide less unemployment insurance may attract more government inspections. Market power (*Client_Pressure*) has positive significant effect on domestic private firms only.

Our descriptive analyses show that SOEs that have not been restructured tend to provide more workers (in percentage) with social insurances, and the variances of their social insurance provision is lower than SOEs that have been restructured, especially when compared with privatized or joint-ventured SOEs. Figure 3 describes the general pattern of social insurance provision by SOE firms that have not been restructured, firms restructured but kept SOE status, and those restructured and successfully changed SOE status.

We further examine how SOE firms' different restructuring experiences changed their historical imprinting. We confirm Hypothesis 3.1 by models 13–15 in Table 3 that SOEs underwent restructuring and retained their SOE status (*Reform_SOE*) will be similarly likely to provide social insurance as SOEs without such experience. Moreover, Hypothesis 3.2 is supported by models 16–18 in Table 3. That is, among the restructured SOEs, those that emerged as domestic private firms or joint ventures (*Reform_Private*) will be less likely to provide social insurance than will SOEs without restructuring experience.

Robustness Check

We used two methods to show that the common method bias is not a major problem in this study. First, the survey was filled out by nine different department managers in a given firm, each in charge of the sections relevant to their job descriptions. The variables used in this study were selected from different sections of the survey and therefore addressed by different managers. Second, we ran factor analyses for all the variables used in a given model, which were not centered on one single factor and therefore indicated that the common method variance is not a critical problem in our research (Podsakoff et al. 2003).

In order to solve the problem of missing cases, we applied multiple imputation method (Rubin 1987, 1996) to handle missing data, by using Stata 11's command *mi*. The results are consistent.

We test for multicollinearity among variables by calculating the variance inflation factor (VIF), which indicates whether a given independent variable could be explained by other independent variables in the equation. If a VIF value of a variable falls beyond the threshold value 5 (Studenmund 2001, p. 258), the variable should be removed from the analysis. In our case, VIF values for each independent variable are lower than 3, indicating that multicollinearity is not a serious problem. Because our dependent variables are ordinal variables, we use ordered logistic regressions to test our hypotheses with Stata 11's command *ologit*. Robustness is also checked by using an alternative method, generalized ordered logit model (Long and Freese 2006; Williams 2006). The results are consistent with each other.

All firms included in our analysis are from the manufacturing sector. We also analyzed models controlling subsectors of these firms by using the first two numbers of the four-digit industry code as identifiers, the statistical analysis results are the same.

In addition, we conducted robustness check using different dependent variables. We replaced dependent

Table 2 Ordered logistic estimates of social insurance provision by founding ownership structure

Independent variables	SOE			Private			Joint-venture		
	Model 4 Retirement	Model 5 Medical	Model 6 Unemploy	Model 7 Retirement	Model 8 Medical	Model 9 Unemploy	Model 10 Retirement	Model 11 Medical	Model 12 Unemploy
Founding_year	0.458	0.703	0.458	0.631**	0.496*	0.698***	2.146***	1.212**	1.781***
	(0.423)	(0.435)	(0.439)	(0.249)	(0.267)	(0.265)	(0.577)	(0.541)	(0.565)
Client_Pressure	−0.354	−0.102	−0.896**	0.582***	0.671***	0.489**	−0.188	0.340	−0.002
	(0.416)	(0.416)	(0.432)	(0.194)	(0.215)	(0.220)	(0.377)	(0.408)	(0.384)
Gov_Inspect	−0.011	0.004	−0.008	0.031	0.007	−0.0666**	−0.053	0.048	0.032
	(0.065)	(0.069)	(0.070)	(0.028)	(0.034)	(0.033)	(0.047)	(0.072)	(0.067)
CEO_Political	0.240	−0.189	0.157	0.215	0.226	0.406*	0.035	−0.544	0.064
	(0.421)	(0.450)	(0.432)	(0.216)	(0.241)	(0.243)	(0.412)	(0.441)	(0.419)
Manager_Edu	0.416**	0.302*	0.063	0.448***	0.294***	0.476***	0.521***	0.458***	0.448***
	(0.179)	(0.173)	(0.180)	(0.085)	(0.089)	(0.095)	(0.152)	(0.154)	(0.152)
Marketing (logged)	0.028	0.143	0.168	0.052	0.187***	0.099	0.046	0.084	0.056
	(0.119)	(0.119)	(0.119)	(0.065)	(0.070)	(0.072)	(0.094)	(0.098)	(0.095)
Employee (logged)	0.238	0.054	0.447**	0.216*	0.014	0.346***	−0.180	−0.103	−0.026
	(0.170)	(0.180)	(0.180)	(0.117)	(0.125)	(0.129)	(0.168)	(0.180)	(0.168)
Profit (logged)	−0.034	−0.067	0.000	1.493	1.844	1.433	0.063	1.149	0.129
	(0.316)	(0.440)	(0.386)	(1.243)	(1.321)	(1.341)	(0.802)	(0.925)	(0.763)
LR test	−146.494	−128.84	−128.561	−582.423**	−474.929**	−443.877**	−172.758***	−150.533**	−166.698**
N	170	155	166	447	410	414	143	137	138

Unemploy unemployment

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Reference group for *Founding_year* are firms founded after year 1992. SD in parentheses. LR test compares full models with models having only control variables. City effects are controlled in all statistical models but their coefficients are not included in the table. Constants of ordered logistic models are not shown in the table

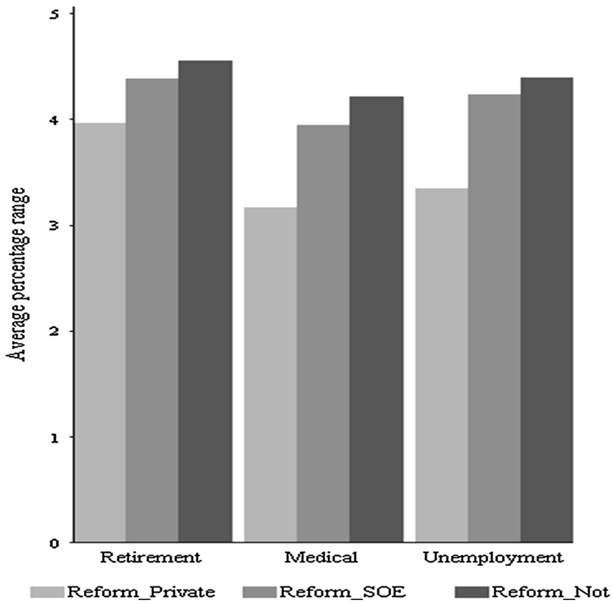


Fig. 3 Social insurance provision for workers by SOEs with various restructuring experiences. *Notes*: Percentage range of workers provided with social insurances: 1: 0–20 %, 2: 20–40 %, 3: 40–60 %, 4: 60–80 %, 5: 80–100 %

variables with another measurement: the firms' spending on employee welfare (a continuous variable), the signs and significant levels of our main independent variables are the same.

Discussion and Conclusion

The findings from our data analyses show strong support for the persistence of organizational imprinting, the influence of founding ownership structures, and the extent to which institutional changes moderate the effects of the imprinting. Chinese firms are not only affected by their present external environments. They also bear the legacies of their founding environments. Specifically, as Hypothesis 1 suggests (Table 1), firms founded in state socialist era are more likely to provide basic insurance for blue-collar workers than are firms founded during the market socialist era, controlling for all relevant variables such as economic performance and institutional pressures. Hypotheses 2.1 and 2.2 suggest (Table 2) that, founding ownership structures as non-SOEs attenuate the effects of organizational imprinting: firms founded in the market socialist era as non-SOEs are less likely to provide social insurance to their workers than their counterparts founded in state socialist era. With respect to the effects of institutional changes on organizational imprinting, as stated in Hypothesis 3.1 and 3.2 (Table 3), the further firms founded as SOEs move away from their original ownership structures, the less likely they are to carry their organizational imprinting.

Our research provides a number of implications to firms' practice in China. First, CSR is now a growing practice for firms. Among many aspects of CSR, social insurance provision for workers is an important concern, especially for firms in transition economies. SOEs' practice in labor relations, at the organizational level, especially with respect to blue-collar workers, shares CSR's concern about working conditions. Chinese SOEs are deemed problematic and less progressive, yet when it comes to social insurance provision for workers, these firms appear to be more enlightened than other firms in China, although only relatively. Thus, an effective strategy for SOEs in adopting CSR activities is to keep some of their organizational imprinting in labor relations—it will be more efficient than to completely destroy them then to fulfill CSR later.

Second, our research also tackles the origin of managerial ideologies and practices (Bendix 1974). In our research setting, the field of labor relations in state socialist China, the rise of a rational discourse of labor relations, and the emergence of CSR resemble the alternating pattern of managerial ideologies in the US as examined by Barley and Kunda (1992). A thorough consideration of other complicating factors such as globalization is necessary for a better understanding of why a particular managerial ideology gains prominence in China. Arguably if global diffusion of good practice is taking place, it should manifest itself first in foreign firms (mostly from affluent countries) and joint ventures. However, our findings show that it is not necessary the case. Our research findings can remind foreign firms and joint ventures that, rather than *race to the bottom* in labor protection to reduce the production costs in the transition economies, they need bring good practices from their home countries to the developing areas. In the meanwhile, they may borrow some of the good practices from the indigenous firms.

The present study also adds theoretical insights to organizational imprinting and labor relations in a number of respects. First, this research enriches our understanding of organizational imprinting of labor relations in China by highlighting its positive effects. Chinese firms continue to be influenced by the past; with regard to social insurance provision for workers, it appears to be a good influence. Second, neither Stinchcombe (1965) nor subsequent scholars have fully addressed the effects of institutional transformations on organizational imprinting. We argue that profound institutional changes create opportunities for founding institutional requirements to be reinterpreted, altered, or replaced by competing institutional logics. Our data analyses of stability and changes in firms' labor relations support this argument. In line with Kriauciunas and Kale (2006), we show that specific channels of organizational learning after post-socialist reforms have different effects on organizational imprinting. When former

Table 3 Ordered logistic estimates of social insurance provision by SOEs

Independent variable	Retained as SOE			Restructured to Private		
	Model 13 Retirement	Model 14 Medical	Model 15 Unemploy	Model 16 Retirement	Model 17 Medical	Model 18 Unemploy
Reform_SOE	−0.026	−0.257	−0.016			
	(0.602)	(0.567)	(0.642)			
Reform_Private				−0.877*	−1.101**	−1.159**
				(0.495)	(0.510)	(0.516)
Client_Pressure	−0.087	0.127	−1.443**	−0.998**	−0.861*	−1.225**
	(0.601)	(0.573)	(0.617)	(0.499)	(0.511)	(0.514)
Gov_Inspect	−0.013	−0.031	0.114	−0.034	−0.040	−0.041
	(0.126)	(0.132)	(0.160)	(0.069)	(0.076)	(0.074)
CEO_Political	1.164*	−0.196	0.532	0.673	0.851	0.633
	(0.642)	(0.589)	(0.653)	(0.521)	(0.564)	(0.531)
Manager_Edu	0.333	0.010	−0.178	0.394*	0.257	0.032
	(0.258)	(0.239)	(0.256)	(0.209)	(0.205)	(0.212)
Marketing (logged)	−0.006	0.142	0.230	0.014	0.107	0.080
	(0.169)	(0.159)	(0.178)	(0.148)	(0.144)	(0.139)
Employee (logged)	0.186	0.349	0.398*	0.372**	0.145	0.631***
	(0.238)	(0.268)	(0.241)	(0.189)	(0.222)	(0.202)
Profit (logged)	−0.129	−0.535	−0.083	−0.055	−0.250	−0.021
	(0.531)	(2.364)	(0.943)	(0.394)	(0.901)	(0.460)
LR test	−73.476	−73.892	−65.178	−103.163*	−89.514**	−93.033**
N	108	100	106	131	117	128

Unemploy unemployment

*** $p < 0.01$, ** $p < 0.05$, *$p < 0.1$

Reference group for variables *Reform_SOE* and *Reform_Private* are SOEs that were never restructured. SD in parentheses. LR test compares full models with models having only control variables. City effects are controlled in all statistical models but their coefficients are not included in the table. Constants of ordered logistic models are not shown in the table

SOEs attempted to follow market rules (i.e., privatized), the impacts of former features on social insurance provision became less salient.

There are several limitations of present study. We only considered social insurance provision as a proxy of labor relations. There are other aspects that need to be included to complement a thorough understanding of this important issue in China. We did not analyze the negative side of organizational imprinting, which is also important in transition economies. Though our results revealed that some firms (i.e., firms founded in state socialist time, firms founded and remained as SOEs) may provide more workers with insurances than others. However, we do not imply that these firms have done enough to protect workers. In fact, none of these Chinese firms have done sufficiently in social insurance provision for workers, as indicated by the percentage range of employed workers covered by the insurances. Older firms and SOEs may only do *relatively* better than emerging companies. Nevertheless, we hope that our research can help firms in China to realize the problem and to find solutions in their labor relations practice, as well as encourage future research on organizational imprinting of labor relations in transition economies.

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Appendix

See Tables 4 and 5.

Table 4 Basic statistics of variables

Variable	Obs	*M*	SD	Min	Max	Description
Dependent variables						
Retirement	1,024	3.5	1.6	1	5	% Workers covered by retirement insurance (ordinal)
Medical	942	3.1	1.8	1	5	% Workers covered by medical insurance (ordinal)
Unemployment	970	3.1	1.8	1	5	% Workers covered by unemployment insurance (ordinal)
Independent variables						
Ownership structures						
Private	1,037	0.5	0.5	0	1	Firm was founded as a domestic private firm (dummy)
Joint-venture	1,037	0.3	0.4	0	1	Firm was founded as an joint-venture (dummy)
SOE	1,037	0.2	0.4	0	1	Firm was founded as an SOE (dummy)
Reform_SOE	1,037	0.1	0.2	0	1	Whether a restructured SOE kept SOE status (dummy)
Reform_Private	1,037	0.1	0.3	0	1	Whether a restructured SOE changed to private (dummy)
Imprinting time						
Founding_year	1,037	0.3	0.5	0	1	Whether a firm was founded before 1992 (dummy)
Control variables						
Client_Pressure	1,037	0.3	0.5	0	1	Whether clients require labor protections (dummy)
Gov_Inspect	932	2.4	3.4	0	36	No. of government inspections on labor issues per year
CEO_Political	1,023	0.4	0.5	0	1	Whether CEO engages in political activities (dummy)
Manager_Edu	1,026	2.4	1.3	1	4	% Managers with at least a college education
Marketing	843	464.2	5,110.3	0	1,20,000	Marketing expenditure for the past 3 years (10,000 RMB)[a]
Employee	1,037	621.2	2053.4	2	32,000	No. of employees in 2004
Profit	1,037	14251.1	112989.3	−84,689	25,34,321	Profit in 2004 (10,000 RMB)

[a] As of December, 2005, 1 USD = 8.07 RMB. Control variables also include 12 cities and 29 sectors of manufacturing firms

Table 5 Pairwise correlations among study variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	1															
2	0.72*	1														
3	0.76*	0.70*	1													
4	−0.34*	−0.33	−0.3*	1												
5	0.14*	0.18*	0.16*	−0.58*	1											
6	0.26*	0.20*	0.26*	−0.60*	−0.29*	1										
7	0.12*	0.11*	0.15*	−0.27*	−0.13*	0.45*	1									
8	0.07*	0.01	0.04	−0.31*	−0.15*	0.52*	−0.07*	1								
9	0.26*	0.22*	0.27*	−0.26*	−0.10*	0.41*	0.14*	0.24*	1							
10	0.02	0.02	−0.03	0.05	0.01	−0.06*	−0.03	−0.01	−0.08*	1						
11	−0.03	−0.05	−0.07*	0.12*	−0.06	−0.08*	−0.05	−0.04	0.01*	0.10*	1					
12	0.11*	0.04	0.12*	−0.04	−0.09*	0.14*	0.06*	0.10*	0.01	0.01	0.05	1				
13	0.27*	0.26*	0.29*	−0.16*	0.12*	0.06*	0.03	−0.02	−0.01	−0.02	−0.03	0.06	1			
14	0.21*	0.24*	0.24*	−0.13*	0.09*	0.07*	0.07*	0.06	0.06	0.06	0.01	0.21*	0.29*	1		
15	0.24*	0.24*	0.32*	−0.29*	0.14*	0.20*	0.10*	0.05	0.03	0.03	0.03	0.26*	0.21*	0.40*	1	
16	0.05	0.05	0.05	−0.05	0.08*	−0.03	−0.01	0.04	0.08*	−0.01	0.00	0.10	0.07*	0.13*	0.24*	1

1 Retirement, *2* medical, *3* unemployment, *4* private, *5* FDI, *6* SOE, *7* Reform_SOE, *8* Reform_Private, *9* Founding_year, *10* Client_Pressure, *11* Gov_Inspect, *12* CEO_Political, *13* Manager_Edu, *14*: Marketing, *15* Employees, *16* Profit

* $p < 0.05$

References

Barley, S. R., & Kunda, G. (1992). Design and devotion: Surges of rational and normative ideologies of control in managerial discourse. *Administrative Science Quarterly, 37*(3), 363–399.

Baron, J. N., Hannan, M. T., & Burton, M. D. (1999). Building the iron cage: Determinants of managerial intensity in the early years of organizations. *American Sociological Review, 64*(4), 527–547.

Bartley, T., & Child, C. (2010). Shaming the corporation: Globalization, reputation, and the dynamics of anti-corporate movements. Manuscript in Preparation. Bloomington: Indiana University.

Bendix, R. (1974). *Work and authority in industry: Ideologies of management in the course of industrialization*. Berkeley: University of California Press.

Boisot, M., & Child, J. (1996). From fiefs to clans and network capitalism: Explaining China's emerging economic order. *Administrative Science Quarterly, 41*, 600–628.

Burton, M. D., & Beckman, C. M. (2007). Leaving a legacy: Position imprints and successor turnover in young firms. *American Sociological Review, 72*(2), 239–266.

Campbell, J. L. (2007). Why would corporations behave in socially responsible ways? An institutional theory of corporate social responsibility. *Academy of Management Review, 32*(3), 946–967.

Croll, E. J. (1999). Social welfare reform: Trends and tensions. *China Quarterly, 159*, 684–699.

DiMaggio, P. J., & Powell, W. W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields. *American Sociological Review, 48*(2), 147–160.

Edelman, L. B. (1990). Legal environments and organizational governance: The expansion of due process in the American workplace. *American Journal of Sociology, 95*(6), 1401–1440.

Frazier, M. W. (2002). *The making of the Chinese industrial workplace: State, revolution, and labor management*. Cambridge: Cambridge University Press.

Frazier, M. W. (2010). *Socialist insecurity: Pension and the politics of uneven development in China*. Ithaca: Cornell University Press.

Friedland, R., & Alford, R. (1991). Bringing society back in: Symbols, practices, and institutional contradictions. In W. W. Powell & P. J. DiMaggio (Eds.), *The new institutionalism in organizational analysis* (pp. 232–263). Chicago: University of Chicago Press.

Gallagher, M. E. (2005). *Contagious capitalism: Globalization and the politics of labor in China*. Princeton, NJ: Princeton University Press.

Guthrie, D. (1999). *Dragon in a three-piece suit: The emergence of capitalism in China*. Princeton, NJ: Princeton University Press.

Kriauciunas, A., & Kale, P. (2006). The impact of socialist imprinting and search on resource change: A study of firms in Lithuania. *Strategic Management Journal, 27*(7), 659–679.

Lee, C. K. (2000). The 'revenge of history': Collective memories and labor protests in northeastern China. *Ethnography, 1*(2), 217–237.

Lee, C. K. (2007). *Against the law: Labor protests in China's rustbelt and sunbelt*. Berkeley: University of California Press.

Lin, J. Y., Cai, F., & Li, Z. (1998). Competition, policy burdens, and state-owned enterprise reform. *American Economic Review, 88*(2), 422–427.

Locke, R., Amengual, M., & Mangla, A. (2009). Virtue out of necessity? Compliance, commitment and the improvement of labor conditions in global supply chains. *Politics & Society, 37*(3), 319–351.

Locke, R. M., Qin, F., & Brause, A. (2007). Does monitoring improve labor standards? Lessons from Nike. *Industrial and Labor Relations Review, 61*(1), 3–31.

Long, J. S., & Freese, J. (2006). *Regression models for categorical dependent variables using Stata* (2nd ed.). College Station, TX: Stata Press.

Lounsbury, M. (2007). A tale of two cities: Competing logics and practice variation in the professionalizing of mutual funds. *Academy of Management Journal, 50*(2), 289–307.

Ma, D., & Parish, W. L. (2006). Tocquevillian moments: Charitable contributions by Chinese private entrepreneurs. *Social Forces, 85*(2), 943–964.

Marquis, C. (2003). The pressure of the past: Network imprinting in intercorporate communities. *Administrative Science Quarterly, 48*(4), 655–689.

Marquis, C., & Huang, Z. (2010). Acquisitions as exaptation: The legacy of founding institutions in the U.S. commercial banking industry. *Academy of Management Journal, 53*(6), 1441–1473.

Meyer, J. W., & Rowan, B. (1977). Institutionalized organizations: Formal structure as myth and ceremony. *American Journal of Sociology, 83*(2), 340–363.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology, 88*, 879–903.

Rubin, D. B. (1987). *Multiple imputation for nonresponse in surveys*. New York: Wiley.

Rubin, D. B. (1996). Multiple imputation after 18+ years. *Journal of the American Statistical Association, 91*(434), 473–489.

Steinfeld, E. S. (1998). *Forging reform in China: The fate of state-owned industry*. Cambridge: Cambridge University Press.

Stinchcombe, A. L. (1965). Social structure and organizations. In J. G. March (Ed.), *Handbook of organizations* (pp. 142–193). Chicago: Rand McNally.

Studenmund, A. H. (2001). *Using econometrics: A practical guide* (4th ed.). Boston: Addison Wesley Longman.

Swidler, A. (1986). Culture in action: Symbols and strategies. *American Sociological Review, 51*(2), 273–286.

Thornton, P., & Ocasio, W. (2008). Institutional logics. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.), *The SAGE handbook of organizational institutionalism* (pp. 99–129). London: SAGE.

Tobert, P. S., & Zucker, L. G. (1983). Institutional sources of change in the formal structure of organizations: The diffusion of civil service reform, 1880–1935. *Administrative Science Quarterly, 28*(1), 22–39.

Walder, A. G. (1986). *Communist neo-traditionalism: Work and authority in Chinese industry*. Berkeley: University of California Press.

Williams, R. (2006). Generalized ordered logit/partial proportional odds models for ordinal dependent variables. *The Stata Journal, 6*(1), 58–82.