

STATE OWNERSHIP IN PUBLICLY LISTED CHINESE FIRMS AND ITS PERFORMANCE

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Abstract

Based on research, we studied the state ownership in publicly listed Chinese firms, and develop an empirical test of the relationship between state ownership and firm performance. We demonstrate the importance of some unique Chinese factors to understanding organizational behavior in China. The study indicates that the predictive validity of Western theories could be improved by taking into account the effects of firm-specific factors. We propose hypotheses that are relevant to this issue, and test them with empirical data collected from formerly state-owned firms in China's manufacturing industries. The results support the hypothesized effects of firm-specific factors. The paper concludes with a discussion of the theoretical and practical implications of the research findings.

Keywords: state ownership, firm performance, China

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Introduction

Our current study tests the effects of state ownership on firm strategy and performance in China. Many studies have been conducted on firm ownership and firm strategy in China in recent years (e.g., Li, et al. 2008). One major focus of these studies is the issues related to state ownership, its effects on firm performance and its reforms. The reform of Chinese enterprises that began at the end of the 1970s has aimed to make firms and their employees more accountable or responsible for their own performances (Peng, 2006; Li, 1992b). One major element of this reform is the transformation of state-owned firms (state firms) into joint stock firms. The first case of transforming a state firm into a joint stock firm occurred in 1984, when Beijing Tian Qiao Department Store shifted much of its state ownership to other firms and legal entities (47.56%) and to individuals, including the firm's managers and employees (41.18%). After that, the number of cases steadily increased. By the end of 1997, the number of joint stock firms had reached 9200, which accounted for approximately 25% of all large and medium sized state firms in China (Smyth, 1998). Since then, the number of such firms has continued to increase. At the same time, the state has been reducing its shares in these firms, and private firms are allowed to become publicly listed firms by buying the controlling shares of already listed firms (e.g., McCallum, 2001).

According to the Chinese government's reform plan, after selling shares to the public, former state firms are expected to compete in the market in the

same manner as do publicly listed firms in the West (Chen, 1999). Since 1990, an increasing number of state firms have been listed on China's stock exchanges, which were established at the beginning of the 1990s. By listing these firms, the state is trying to find a way for China to move toward a true market economy. In other words, the transformation of state firms into joint stock firms is considered to be a conversion of the managerial mechanism in China, or a conversion of dependent instruments of the state plan into independent market oriented entities (Chen, 1999).

In spite of the progresses of the reform since 1979, it remains unclear how the former state firms have been changing their behaviors in China's new business environments. Neither is it clear whether these firms are really competing in a manner similar to that of their Western counterparts. Some empirical observations suggest that they might be competing differently: for example, as their state ownership is shifted, many of these firms are becoming, step by step, diversified companies (Wen, 2000). This is true even for some of the most successful firms, such as Legend (the largest personal computer maker in China) and Haier (the largest refrigerator producer in China). After becoming stars or leaders in their own industries, these firms are not focusing on what they have done well, but are diversifying into other industries where they may know very little, such as the case of the electronics firm that diversified into the real estate industry.

What caused this pattern of behavior? We believe that some China-specific factors may be at

work. For example, Boisot and Child (1988, 1996, 1999) suggested the significance of fiefs. Based on research into the relationship of culture, information sharing, and transaction-governance structure, Boisot and Child proposed a cultural space that was described by the dimensions of information codification and information diffusion. Based on this model, they argued that China's reform had created a fief structure (Boisot and Child 1988). This structure has several characteristics (Boisot and Child, 1999), such as personal and hierarchical relationships, submission to superordinate goals, hierarchical administrative coordination, and limitation in information diffusion that results from lack of codification.

In light of the Boisot and Child model, one may ask whether, when studying firm behavior and performance in China's fief structure, we should consider the effects of China-specific or fief-specific factors. What should be the major characteristics of these factors? How might these factors influence organizational behavior or firm performance in China's transitional economy? The current China studies have a major weakness in this respect. Many researchers are applying Western theories to their studies, and the unique characteristics of China's business environments are often ignored or only insufficiently considered. By identifying a set of constructs that catch the unique characteristics of the Chinese environment, China research can make greater progress. The external validity of Western theories can also be tested or improved.

As mentioned above, we consider it impossible, given the research evidence available, to identify and test all fief-specific factors in one article. Because of the complexity of the issues and lack of sufficient empirical research evidence, each fief-specific factor should be discussed and tested rigorously so that we can clearly understand their effects. In this sense, our article attempts to set a precedent for such studies in the future. In this article, we will highlight the existence of fief-specific factors, identify their common characteristics, and then demonstrate their importance by testing the particular effect of one fief-specific factor on selected dimensions of behavior among joint stock firms in China.

FIEF-SPECIFIC FACTORS AND RELEVANT RESEARCH

According to the Boisot and Child (1988, 1999) cultural space model, the major characteristics of a business environment in a given society can be described by two dimensions, i.e., information codification and information diffusion. The efficiency of a transaction governance structure is contingent upon these two dimensions. For example, with both a high level of information codification and a high level of information diffusion, markets such as those in the Western economies are efficient and will prevail. In

the absence of sufficient information codification and information diffusion, other transaction-governance structures, such as clans and fiefs, may prevail.

Based on this model, Boisot and Child (1988) argued that China's reform had created a fief structure. This structure has several characteristics (Boisot and Child, 1999). First, relationships are personal and hierarchical. A large number of studies of Guanxi (connections) have provided support for this view (e.g., Peng and Luo, 2000). Among these relationships, the hierarchical relationships between firm managers and government officials are the most significant in terms of their effects on firm behavior and firm performance (Peng and Luo, 2000).

Second, submission to superordinate goals is important for organizations to survive and develop in this structure. Superordinate goals are often set by government officials, and firms often feel the pressure to adopt this goal to maintain their legitimacy to obtain resources or to reduce transaction costs (Li, 1992a; Peng, Tan, and Tong, 2004).

In addition, hierarchical coordination is widely adopted in fiefs (Boisot and Child, 1999). Even today, after over 20 years of economic reform, some authors still observe this coordination in China. Firms are at the mercy of a system in which government officials and their acolytes can exercise arbitrary power through administrative orders, regulations, restrictions, fees, and other informal means (Lubman, 1995; Nevitt, 1996). Firms' dependence on the government can even extend to the joint ventures that Chinese firms establish with overseas investors (Boisot and Child, 1999).

Finally, in this structure, information diffusion is limited by the lack of codification. For example, until very recently, Chinese firms have not been protected by well-developed laws, i.e., a set of well-codified information (Luo and Tung, 2007). The support of a certain government official can often be very critical for a legal decision to be implemented (Li and Khatri, 1999).

Consistent with the Boisot and Child argument, we believe that a set of fief-specific factors (fief factors) can be identified to help in the study of organizational behavior and performance in China. The definition of these factors (i.e., fief factors) can be those that have significant effects on organizational behavior and performance only in a fief transaction governance structure, which has been documented by Boisot and Child (1988, 1999). We argue that the fief factors exist not only in China, but also in Vietnam, Mongolia, North Korea, and other Asian countries that share many dimensions of culture with China and that are also undergoing economic reform.

According to research, these factors should have three unique characteristics. First, they should be commonly found only in an economy with fief transaction-governance structures, and they should disappear or become much less significant after the economy transforms into a true market economy.

However, because the transformation may take a long period of time, the effects of fief factors may remain significant for a long time. To understand firm behavior and performance during this long period of reform, one should not ignore the effects of fief factors. Second, the factors should be relevant to the personal and hierarchical relationships that are commonly found in fief-like transaction-governance structures. For example, personal and hierarchical relationships between firm managers and government officials create many unique characteristics in business processes and transactions in China, which we will discuss in detail later. Finally, the fief factors should reflect submission to superordinate goals. In China, these goals are often set by key government officials. Sometimes they can even be set in a very informal way, but they still have very significant effects on firm behavior and firm performance.

Past studies have suggested some examples of fief-specific factors. For example, some of the connections or Guanxi, mainly those reflecting hierarchical relationships, can be considered fief-specific factors. Although connections or social ties among managers are considered to be important for firm performance even in the West (e.g., Burt, 1997; Mintzberg, 1973), hierarchical relationships between firm managers and government officials, especially personal or informal relationships, may be significant only in fiefs (Li, 1992a). In a Western democracy with a well-developed legal system, these hierarchical and personal relationships may be observed closely by society and their effects may be very limited. In China, however, they may be very important for making business deals or reducing transaction costs (Peng and Luo, 2000). For example, a personal note written by a certain government official may be the most critical factor in the success of an important business transaction (Wen, 2000), and other people in the society may not even know what has happened. Given the importance of these personal and hierarchical relationships, many Chinese firm managers have to maintain “disproportionately greater contact” with the government officials (Child, 1994).

Some aspects of China-specific legitimacy or prestige can also be considered as fief-specific factors. In an economy without sufficient codified information, such as a set of well-developed business laws, transactions among firms in China are often governed or protected by this legitimacy. Being positively reported upon by the government-controlled news media, for example, can create such legitimacy. A well-known case involved the Great Wall Electric Motor Co. at the beginning of 1990s. After the largest government-controlled newspaper, the People’s Daily, published several positive articles about the firm, it successfully raised funds from the public. This fund raising turned out to be a huge scandal, and many investors who lost their money demanded compensation from the government.

However, despite such scandals, government-related legitimacy is still considered useful among Chinese managers. One can easily observe relevant firm behavior in China today. For example, some firms still bribe reporters who work for the government news media to write positive reports, and the effectiveness of a report seems to be positively correlated to the level of government control of the media outlet that carries the report. Chinese firms, regardless of their ownership, may also try other approaches to obtain such legitimacy. For example, many firms pay current or former government officials to write the firms’ names in Chinese calligraphy, and put the calligraphy, together with the name of the official, on the front gates of their premises. The annual reports or other publications of Chinese firms often carry pictures of firm managers meeting with current or former government officials. Even a picture with former foreign government official, such as the former U.S. President Bill Clinton, is considered valuable and is proudly presented. All these factors create fief-specific legitimacy that helps to reduce transaction costs for Chinese firms, especially private firms. In many important business transactions in China, such as applying for bank loans or obtaining important construction contracts, this legitimacy is often an important factor of success (Li and Khatri, 1999).

The frenzy of engaging in a certain activity, the focus of which changes every year among Chinese firms and organizations, can also be seen as a fief-specific factor. As an institutional heritage of “mass movement” advocated by the founder of P.R.China, Mao Tse-dong, this approach to national governance is still widely adopted by government officials to achieve their goals. The frenzy can often be attributed to the desire of certain government officials to show off their capabilities or achievements, and it is normally hierarchically coordinated. Moreover, it has significant effects on firm behavior in fiefs with high levels of submission to superordinate goals. Facing such a frenzy, Chinese organizations and firms often feel the pressures to participate or to make some financial donations. For example, the latest fashion is the application for UNESCO World Heritage projects. Chinese cities are trying to have something nominated, ranging from Shaolin Temple, Cantonese dishes, to a love story entitled *The Butterfly Lovers: Liang shanbo and Zhu Yingtai* (South China Morning Post, March 6, 2003, p. 2). This kind of frenzy often results in a waste of money and other resources. For example, during the 1990s almost all Chinese cities built theme parks, but the majority had few visitors and lost money.

Finally, state ownership in joint stock firms in China should be seen as a fief-specific factor. On the one hand, this factor should become insignificant once China completes its market-oriented reform. On the other hand, in the long period before China completes building the legal system and other institutions for a

true market economy, state ownership will exist and its effects on firm behavior and performance will remain significant. In an economic structure without sufficient codified information, such as laws, business transactions may need the protection or insurance of the government, and state ownership is often perceived as representative of such action. Evidence supporting this point can easily be observed. For example, firms with state ownership are more likely than private firms to obtain bank loans and other important resources in China, even if the private firms are more competitive in the market. In many business transactions, whether the parties involved have state ownership is still a critical factor in decision making. Because of these problems, private firms often complain that they are discriminated against in many business transactions. For example, private firms normally have greater difficulties than do state firms in obtaining bank loans or other important resources in China (Wen, 2000).

State ownership can also influence stock prices in China. In recent years, every attempt by the government to reduce state ownership in a given listed firm has led to the downfall of the stock's price. To understand this market reaction, we should point out that, in China's fief structure, governments influence firm operations and performance regardless of their ownership (Boisot and Child, 1999; Lu and Yao, 2006). Moreover, the intervention of local government officials in private firms may be greater than that in state firms. The reason is that the state firms may have the support of a powerful Central government ministry or a provincial government. Accordingly, for a joint stock firm without government ownership today, the intervention of local government officials may not necessarily decrease. On the other hand, without government ownership, the joint stock firm loses important transactional benefits. First, without government representatives sitting on its board of directors, the firm will have more difficulty in obtaining information on possible government policy changes and other non-codified information, which can be obtained in China only through face-to-face personal relationships (Boisot and Child, 1988). This disadvantage may affect firm performance. Second, as mentioned above, government ownership may increase the legitimacy of the firm, which is often important for business transactions in fiefs. Without this legitimacy, firms will have higher transaction costs in a business environment that lacks free information flows and legal protection. Stock investors perceive all these of factors to be potentially risky.

To summarize, we can identify a set of fief-specific factors that affect firm behavior and performance in China. For example, factors such as Guanxi and state ownership may help firms to obtain important resources and reduce transaction costs. In the rest of this paper, we focus on one of these fief factors – state ownership in China's joint-stock firms

– to demonstrate the effect of fief factor on firm behavior and performance.

STATE OWNERSHIP AND DIVERSIFICATION AMONG JOINT STOCK FIRMS IN CHINA, AN EMPIRICAL TESTING

As already mentioned, before economic reform began in 1978, the majority of Chinese firms operated in a planned economy. With total state ownership, Chinese state firms seldom undertook any unrelated diversification (Meisner, 1972; Thomson, 1996). There were several reasons for this phenomenon. First, before the reform, management was only required to fulfill a firm's obligations under the state plan. Using Western criteria, China's state firms at that time were merely workshops rather than real enterprises because they did not have independent plans and decision-making to compete in the market. Also, the firms' profits or other income from operation should be handed over to the state. Therefore, there was no motivation or incentive for the state firms to diversify either. In addition, before the reform, all important production means or resources were fully controlled by the state plan. Even electricity and other utilities were not available before being listed in a state plan. Given this limitation of resources, state firms would have had great difficulty in diversification even if they could have done it. Finally, the institutional environments before the reform would make any state firm that diversified illegitimate. If a firm wanted to adopt unrelated diversification outside the state plan to increase its profits, then its managers would certainly be criticized for not focusing on state goals and for taking the capitalist road for their own interests. Because of all these reasons, the state firms before the reform had little diversification.

Since the initiation of the reform process, as mentioned above, the Chinese government has been selling part or all of its state shares to private investors. With this ownership change, many former state firms have pursued diversification (Wen, 2000). For example, after the government sold all of its shares in China's largest personal computer producer, Legend, the firm diversified into unrelated industries such as real estate development. Although diversification, according to research in the West, affects firms' long-term competitiveness (e.g., Hitt, Hoskisson and Ireland, 1990), Chinese firms as a whole do not seem to be influenced by the research findings in the West.

Considering firm behavior in China's fief transaction-governance structure, we argue that state ownership, a fief-specific factor, has a considerable effect on firm diversification. We also argue that before China becomes a true market economy, state ownership could have this effect for a long period, because firms with state ownership are more likely

than those without it to have a better access to uncodified information and more firm-specific legitimacy. Given these resources, both the managers and shareholders of the firms will have less perceived uncertainty, which may make firm management less likely to pursue diversification. Second, state ownership might represent institutional traditions that restrain firm management from freely pursuing diversification. Once this ownership disappears, firm management may be more likely to pursue diversification because such a strategy can increase its power (Hitt, Hoskisson and Ireland, 1990). Finally, if state ownership decreases or disappears in a joint-stock firm, government connections and support are also likely to decrease or disappear. The government may become more reluctant to help a firm in which it has few or no shares. Facing this reality, former state firms may feel the need to build non-government connections, or to obtain resources from non-government sources, through diversification. In other words, by diversifying into other industries, former state firms, which normally produced only a single product before the reform, can build more connections and reduce their dependence on a single market or a single source of resources. The more that a former state firm has lost its government connections, the more uncertainties that it may perceive, and the more likely it will be to adopt a diversification strategy to build connections and obtain resources from other non-government sources. Based on these arguments, we predict that the firm-specific factor will have a direct effect on firm diversification.

Hypothesis 1

Among listed former state firms in China, there is a negative relationship between state ownership and firm diversification.

However, the effect of state-ownership may be moderated by the effect of management ownership, which is frequently tested in Western research (e.g., Hitt, Hoskisson and Ireland, 1990). According to such research, management ownership helps to prevent over-diversification (e.g., Bethel and Liebeskind, 1993; Gibbs, 1993). The reason is that this management share ownership may make management more responsible or accountable for the long-term competitiveness of the firm. Given this condition, if management understands that diversification is affecting the long-term competitiveness of firm, they will try to avoid this problem. On the other hand, some observations suggest that firm management in China may still want to diversify regardless of its ownership in the firm (e.g., Wen, 2000). The main reason is that few of these managers receive any formal management education. Nor do these people learn too much recent Western studies on diversification (e.g., Li and Murray, 1992). Moreover, given the current firm characteristics in China, such managers may not have

enough reliable information to conduct any long-term strategic planning even if they want to. Therefore, these managers may believe that diversification is in their own interests as shareholders of their firms.

Hypothesis 2

The effect of management ownership will offset the effect of state ownership on firm diversification.

If hypothesis 2 is not supported, and if management ownership is in fact helping to reduce firm diversification as was predicted by some research in the West (e.g., Bethel and Liebeskind, 1993; Gibbs, 1993), then there may be a joint effect of management ownership and state ownership on firm diversification. This joint effect would thus help to reduce diversification among Chinese firms.

Hypothesis 3

The interaction between management ownership and state ownership will have a significant and negative effect on firm diversification.

Other factors may also moderate the effects of state ownership. One such factor is the profitability in a given industry. If a firm is operating in an industry with low industrial profit, then, even assuming that it has a high proportion of state ownership, it is more likely to diversify into a new industry with high industrial profit. In this situation, the effect of state ownership may be offset.

Hypothesis 4

Industrial profitability moderates the relationship between state ownership and firm diversification, such that the negative effect of state ownership on firm diversification will be stronger when industrial profitability is low.

Another such factor is firm age. According to observations (e.g., Li, 2001), when a Chinese state firm is first listed, it normally has no or only a low level of diversification. When the firm grows “older”, it often issues new shares and begins to diversify. If this observation is true, then firm age, i.e., the number of year in which a given firm has been listed, may offset the effect of state ownership. In other words, among firms with the same level of state ownership, those with an older firm age will be more likely to diversify than those with a younger firm age.

Hypothesis 5

Firm age moderates the relationship between state ownership and firm diversification, such that the negative effect of state ownership on firm diversification will be stronger for younger firms.

Finally, firm size may also have moderating effects on diversification. According to the observations of some authors (e.g., Wen, 2000), if a

firm is very large, then it is likely to diversify because, given the fief characteristics in China, firm management may have great difficulties in conducting long-range planning. To reduce the uncertainty about a firm's long-term development, its management may decide to diversify when the firm grows very large, even if the firm still has a high level of state ownership.

Hypothesis 6

Firm size moderates the relationship between state ownership and firm diversification, such that the negative effect of state ownership on firm diversification will be stronger for smaller firms.

In terms of the effect of state ownership on firm performance, past research has offered inconsistent predictions. Some studies suggested a negative relationship (e.g., The World Bank, 1997, & Li, Wang, & Deng, 2008), but others suggested a positive (e.g., Peng and Luo, 2000) or no significant relationship (e.g., Tian and Lau, 2001). We believe that researchers should be very specific about the definition and measurement of the construct "firm performance." Research findings can be different depending on what definition or what forms of measurement are adopted. If we refer to firms' financial or accounting performance, especially short-term performance, then we may not see any significant relationship between state ownership and firm performance (Zou, & Adamas, 2008). This will be the case because in China's fief structure, such performance can be affected by many factors other than state ownership, such as firms' marketing opportunities, management competence, and accounting policies. In other words, given the fief characteristics of China's current transition economy, the financial or accounting performance of firms, especially short-term performance, may not be directly predictable by state ownership.

In contrast, if we consider stock market performance, then it may have a positive relationship with state ownership. According to some authors, this dimension of performance reflects the perception of shareholders about the firms' future performance (Desai, Kroll, and Wright, 2005; Hoskisson et al., 1994; Xiao, & Yuan, 2007). As mentioned above, state ownership is perceived as being positive by Chinese stockholders (Chen, Michael, & Xu, 2009). Therefore, state ownership may have a positive relationship with the firms' stock market performance. The evidence in recent years is that whenever the Chinese government wants to sell its shares in a listed firm, the firm's stock price drops (Li, 2001). Although this can be explained by the fact that the selling of government shares increases the overall supply of shares in the market, some economists, such as Wu Jinlian, have offered an alternative explanation: Chinese stock investors think that the selling of state shares indicates the loss of government support and

protection (Singtao Daily, March 8, 2003, p. B15). In other words, given the incapacity of Chinese laws to protect Chinese investors, state ownership may be considered as a kind of insurance. Investors perceive that there is an increase of transaction costs after the selling of state shares, which may affect firm performance. All of these may explain why Chinese investors tend to sell the stock of a given firm once they hear that the government is planning to reduce its ownership in the firm.

Hypothesis 7

Among listed former state firms in China, there is a positive relationship between state ownership and the firms' stock market performance.

METHOD

Sample

The sample for this study consisted of the former state-owned manufacturing firms that were listed on the two Chinese Stock Exchanges before 1995 (N = 578). According to the category system that is used by the State Statistical Bureau of China (SSBC), these firms were from 11 different industries¹⁶. Each industry could be further divided into between 3 and 25 sub-industries. For example, the Chinese electronics industry was divided into 23 sub-industries, such as television, telecommunications equipment, and the computer industry. Other data sets, such as those that are reported in China's Industrial Markets Yearbook (which is published by the City University of Hong Kong), also use this classification system. Based on this system, we treated a firm in one industry that had products in more than one of its sub-industries as having been involved in related diversification. An example is an electronics firm that produced TVs and mobile phones at the same time. If a firm was operating in two unrelated industries, such as electronics and real-estate development, then we considered this firm as having been involved in unrelated diversification.

The average age of the firms was 5.71 years (the oldest was 10.2, and the youngest was 2.8); 315 were located in the coastal provinces, and 263 were located in inner-China provinces. These 578 firms competed in 11 different industries and 118 sub-industries in China.

Information about these firms came from three sources. First, we obtained the data from the Taiwan Economic Journal Database, which contains such information as ownership, firm size, and firm age. Second, we used three research assistants, who knew nothing about the purpose of the study, to check the data from the Database CD against the annual reports and website information of the firms. The research assistants were also asked to code information that

pertained to the firms' related and unrelated diversifications. Finally, we obtained information such as industrial profitability from China's Industrial Markets Yearbook that is published by the City University of Hong Kong.

Measurement

(A) Independent Variables

State Ownership was measured by the ratio of shares that were controlled by the state to the total outstanding shares of a given firm. Management ownership was tested by the ratio of management shares to the total outstanding shares of a given firm. All of the data were for the firms in 1995.

(B) Dependent Variables

Firm Diversification was measured as two separate variables, related diversification and un-related diversification. We measured related diversification according to the information that was provided by the 1999 annual reports. If a firm focused on a single product, then we gave it a score of zero, which meant that it had not pursued related diversification. If the firm diversified into one related industry (i.e., it operated in a total of two related industries), we coded it as one. If the firm diversified into two more related industries, we coded it as two, and so on. With the same approach, we measured un-related diversification. If a firm focused on a single product, then we gave it a score of zero, which meant that it had not pursued unrelated diversification. If the firm diversified into one unrelated industry, then we coded it as one, and so on.

The reason for measuring firm diversification in this manner was the difficulty in obtaining data about the firms' sales in each industry, as they did not disclose sales data for each product/industry. The only information that was available in their annual reports was the number of products that they produced. We believed that this information could still be used to measure the level of diversification. Regardless of their percentage of sales in each industry, there is still a significant difference between the firms that focus on one industry and those that diversified into related or un-related industries.

Moreover, given the fact that the listed firms had very short history (i.e., the average age of these firms was 5.7 years), the sales data might actually have under-estimated the firms' level of diversification. For example, a Chinese diversifier might have expended many resources in developing a new product, but the sales of the product might have been small at the beginning. Accordingly, although the lack of sales data limited our measurement, we believe that such data may not be very critical given the fact that our sample was still in the early stages of diversification.

Another dependent variable, i.e., stock market performance or return (SP) was computed by the following formula:

$$SP = [(stock\ price\ at\ the\ end\ of\ year + dividend\ received\ during\ the\ year) / stock\ price\ in\ the\ beginning\ of\ year] - 1.$$

After computing this variable for each year, we computed an average of the variable over four years (i.e., 1996-2000). We used this average to control for speculation in the Chinese Stock Exchanges. The assumption was that while a firm may have been able to manipulate its stock price over a short period, it would have been difficult to keep that price high or low for four years. For the same reason, when we considered the ROA of the firms we used a four-year average from 1996 to 2000.

(C) Controlled Variables

Industry Profitability was coded from the 1995 data set published by the City University of Hong Kong (CTHK, 1997). To match a firm in our sample with an industry, we checked the products of our sample firms before they were listed. For example, if an unrelated diversifier was historically a television producer, then we adopted data from China's television industry as its industry profitability.

Firm Size was coded from the 1995 annual reports of the firms. We coded the total sales (i.e., the total turnover) of a given firm as the size of the firm.

Finally, firm age was the number of years (before 2000) that a given firm had been listed on the Chinese stock exchanges.

RESULTS

Table 1 presents the descriptive statistics of the data. From these data, we found no evidence of multicollinearity. Hence, we conducted hierarchical regressions to test the effect of state ownership, a chief factor, on the firms' behavior and performance. We selected this regression approach because it is appropriate for testing our hypotheses and assessing the stability of the regression coefficients on the main independent variables (Tsui, Egan, and O'Reilly, 1992).

Insert Table 1 about here

In the analyses, we first entered unrelated diversification as the dependent variable. State ownership was entered first as an independent variable (Model 1). After that, management ownership was entered to test its effect (Model 2), which was followed by an interaction between state ownership and management ownership (Model 3). Finally, the control variables, i.e., firm size, firm age, and industry

profitability, were entered (Model 4). We entered the variables in this way so that the main effects and moderating effects of the variables could be tested separately (Tsui, Egan, and O'Reilly, 1992).

Table 2 presents the results of the analyses. State ownership has a significant and negative effect on unrelated diversification in all four models, which supports hypothesis 1. Moreover, the effects of firm age and size are both significant. These data partially support hypotheses 5 and 6. In other words, both firm age and firm size have positive effects on firm diversification in China. However, the effect of state ownership remains significant even though its effect size becomes smaller. In relation to the effects of management ownership, the data in models 2 and 3 show that it is not significant. Hence, hypotheses 2 and 3 are not supported. These results seem to suggest that, as mentioned above, management ownership has both positive and negative effects on firm diversification. These effects may offset each other to the extent that we cannot observe a significant effect of management ownership. The interactive effects in Model 3 are not significant. However, after the interactions are entered, the effect size of state ownership has become smaller. These seem to support the moderating effects of firm size and firm age. Finally, the effect of industry profitability is not significant, which does not support hypothesis 4. This result suggests that when Chinese firms diversify, industry profit may not be a factor that they consider. They may mainly diversify to obtain market resources and build connections.

Insert Table 2 about here

After testing the effect of state ownership on unrelated diversification, we analyzed the effect of state ownership on related diversification. This time, related diversification was entered as a dependent variable. The other variables and their entry procedures remained unchanged.

Table 3 shows the results. Consistent with the results in Table 2, state ownership still has a significant and negative effect on (related) firm diversification in all four models, which supports hypothesis 1. However, it is interesting to note that compared with the data in Table 2, the effect of the size of state ownership has become smaller. This difference suggests that state ownership may have more significant effects on unrelated diversification than on related diversification. Finally, with related diversification as the dependent variable, the data in Table 3 show that the effects of firm age and size are still significant, which support hypothesis 5 and 6.

Insert Table 3 about here

Finally, we conducted hierarchical regressions to test the effects of state ownership on the firms' stock market performance. In the analyses, the firms' stock market performance was first entered as the dependent variable. State ownership was entered as an independent variable (Model 1). After that, unrelated and related diversifications were entered (Model 2). Finally, the controlled variables, i.e., firm size, firm age, and industry profitability, were entered (Model 3). Again, we entered the variables in this manner to assess the stability of the regression coefficients on the main independent variable, i.e., state ownership.

Table 4 shows the results of this analysis. It suggests that state ownership has no significant effect on stock market performance. This result is surprising and does not support our prediction in hypothesis 7. After considering this result carefully, we believe that the explanation may be the way in which Chinese investors react to the news of state ownership reduction. The Chinese government has never clearly announced how and when it will reduce its state ownership among listed firms as a whole, yet it keeps testing the markets by reducing its shares in one or two listed firms once in a while. This practice keeps the stock markets guessing what the government might do next. Consequently, when investors hear the news that the government is selling its shares in one firm, they will sell not only the stock of that firm but also the stocks of other firms that may face similar reductions in the future. However, as the prices of many stocks have dropped without reductions in state ownership, there is no linear relationship between the cutting of state ownership and the dropping of stock price.

In terms of diversification, model 2 in Table 4 shows significant effects of unrelated and related diversification on stock market performance. However, it should be pointed out that the model itself is not significant and the R square suggests that little variance can be explained. Moreover, after controlling the effects of industry profitability and firm size, we found no significant effect of either form of diversification on the firms' stock market performance.

Finally, as Table 4 shows, only Model 3 is significant, and indicates the significant effects of industry profitability and firm size on the firms' stock market performance. It seems that industry profitability improves stock market return because investors react to the profitability potential of each industry. If the profitability potential of one industry is good, investors may chase all stocks in this industry and push up the stock prices of all firms therein. In contrast, firm size seems to have a negative effect on stock market return. According to observations (e.g., Li, 2001), many Chinese firms increase their size by issuing new shares to purchase other firms. In recent years, whenever firms are doing this, their stock prices tend to drop. Consequently, Chinese firms that are aggressively expanding can have a larger firm size

but a declining share price, which explains the negative effect of firm size on stock market performance.

Insert Table 4 about here

DISCUSSION AND CONCLUSIONS

We have highlighted the existence of a set of fief-specific factors that should be considered when studying organizational behavior in China's transitional economy. We have also identified the key characteristics of these fief-specific factors based on the Boisot and Child (1988) model. These characteristics include: 1) the effects of fief-specific factors remaining significant as long as China still has a fief transaction-governance structure, but disappearing or becoming much less significant after the current transitional economy is transformed into a true market economy; 2) the existence of relationships between these factors and the personal and hierarchical relationships that are commonly found in a fief transaction-governance structure; and 3) the fact that these fief-specific factors reflect submission to superordinate goals, which are often set by government officials.

Based on the characteristics identified, we have given examples of these fief-specific factors. For example, some of the connections or Guanxi that have been studied by past research (e.g., Peng and Luo, 2000) can be considered as fief factors because they have all the characteristics identified above. Similarly, some China-specific legitimacy that is related to the government or specific government officials can also be considered as fief factors. Moreover, the frenzy or movements that reflect hierarchical coordination and submission of superordinate goals in China should also be considered as fief factors because they force Chinese firms to participate or do things that they would not normally do. Finally, in listed former state firms, state ownership can also be considered as a fief factor because it reflects all of the major characteristics of fief-specific factors.

Although this study tests only one fief-specific factor, i.e., levels of state ownership of publicly-listed firms in China, it is sufficient to show the existence of these fief-specific factors, which may be relevant to all studies of organizational behavior and performance in China. Past research has not paid sufficient attention to the existence and effects of this set of factors. Therefore, the main contribution of this paper, for the future development of organization theory in China, is highlighting the necessity and significance of considering these factors in future studies.

Our findings also have special implications for the study of some topics that have been widely studied by scholars interested in organizational

behaviors in China today. For example, in studying the effects of China's institutional environment on firm behavior and performance, some researchers focus on Guanxi or connections. Our study suggests that the concept of Guanxi may be too narrow to catch all of the unique characteristics of China's business environment, and may be too general to explain the significant differences among forms of organizational behavior or organizational processes among the so-called transitional economies. Take China and the former Soviet Union as examples. Some authors have argued that both countries emphasize connections and Guanxi (Peng and Luo, 2000). However, during the reform processes toward market economies, one observes many differences between these two countries. In China, as in Vietnam and some other Asian countries, one sees incremental processes of reform, covering such dimensions as changing employment system, shifting firm ownership, and reforming firm governance structure. In the former Soviet Union and the East European countries, all of the reforms took place almost overnight. If the effects of Guanxi are significant in both China and the former Soviet Union (e.g., Peng and Luo, 2000), then why should we see different institutional processes and organizational outcomes in these two countries? In fact, in their articles, Boisot and Child (1988, 1999) have already pointed out many significant differences between China and former Soviet Union in terms of societal culture, economic infrastructure and institutional traditions. Unfortunately, some studies on connections and Guanxi seem to ignore all these differences and treat transitional economies as a homogeneous sample. This practice, as our study indicated, will not help understanding the differences in organizational behaviors among firms in different transitional economies.

On the other hand, empirical observation of reform processes in East Asian countries, such as China, Vietnam, and North Korea, suggest many similar fief characteristics or factors, which can be attributed to the East Asian culture only. It is these fief characteristics and factors that may lead to more reasonable and powerful explanations of organization behavior in these East Asian countries. Accordingly, we believe that our study contributes to the field by suggesting a new construct or a set of new constructs that may encourage more rigorous organizational studies in China and other East Asian transitional economies.

Our study also has implications for the study of Chinese enterprise reform and business strategy. The findings in the current paper reveal the effects of the institutional environment on firm strategy and performance. During the current transition period, in which China is moving from a planned economy to a market economy, firms may be forced by the fief environment to pursue diversifications to reduce perceived uncertainties. Moreover, this diversification is more likely to happen when firms are no longer

state owned or when firms are losing major hierarchical connections or Guanxi with government officials. In other words, after the reduction of state ownership, Chinese firms do not perform as do their counterparts in the West. It remains unclear, however, whether diversification is really in the long-term interests of these firms' shareholders. Future studies should collect empirical data over a long period to test the long-term effects of diversification on firm performance.

Finally, the current study has some limitations. First, it uses a cross-sectional design, which could make it difficult to assess the causality of the variables. Although the inclusion of industrial data allowed for some control over the differences among the industries, these cross-sectional data make it difficult to study the changes of firm behavior over the years. Future studies should consider this issue and develop more powerful tests. Moreover, the current study failed to obtain data on sales proportions to measure diversification, which means that the measurement of diversification herein is not as precise as in Western studies. Future studies should try to improve the measurement of diversification.

REFERENCES

1. Agrawal, A. and G. Mandelker (1990), "Large shareholders and the monitoring of managers: The case of antitakeover charter amendments," *Journal of Financial and Quantitative Analysis*, 25, 2, pp. 143-161.
2. Alchian, A. A. and H. Demsetz (1972), "Production, information costs and economic organization," *American Economic Review*, 62, pp. 777-795.
3. Bethel, J. E. and J. Liebeskind (1993), "The effects of ownership structure on corporate restructuring," *Strategic Management Journal*, 14 (special issue), pp. 15-32.
4. Boisot, Max H. and J. Child (1988), "The iron law of fiefs: Bureaucratic failure and the problem of governance in the Chinese economic reforms," *Administrative Science Quarterly*, 33, pp. 507-527.
5. Boisot, M. and J. Child (1996), "From fiefs to clans and network capitalism: Explaining China's emerging economic order," *Administrative Science Quarterly*, 41, pp. 600-628.
6. Boisot, M. and J. Child (1999), "Organizations as adaptive systems in complex environments: the case of China," *Organization Science*, 10, 3, pp. 237-252.
7. Burt, R. (1997), "The contingent value of social capital," *Administrative Science Quarterly*, 42, pp. 339-365.
8. Chang, Y. and H. Thomas (1989), "The impact of diversification strategy on risk-return performance," *Strategic Management Journal*, 10, pp. 271-284.
9. Chen, Q.T. (1999), "The Road of State-owned Enterprises to the Market," Beijing: Chinese Development Press.
10. Child, J. (1994), *Management in China During the Age of Reform*. Cambridge, England: Cambridge University Press.
11. CTHK (1997), *China's Industrial Markets Yearbook*. City University of Hong Kong.
12. Davis, J.H., F.D. Schoorman, and L. Donaldson (1997), "Toward a stewardship theory of management," *Academy of Management Review*, 22, 1, 20-47.
13. Demski, J., and G. Feltham (1978), "Economic incentives in budgetary control systems," *The Accounting Review*, 53, pp. 336-358.
14. Desai, A., Kroll, M. and Wright, P. (2005), "Outside board monitoring and the economic outcomes of acquisitions: A test of the substitution hypothesis," *Journal of Business Research*, 58, pp. 926-934.
15. Dong, F. (2001), "The operation problems in reducing state ownership," *The Singdao Daily (Hong Kong)*, Oct. 25, Page A14.
16. Dyck, I.J.A. (1997), "Privatization in Eastern Germany, management selection and economic transition," *American Economic Review*, 87, 4, pp. 565-597.
17. Eisenhardt, K. M. (1989), "Agency theory: an assessment and review," *Academy of Management Review*, 14, 1, pp. 57-74.
18. Geringer, J.M., Beamish, P.W. and R.C. da Costa (1989), "Diversification strategy and internationalization: Implications for MNE performance," *Strategic Management Journal*, 10, pp. 109-119.
19. Grant, R.M. (1988), "On 'dominant logic', relatedness and the link between diversity and performance," *Strategic Management Journal*, 9, pp. 639-642.
20. Gibbs, P. A. (1993), "Determinants of corporate restructuring: The relative importance of corporate governance, takeover threat, and free cash flow," *Strategic Management Journal*, 14 (special issue), pp. 51-68.
21. Chen G. M., F. Michael. & L. P. Xu. (2009), "Does the type of ownership control matter? Evidence from China's listed companies," *Journal of Banking & Finance*. 33(1), pp. 171-179.
22. Hitt, M. A., R. E. Hoskisson and R. D. Ireland (1990), "Acquisitive growth and commitment to innovation in M-form firms," *Strategic Management Journal*, 11 (special issue), pp. 29-47.
23. Li, H.X., Z.J. Wang., & X.J. Deng. (2008), "Ownership, independent directors, agency costs and financial distress: evidence from Chinese listed companies," *Corporate Governance*. 8(5): pp. 622-643.
24. Hoskisson, R. E., M. A. Hitt and C.W.L. Hill (1993), "Managerial risk taking in diversified firms: An evolutionary perspective," *Organization Science*, 2, pp. 296-313.
25. Hoskisson, R.E., R. A. Johnson and D. D. Moesel (1994), "Corporate divestiture intensity in restructuring firms; Effects of governance, strategy, and performance," *Academy of Management Journal*, 37, 5, pp. 1207-1233.
26. Johnson, R.A., R. E. Hoskisson and M.A. Hitt (1993), "Board of director involvement in restructuring: The effects of board versus managerial controls and characteristics," *Strategic Management Journal*, 14 (special issue), pp. 33-50.
27. Jones, G.R. and C.W.L. Hill (1988), "Transaction cost analysis of strategy-structure choice," *Strategic Management Journal*, 9, pp. 159-172.
28. Li, J. (1992a), "The change from fief structure in China," *Advances in Chinese Industrial Studies*, 3, pp. 21-36.

29. Li, J. (1992b), "Management by objectives and China's reform of the employment system," *Advances in Chinese Industrial Studies*, 3, pp. 169-180.
30. Li, J. and Khatri, N. (1999), "Power and influence issues in Asian emerging markets," *The Management Development Journal of Singapore*, 8,1, pp. 19-26.
31. Li, J., Karakowsky, L. and K. Lam (2002), "East meets east and east meets west: the case of Sino-Japanese and Sino-West joint ventures in China," *Journal of Management Studies*, 39, 6, pp. 22-38.
32. Li, J.; Lam, K.; Sun, J. & Liu, S. X. Y. (2008). Strategic human resource management, institutionalization, and employment modes – an empirical study in China.. *Strategic Management Journal*. Vol. 29 (3): 337-355.
33. Li, J., K. Lam, and G. Qian (2001), "Does Culture Affect Behaviour and Performance of Firms: The Case of Joint Venture in China," *Journal of International Business Studies*, 32,1, pp. 115-31.
34. Li, J. and Murray, V. (1992), "Obstacles to the development of the field of organizational behavior in China," *Advances in Chinese Industrial Studies*, 3, pp. 155-168.
35. Li, Z. (2001), "Strange phenomena in mainland stock markets today," *Xin Bao (Hong Kong)*, Aug. 14, Page 16.
36. Liew, L. (1999), "The impact of the Asian financial crisis on China: The macroeconomy and state-owned enterprise reform," *Management International Review*, 39, pp. 85-95.
37. Lin, J. Y., C. Fang and L. Zhou (1998), "Competition, policy burdens, and state-owned enterprise reform," *The American Economic Review*, 88, 2, pp. 422-427.
38. Lu, Y. and I. Bjorkman (1997), "HRM practices in China-Western joint ventures," *International Journal of Human Resource Management*, 8, 5, pp. 614-628.
39. Lu, Y. and Yao, J. (2006), "Impact of state ownership and control mechanisms on the performance of group affiliated companies in China," *Asia Pacific Journal of Management*, 23, pp. 485-503.
40. Lubatkin, M. and S. Chatterjee (1994), "Extending modern portfolio theory into the domain of corporate diversification: Does it apply?" *Academy of Management Journal*, 37, 1, pp. 109-136.
41. Luo, Y. (2002), "Product diversification in international joint ventures: performance implications in an emerging market," *Strategic Management Journal*, 23, pp. 1-20.
42. Luo, Y. and Tung, R. L. (2007), "International expansion of emerging market enterprises: A springboard perspective", *Journal of International Business Studies*, 38, pp. 481-498.
43. Mallette, P. and K. L. Fowler, "Effects of board composition and stock ownership on the adoption of 'Poison Pills'," *Academy of Management Journal*, 35, 5, p. 1010.
44. Markides, C.C. and P.J. Williamson (1994), "Related diversification, core competencies and corporate performance," *Strategic Management Journal*, 15, pp. 149-165.
45. McCallum, K. (2001), "Chinese IPOs to include state-owned stock," *The Asian Wall Street Journal*, July 25, p. M8.
46. Mckinnon, R. I. (1992), "Spontaneous order on the road back from socialism: an Asian perspective," *The American Economic Review*, 8, 2, pp. 31-37.
47. Meisner, Mitch. (1972), "The Shenyang transformer factory – a profile," *China Quarterly*, Oct. – Dec., Issue 52, 717-737.
48. Michel, A. and I. Shaked (1986), "Multinational corporations vs. Domestic corporations: Financial performance and characteristics," *Journal of International Business Studies*, 17, 3, pp. 89-110.
49. Mintzberg, H. (1973), *The Nature of Managerial Work*. New York: Harper & Row.
50. Montgomery, C.A. and H. Singh (1984), "Diversification strategy and systematic risk," *Strategic Management Journal*, 5, pp. 81-191.
51. Newman, K.L. (2000), "Organizational transformation during institutional upheaval," *The Academy of Management Review*, 25, 3, pp. 602-619.
52. Palepu, K. (1985), "Diversification strategy, profit performance and the entropy measure," *Strategic Management Journal*, 6, pp. 239-255.
53. Peng, J. 2006. *Research on the Reform of Ownership among State-owned Insurance Firms*. Salian Press. Shanghai, China.
54. Peng, M. W., Tan, J. and Tong, T. W. (2004), "Ownership types and strategic groups in an emerging economy", *Journal of Management Studies*, 41, 7, pp. 1105-1129.
55. Peng, M. and Y. Luo (2000), "Managerial ties and firm performance in a transition economy: the nature of a micro-macro link," *Academy of Management Journal*, 43, 3, pp. 486-501.
56. Perrow, C. (1986). *Complex Organizations: A Critical Essay*. New York: McGraw-Hill.
57. Porter, M.E. (1996), "What is strategy," *Harvard Business Review*, 74, November-December, pp. 61-79.
58. Ramanujam, V. and P. Varadarajan (1989), "Research on corporate diversification: A synthesis," *Strategic Management Journal*, 10, pp. 523-551.
59. Ramamurti, R. (2000), "A multilevel model of privatization in emerging economies," *Academy of Management Review*, 25, 3, 525-550.
60. Rumelt, R.P. (1974), *Strategy, Structure and Economic Performance*, Harvard Business School, Boston: Division of Research.
61. Rumelt, R.P. (1982), "Diversification strategy and profitability," *Strategic Management Journal*, 3, pp. 359-369.
62. Smyth, R. (1998), "Toward 'the modern corporation': recent developments in the institutional reform of state-owned enterprises in Mainland China," *Issues and Studies*, 34, 8, pp. 102-131.
63. Smyth, R. (2000), "Asset stripping in Chinese state-owned enterprises," *Journal of Contemporary Asia*, 30, 1, pp. 3-16.
64. The World Bank (ed.) (1997), *China's Management of Enterprise Assets: The State as Shareholder*. Washington, D.C.: The World Bank.
65. Thomson, E. (1996), "Reforming China's coal industry," *China Quarterly*, Sep., Issue 147, pp. 726-750.
66. Tian, J. and C .M. Lau (2001), "Board Composition, leadership structure and performance in Chinese shareholding companies," *Asia Pacific Journal of Management*, 18, 245-263.
67. Tse, D. K. and C. M. Lau (1999), *New ownership forms in transitional economies: emergence, characteristics and performance of China's joint stock companies*. The University of Hong Kong: CMC Working Paper (CMC1999-003-01).

68. Tsui, A.S. Egan, T.D. and C.A. O'Reilly (1992), "Being Different: Relational Demography and Organizational Attachment," *Administrative Science Quarterly*, 37, 3, 549-579.
69. Tung, R. (1995), "Market-oriented reform of state-owned enterprises in Mainland China." *Issues and Studies*, 31, 2, pp. 1-20.
70. Wen, G. (2000), *Explain the Investment of Chinese Enterprises. Democracy and Construction Press, Beijing.*
71. Wrigley, L. (1970), *Divisional Autonomy and Diversification. Harvard Business School, Boston: Doctoral Dissertation.*
72. Xiao, H. F., & J. G, Yuan (2007), "Ownership structure, board composition and corporate voluntary disclosure; Evidence from listed companies in China," *Managerial Auditing Journal*, 22(6): pp. 604-624.
73. Zou, H., M. B, Adams (2008), "Corporate ownership, equity risk and returns in the People's Republic of China," *Journal of International Business Studies*, 39(7): pp. 1149-1169.

TABLE 1. DESCRIPTIVE STATISTICS

VARIABLES	M.	S.D.	1	2	3	4	5	6	7	8	9	10	11	12
1 Stock Market Return	0.62	0.84	1.00											
2 Firm Size	5434532	15963054.06	-0.01	1.00										
3. Firm Age	5.71	1.95	0.03	0.07	1.00									
4 State Ownership	0.32	0.28	-0.06	-0.01	-0.11	1.00								
5 Institution Ownership	0.30	0.13	0.03	-0.08	0.02	-0.22	1.00							
6 Employee Ownership	0.02	0.01	0.05	-0.13	0.07	-0.20	0.02	1.00						
7 Overseas Ownership	0.05	0.02	-0.12	0.14	-0.12	0.10	0.02	-0.08	1.00					
8 Domestic Ownership	0.30	0.27	-0.23	0.05	0.07	-0.13	0.19	-0.13	0.02	1.00				
9 Management Ownership	0.01	0.01	0.12	0.01	-0.05	-0.20	-0.12	0.14	0.07	0.07	1.00			
10 Un-related Diversification	1.54	1.36	-0.19	0.06	0.02	-0.09	0.04	-0.08	0.05	-0.08	-0.01	1.00		
11 Related Diversification	2.22	1.71	-0.23	0.05	0.07	-0.13	0.04	-0.13	0.07	-0.13	0.10	0.12	1.00	
12 Return on Assets	-2.02	3.41	0.09	-0.11	-0.12	0.14	-0.11	0.14	-0.12	0.14	0.02	0.01	0.05	1.00

Note: *p < .05; ** p < .01; ***p < .001, one-tailed significance.

TABLE 2. STATE OWNERSHIP AND UN-RELATED DIVERSIFICATION (N = 578)

Un-related Diversification				
	Model 1	Model 2	Model 3	Model 4
1. State Ownership	-0.147***	-0.135***	-0.134*	-0.125*
2. Management Ownership		-0.027	-0.023	-0.019
3. Industry Profitability		-0.047	-0.082	-0.077
4. Firm Size		0.104**	0.210**	0.192*
5. Firm Age		0.314***	0.394***	0.381***
6. Interaction (State and Management Ownership)			-0.187	0.016
Interaction (State Ownership and Industry Profit)			0.077	0.066
Interaction (State Ownership and Firm Size)			0.138	0.114
Interaction (State Ownership and Firm Age)			-0.121	-0.119
7. Controlled Variables				
Parent Firm Ownership				0.011
Employee Ownership				0.061
Overseas Ownership				-0.024
Public Ownership				0.048
Overall Model F	12.442***	17.598***	10.749***	8.452***
Adjusted R Square	0.022	0.136	0.148	0.155
Standard Error	1.344	1.267	1.263	1.260

Note: * p < 0.05; ** p < 0.01; *** p < 0.001.

TABLE 3. STATE OWNERSHIP AND RELATED DIVERSIFICATION (N = 578)

Related Diversification				
	Model 1	Model 2	Model 3	Model 4
State Ownership	-0.147***	-0.129**	-0.126*	-0.118*
Management Ownership		-0.057	-0.057	-0.050
Industry Profitability		-0.023	-0.061	-0.064
Firm Size		0.0135**	0.258**	0.217**
Firm Age		0.222**	0.280***	0.270**
Interaction (State and Management Ownership)			0.079	0.001
Interaction (State Ownership and Industry Profit)			0.083	0.027
Interaction (State Ownership and Firm Size)			0.107	0.103
Interaction (State Ownership and Firm Age)			-0.180	-0.161
Controlled Variables				
Parent Firm Ownership				0.011
Employee Ownership				-0.027
Overseas Ownership				-0.069
Public Ownership				0.021
Overall Model F	11.737***	11.674***	7.300***	5.844***
Adjusted R Square	0.020	0.095	0.106	0.115
Standard Error	1.682	1.623	1.618	1.616

Note: * p < 0.05; ** p < 0.01; *** p < 0.001.

TABLE 4. STATE OWNERSHIP AND FIRM'S STOCK PERFORMANCE (N = 578)

Three-Year Average Stock Market Return				
	Model 1	Model 2	Model 3	Model 4
State Ownership	-0.017	-0.018	0.271*	0.266*
Unrelated Diversification	-0.052	-0.070	-0.078	-0.050
Related Diversification	0.129	0.116	0.117	0.085
Management Ownership		-0.013	-0.006	-0.001
Industry Profitability		-0.164***	-0.095	-0.106
Firm Size		-0.146**	-0.196*	-0.158
Firm Age		0.031	0.121	0.125
Interaction (State and Management Ownership)			0.052	-0.022
Interaction (State Ownership and Industry Profit)			-0.137	-0.144
Interaction (State Ownership and Firm Size)			0.065	0.046
Interaction (State Ownership and Firm Age)			-0.103	-0.104
Controlled Variables				
Parent Firm Ownership				0.125
Employee Ownership				-0.104
Overseas Ownership				0.166*
Public Ownership				-0.001
Overall Model F	1.119	5.051***	3.540***	3.618***
Adjusted R Square	0.000	0.152	0.165	0.188
Standard Error	1.543	1.497	1.481	1.459

Note: * p < 0.05; ** p < 0.01; *** p < 0.001