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Board independence, state ownership and stock return volatility during Chinese state enterprise reform

Cheng Zhang, Kee Cheok Cheong and Rajah Rasiah

Abstract

Purpose – This study aimed at investigating the influence of corporate governance on firm risk during the Chinese state enterprise reform. The purposes of this study are to examine the effects of board independence, state ownership and other governance variables on firm risk and to check the influence of controlling shareholder types on firm risk.

Design/methodology/approach – This study uses the dynamic and static panel model to estimate the effects of board independence, state ownership and other governance factors on return volatility. To examine the influence of controlling shareholder types on corporate risk-taking, this study further used the treatment effect model (or sample selection model) to analyze the effect of private, state-owned enterprise (SOE) entity, central government and local government controls on corporate risk-taking.

Findings – It was found that the enforcement of board independence significantly increases firm risk. The strategy of decentralizing state enterprises (from central government to local government) is a good way to achieve stable stock returns.

Originality value – This study contributes to existing knowledge in several ways. First, it focused on independent directors rather than on the size of the corporate board. Second, it highlighted the impacts of state ownership and control on corporate risk. Instead of treating all types of state ownership as homogenous, SOEs are further classified into directly controlled and indirectly controlled, in line with prior studies.

Keywords Financial performance, Corporate governance, Board of directors, Ownership

Paper type Research paper

1. Introduction

Corporate board serves the most important role in corporate governance. It is to mitigate agency problems arising between managers and shareholders in a firm where ownership is separated from management (Nakano and Nguyen, 2012; Ho et al., 2013; Alves et al., 2015; Lu and Wang, 2015). Board independence[1] is a primary requirement for companies in many countries. However, in spite of its perceived importance, prior studies provide mixed empirical evidence on the effectiveness of board independence on various decision-making processes within a firm (Bhagat and Black, 1999; Bhagat and Black, 2001; Weir and Laing, 2001; Kumar and Sivaramakrishnan, 2008).

The same scenario of mixed empirical evidence is also applicable to the context of China. For example, Liu et al. (2015) found that board independence contributes to firm performance in government-controlled firms. In contrast, Li et al. (2015) found that board independence improves board effectiveness in only private-controlled firms. Therefore, making any definitive conclusion is even more difficult for a transitional economy like China, where the institutional environment and governance variables are constantly changing.
In China, the corporate board functions as the ultimate authority in matters relating to corporate strategy and investment; therefore, its risk preference is fundamental for corporate success and performance. Most Chinese firms have little variation in board size; the board usually consists of 9 to 11 directors, with a standard deviation of 2 (Huang and Wang, 2015; Li et al., 2015). Such small variation in board size would decrease the estimated importance of the relationship between board size and corporate risk (Huang and Wang, 2015). Most studies attribute corporate risk to board size, with little focus on board independence (Cheng, 2008; Pathan, 2009; Nakano and Nguyen, 2012; Huang and Wang, 2015; Koerniadi et al., 2013). Instead, research focus should be directed toward Chinese board independence, which has grown from around 2 per cent in 2000 to an estimated 37 per cent in 2012 (Liu et al., 2015), as mandated by Chinese Government regulations.

The Chinese state-owned enterprise (SOE) reform, which occurred during the country’s economic transition, provides an interesting context for examining the benefits of board independence. First, owing to the strategies of partial privatization and decentralization, state ownership is still widespread in Chinese listed companies. Second, state ownership has diversified controlling shareholders, which may influence corporate risk-taking (Faccio et al., 2011; Boubaker et al., 2012; Boubakri et al., 2013). Third, the Chinese share structure reform in 2005 further privatized Chinese SOEs and accelerated the economic transition, which makes the corporate governance system in China more complex than that of developed countries.

This study aimed at investigating the corporate governance issues during the Chinese state enterprise reform. The specific aims are to examine the effects of board independence, state ownership and other governance variables on firm risk and to check the influence of controlling shareholder types on firm risk. We found that the enforcement of board independence in 2003 significantly reduced firm risk, but the percentage of independent directors and the retained state ownership tends to positively affect firm risk. Board independence, as a symbol of good corporate governance and a widely accepted practice in many countries, comes with both merits and flaws in China. The government strategy of decentralizing state enterprises from government control to SOE entity control is a good way to achieve stable performance. This study contributes to existing knowledge in several ways. First, we examine corporate board governance and corporate risk, as measured by stock return volatility, by focusing on independent directors rather than on the size of the corporate board. Second, we highlight the impacts of state ownership and control on corporate risk. Instead of treating all types of state ownership as homogenous, SOEs are further classified into directly controlled and indirectly controlled enterprises, in line with prior studies (Berkman et al., 2012, Li, 2010).

The structure of the remainder of this paper is as follows: Section 2 presents the literature review and the hypotheses. Section 3 discusses the research methodology. Section 4 reports the findings. Section 5 concludes the study.

2. Literature review

In an enterprise, risk-taking behavior varies for different stakeholders who have legitimate interests in the firm. For example, executive directors are managers, and their risk-taking attitude depends on factors such as job security, stock incentives and compensation; most of them prefer less risk (March and Shapira, 1987). In contrast, shareholders can be risk-neutral, as they are able to diversify their investment and may be willing to accept any project that increases net present value, regardless of the risk (Deutsch et al., 2011).
2.1 Board independence and firm risk

Independent directors are well-placed outside directors to influence corporate decision-making by monitoring managerial self-serving behavior and advising managers in the design and execution of corporate strategies (Li et al., 2015). According to the resource dependency theory, outside directors facilitate a firm’s borrowing, information acquisition and alliance formation. Board independence is likely to bring about firms with both opportunities and risks (Peng, 2004). Supporting this, Minton et al. (2011) found that lower levels of board independence are associated with lower levels of risk. From the perspective of agency theory, Brick and Chidambaran (2008) found a negative relationship between board independence and firm risk. Because risky firms are usually associated with greater information asymmetry between managers and shareholders, independent directors who are unfamiliar with intra-firm information may find it difficult to monitor risky firms. There are also empirical findings which suggest that board independence has no effect on firm risk-taking (Cheng et al., 2010).

Chinese board independence became a mandatory requirement in 2001 when the China Securities Regulatory Commission (CSRC) issued the “Guidelines for introducing independent directors”. It stipulated that Chinese listed firms must have two independent directors by the end of June 2002, and a third independent director by the end of June 2003. According to CSRC, independent directors are those who have no relations with the company that may bias their independent judgment. Tricker (2011) asserted that the more independent a director is, the less he or she knows about a company’s business, organization, strategies, markets, competitors and technologies. Therefore, we predicted that Chinese independent directors conducted monitoring functions more than the advising function. The independent directors’ monitoring renders corporate decision-makers more conservatism in risk-taking activities:

H1. Board independence decreases firm risk.

2.2 State ownership and firm risk

State ownership is another important Chinese corporate governance characteristic. Government shareholders can influence corporate decision-making through their voting rights. Because the government has objectives of maintaining social stability and high employment rate, they have the intention to stabilize big business groups, which are the key providers of middle-income jobs (Fogel et al., 2008). Therefore, firms with high state ownership are less likely to engage in risky investments. Besides, state ownership is associated with poor monitoring, while managers tend to be conservative toward risk-taking to safeguard their job (Boubakri et al., 2013). The government provides strong support for politically well-connected firms, which are protected from economic downturns, and investment failures; thus, state ownership is predicted to decrease the firm risk:

H2. State ownership reduces firm risk.

2.3 Chinese split-share structure reform and firm risk

In the Chinese context, the risk-taking behavior has to be superimposed on China’s continuing state enterprise reform, which targeted both ownership structure reform and governance reform. Russia and Eastern Europe are examples of countries and regions that failed to implement the market economy immediately (Sun et al., 2002), whereas the Chinese state enterprise reform has followed a gradual path of decreased state ownership but control rights are still retained over important SOEs.

The ownership structure reform is reflected in the split-share structure reform of 2005. Before this reform, the typical Chinese listed firms had an ownership structure composed of non-tradable shares and tradable shares, which greatly impeded the Chinese economic
During 2001 and 2005, the Chinese Stock Market experienced a slump, although the macro-economy was booming. This is because non-tradable shares accounted for more than two-thirds of the total shares. Among the non-tradable shares, state shares can be held by both central and local governments, government agencies and SOE entities (such as central and local state assets management bureaus, and the finance ministry) (Qiang, 2003). Legal person shares can be held by institutions, such as security companies or trust and investment companies. The split-share structure reform took place in April 2005, and 94 per cent of the listed firms had completed the conversion process by the end of 2006 (Jiang et al., 2008). By the end of 2007, 98 per cent of the firms had completed the share structure reform process. Therefore, state ownership decreased dramatically and the private enterprises boomed by issuing shares or acquiring existing shares released by the government. We predict that the split-share structure reform will increase firm risk. This is because the share liberalization exposes firms to the open market environment with both growth opportunities and uncertainty (Brown and Kapadia, 2007):

H3. The split-share structure reform increases firm risk.

2.4 Controlling shareholders and firm risk

Chinese enterprises experienced several governance structure reforms that created a more diversified institutional environment. To discourage self-serving behavior by managers and to supervise state enterprises directly controlled by the Chinese Government, the State Assessment Supervision and Administration Commission (SASAC) and State Assessment Management Bureaus (SAMBS) are set up at the central and local government levels, respectively.

SOEs indirectly controlled by the government through pyramid shareholding[4] represent a kind of market-oriented SOEs (MOSOEs) (Li, 2010). They are similar to private enterprises in many aspects. Managers of MOSOEs usually have superior expertise over the firms they manage, and they are partially rewarded based on firm performance (Kang and Kim, 2012). As legal entities, MOSOEs are more likely to have commercial objectives and their after-tax profits can be retained for internal use. We predict that compared with the directly controlled government firms, the SOE entity control reduces political intervention, which may reduce firm risk:


Private firms are controlled by individuals or private entities. The controlling shareholders of private firms usually have better knowledge within their industries than other types of firms, so they often prefer to install themselves as the chairman or CEO of the firm (Berkman et al., 2012). We predict that private control may increase the firm risk, because private firms are the most market-oriented. Managers are rewarded based on firm performance, and thus, they are likely to take on any project that generate net profit regardless of the firm risk:

H5. Private control increases firm risk.

Directly controlled SOEs can be further sub-divided into central government-controlled SOEs (Central) and local government-controlled SOEs (Local). Officials of government agencies are public servants with fixed salaries. As their compensation is not related to corporate performance, they have little incentive and expertise to manage enterprises for shareholders. Despite some similarities, central government- and local government-controlled firms differ in many ways. Central government-controlled firms are enterprises that are critical to the national economy; therefore, they are closely monitored by central government agencies, such as the State Council or the Ministry of Finance. The chairmen of central government-controlled firms are usually carefully selected based on their ability, and most of them have the opportunity to be promoted to higher hierarchies in the central
government (Chen et al., 2009). We predict that central government control may reduce firm risk, because the government aims to maintain social stability and lower unemployment rates; thus, it is less likely for central government controlled firms to engage in high-risk investment:

\[ H_6. \] Central government control decreases firm risk.

Local SOEs are controlled by local government agencies and local state asset management bureaus. Owing to the administrative distance from the central government’s power center, it is harder for the central government to enforce rules and regulations on local SOEs. Local governments have the right to set their own rules to regulate SOEs, which are regarded as instruments through which local governments compete with each other in collecting much-needed resources. Thus, we predict that local governments may be more tolerant of corporate risk-taking behaviors in local SOEs:

\[ H_7. \] Local government control increases firm risk.

3. Research methodology

3.1 Data

This study selected 444 non-financial firms that had been continuously listed from 2000 to 2012. They included enterprises and conglomerates engaged in utilities, property and commerce. The sample has been selected based on several criteria. First, this study only considers firms which were continuously listed throughout the sample period, because one of the main objectives of this study is to evaluate the effects of government regulations and reforms on firm-level behaviors. It would be difficult to capture these effects through inactive or unlisted firms. Second, financial firms such as banks, insurance companies and financial institutions have been excluded from this study, as they follow different governance procedures. Third, firms controlled by government universities, research institutions or government media agencies have not been included in this study because they are non-profit organizations. Fourth, firms without complete data information for the sample period were eliminated, including those without a complete 12-month accounting period, and those whose accounting year was not ended on December 31. All of the financial and corporate governance data were drawn from the companies’ annual reports, which were gathered from the China Stock Market Accounting Research Database and the CCER Database developed by GTA Information Technology Company Limited and SinoFin Financial Information Company Limited.

3.2 Model specifications

Because the study used the balanced panel data set to capture the effect of board independence, state ownership and other governance factors on firm risk, both static equation (1) and dynamic equation (2) regression models are developed as follows:

\[
RV_{it} = \beta_0 + \beta_1 BI_{it} + \beta_2 SO_{it} + \beta_3 Controls_{it} + \text{Govern 03} + \text{Govern 07} + \text{Govern 08} + \epsilon_{it} \\
(1)
\]

\[
RV_{it} = \beta_0 + \beta_1 RV_{it-1} + \beta_2 BI_{it} + \beta_3 SO_{it} + \beta_4 Controls_{it} + \text{Govern 03} + \text{Govern 07} + \text{Govern 08} + \epsilon_{it} \\
(2)
\]

In equations, \( RV_{it} \) (Return Volatility) represents firm risk; it is measured by the standard deviation of monthly stock return within 12 months of the year \( t \) and firm \( i \). \( RV_{it-1} \) is the one-year lagged value of stock return volatility. \( BI_{it} \) (Board Independence) is the percentage of independent directors on the board. \( SO_{it} \) (State Ownership) is the percentage of state ownership. Controls_{it} is a list of control variables applied in this...
study, including the other corporate governance variables and firm character variables. Specifically, board size (BS) is measured by the natural logarithm of the total number of directors on the corporate board. The supervisory board size (SS) is the number of directors in the supervisory board. The ownership concentration (OwnCon) is the total percentage of shares held by the top ten largest shareholders. CEO Duality (Duality) is a dummy variable that equals 1 if the CEO and board chairman are the same person, 0 otherwise. FirmSize is measured by the natural logarithm of the total assets, while FirmAge is the number of years since the firm was established. ROA is the net income divided by total assets. TobinQ is the total market value divided by total assets. Govern03, Govern07 and Govern08 are year dummy variables. Govern03 represents the year 2003 when the “Guidelines for introducing independent directors” was reinforced, and it equals 1 if the year equals 2003, and 0 otherwise. Govern07 and Govern08 represent years 2007 and 2008 when the split-share structure reform completed 94 and 98 percent, respectively. They are equal to 1 when the year is 2007 and 2008, and 0 otherwise. $e_{it}$ represents the error term of the models.

For the purposes of this study, the panel data covered more degrees of freedom that were able to discover the complexity of corporate governance issues better than a single cross section or time series data. The study used three estimation methods, namely, pooled ordinary least squares (OLS), fixed effect and dynamic generalized method of moments (GMM), to illustrate the regression results. The pooled OLS model simply pooled all the entities together; in contrast, the fixed-effect model assumes that the individuality of each entity has significant effects on the regression results that is not randomly happened. In this study, the fixed-effect method is preferential than the random-effect method, as the Hausman test refused the assumption of random effect nested in the fixed effects. Dynamic GMM has more merits compared with other methods when dealing with endogeneity and autocorrelation issues. It applies multiple instruments to eliminate the endogeneity problems. According to the Hansen J test, the instruments used in the model are valid, whereas the AR(2) test suggests that the second-order autocorrelation is not a problem. Besides, the standard error was applied in this study to avoid the heteroskedasticity issue.

4. Analysis

Table I shows the descriptive statistics of each variable used in this study between 2000 and 2012 (for detailed information, refer to the Appendix). To minimize the bias of extreme values, this study winsorized all variables with the 10-percentile value from each end of the

<table>
<thead>
<tr>
<th>Table I</th>
<th>Descriptive data analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
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<tr>
<td><strong>Main variables</strong></td>
<td></td>
</tr>
<tr>
<td>RV</td>
<td>5,772</td>
</tr>
<tr>
<td>BI</td>
<td>5,772</td>
</tr>
<tr>
<td>SO</td>
<td>5,772</td>
</tr>
<tr>
<td><strong>Control variables</strong></td>
<td></td>
</tr>
<tr>
<td>BS</td>
<td>5,772</td>
</tr>
<tr>
<td>SS</td>
<td>5,772</td>
</tr>
<tr>
<td>OwnCon</td>
<td>5,772</td>
</tr>
<tr>
<td>Duality</td>
<td>5,772</td>
</tr>
<tr>
<td>FirmAge</td>
<td>5,772</td>
</tr>
<tr>
<td>FirmSize</td>
<td>5,772</td>
</tr>
<tr>
<td>ROA</td>
<td>5,772</td>
</tr>
<tr>
<td>TobinQ</td>
<td>5,772</td>
</tr>
</tbody>
</table>
distribution. We found that, on average, there are about 29.8 per cent independent directors and 25.6 per cent state ownership.

4.1 Influence of board independence, state ownership and other governance factors on firm risk

Table II illustrates the regression results for the influence of board independence, state ownership and other governance factors on firm risk. The highest correlation coefficient among variables is about 0.5, which suggested there is no serious multicollinearity issue in this study. OLS, fixed effect and GMM yielded similar results for the pooled sample. We also found that the effects of these investigated factors vary in firms with different controlling shareholder types including central government controlled (Central), local government controlled (Local), market-oriented SOEs (MOSOE) and private firms (Private).

Board independence has a positive influence on firm risk; thus, \( H1 \) cannot be supported, as the percentage of independent directors increased firm risk. It suggested that first, independent directors as an outside resource provider induced the decision-makers to undertake risky projects. Second, independent directors as an outside monitoring agency, who are not familiar with intra-firm information, cannot constrain managerial risk-taking behavior. However, the enforcement of the “Guidelines for introducing independent directors” as indicated by Govern03 was found to reduce firm risk in all types of firm. This suggested that rules and regulations enforced by the Chinese Government are able to constrain corporate risk-taking behavior. The government played a significant role in a Chinese corporate governance system.

The state ownership tends to positively affect firm risk, especially in SOE-controlled firms; thus, \( H2 \) cannot be supported. It means that state ownership cannot keep the stability of the firm; the more state ownership in the firm, the more likely that corporate resources are diverted for political use at the expense of shareholders’ interests (Tian and Estrin, 2008) that increased the uncertainty. At the same time, the split-share structure reform also increases firm risk as indicated by Govern07 and Govern08. This is because the reform that converted non-tradable shares into tradable ones greatly liberalized the Chinese Stock Market and increased the uncertainty of stock returns, and hence, \( H3 \) is accepted.

For other investigated variables, the supervisory board size tends to reduce firm risk in SOE-controlled firms, because one of the main function of the supervisory board is to monitoring managerial behaviors; thus, it tends to constrain the corporate risk-taking behavior. Ownership concentration has a significant impact on firm risk. This is because the higher the ownership concentrated, the more the large shareholders are concerned about corporate governance issues. Besides, CEO Duality also significantly affects firm risk, as it gives the CEO more power in risk-taking decisions.

4.2 Influence of controlling shareholders on firm risk

To examine the influence of controlling shareholder types on corporate risk-taking, this study further used the treatment effect model (or sample selection model) to analyze the influence of private, SOE entity, central government and local government controls on corporate risk-taking (Table III). The Chinese Government decentralized its state enterprises based on the type of enterprise, such as the “grasping the large and letting the small go” policy. Thus, the controlling shareholder types are not randomly selected but determined by a firm’s character. The treatment effect model is a good way to capture this selection process (Guo and Fraser, 2014). According to the Wald test, overall the goodness of fit of the model is acceptable with the \( p < 0.000 \). Besides, the treatment effect model assumes that the correlation between the error term of the selection equation and main regression equation is nonzero, and the likelihood ratio (LR) test with \( p < 0.05 \) refused their correlation is zero, means that applying the treatment effect model is appropriate in this study.
Table II
The influence of board independence, state ownership and other factors on firm risk

<table>
<thead>
<tr>
<th></th>
<th>OLS Pool</th>
<th>FE Pool</th>
<th>GMM Pool</th>
<th>FE Central</th>
<th>FE Local</th>
<th>FE MOSOE</th>
<th>FE Private</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI</td>
<td>0.0486*** (0.00546)</td>
<td>0.0471*** (0.00608)</td>
<td>0.105*** (0.00656)</td>
<td>0.0403 (0.69)</td>
<td>0.0350*** (2.71)</td>
<td>0.0299*** (3.09)</td>
<td>0.0535*** (3.38)</td>
</tr>
<tr>
<td>SO</td>
<td>-0.000566 (0.00282)</td>
<td>0.00587 (0.00365)</td>
<td>0.115* (0.00466)</td>
<td>0.0100 (0.70)</td>
<td>0.0140 (1.87)</td>
<td>0.0174 (2.58)</td>
<td>-0.00548 (0.33)</td>
</tr>
<tr>
<td>BS</td>
<td>-0.00374 (0.00267)</td>
<td>-0.00450 (0.00359)</td>
<td>-0.00973 (0.00770)</td>
<td>0.0183 (0.79)</td>
<td>-0.00477 (0.65)</td>
<td>0.00245 (0.39)</td>
<td>-0.00462 (0.56)</td>
</tr>
<tr>
<td>SS</td>
<td>-0.000455 (0.000470)</td>
<td>-0.000827 (0.000850)</td>
<td>-0.00253 (0.0141)</td>
<td>-0.00345 (0.80)</td>
<td>0.000148 (0.09)</td>
<td>-0.00347* (2.27)</td>
<td>0.000329 (0.14)</td>
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<tr>
<td>OwCon</td>
<td>0.007752 (0.00472)</td>
<td>0.000810 (0.00807)</td>
<td>0.0104 (0.0927)</td>
<td>-0.0507 (-1.32)</td>
<td>-0.0442* (-2.47)</td>
<td>-0.0286 (-1.46)</td>
<td>0.0377* (2.57)</td>
</tr>
<tr>
<td>Duality</td>
<td>0.000241 (0.00179)</td>
<td>0.000669 (0.00226)</td>
<td>-0.00824* (0.0376)</td>
<td>0.0170 (1.36)</td>
<td>-0.00597 (-1.35)</td>
<td>0.0154* (3.17)</td>
<td>-0.00263 (-0.60)</td>
</tr>
<tr>
<td>FirmAge</td>
<td>0.00441*** (0.00126)</td>
<td>0.00308 (0.00165)</td>
<td>0.00230 (0.0153)</td>
<td>-0.0111 (-1.62)</td>
<td>-0.00974 (-0.32)</td>
<td>0.00647* (2.22)</td>
<td>0.00373 (0.99)</td>
</tr>
<tr>
<td>FirmSize</td>
<td>-0.000697 (0.000598)</td>
<td>0.00391*** (0.00105)</td>
<td>-0.000645 (0.00875)</td>
<td>0.000685 (0.14)</td>
<td>0.0050* (2.29)</td>
<td>0.00403 (1.87)</td>
<td>0.00412 (1.79)</td>
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<td>ROA</td>
<td>-0.0766*** (0.00823)</td>
<td>-0.0458*** (0.00910)</td>
<td>-0.0438*** (0.0132)</td>
<td>-0.0559 (-1.20)</td>
<td>-0.0516** (-2.96)</td>
<td>-0.0173 (-0.95)</td>
<td>-0.0361* (-2.03)</td>
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<td>TobinQ</td>
<td>0.00856*** (0.000698)</td>
<td>0.0104*** (0.000843)</td>
<td>0.00639*** (0.00136)</td>
<td>0.00864* (2.32)</td>
<td>0.0128*** (7.48)</td>
<td>0.0128*** (6.99)</td>
<td>0.0115*** (7.01)</td>
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<td>Govern03</td>
<td>-0.0304*** (0.00229)</td>
<td>-0.0289*** (0.00229)</td>
<td>-0.0290*** (0.00181)</td>
<td>-0.0347* (-2.44)</td>
<td>-0.0313*** (-6.64)</td>
<td>-0.0243*** (-7.51)</td>
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<td>Govern07</td>
<td>0.100*** (0.00229)</td>
<td>0.0981*** (0.00227)</td>
<td>0.0964*** (0.00314)</td>
<td>0.0944*** (13.16)</td>
<td>0.0926*** (25.04)</td>
<td>0.0986*** (15.27)</td>
<td>0.0997*** (22.90)</td>
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<td>Govern08</td>
<td>0.0621*** (0.00226)</td>
<td>0.0625*** (0.00222)</td>
<td>0.0456*** (0.00313)</td>
<td>0.0601*** (7.73)</td>
<td>0.0605*** (16.52)</td>
<td>0.0656*** (14.58)</td>
<td>0.0591*** (13.27)</td>
</tr>
<tr>
<td>L.RV</td>
<td>0.150*** (0.0154)</td>
<td>0.150*** (0.0154)</td>
<td>0.150*** (0.0154)</td>
<td>0.150*** (0.0154)</td>
<td>0.150*** (0.0154)</td>
<td>0.150*** (0.0154)</td>
<td>0.150*** (0.0154)</td>
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<tr>
<td>_cons</td>
<td>0.0725*** (0.0159)</td>
<td>-0.0138 (0.0245)</td>
<td>0.0710** (0.0236)</td>
<td>0.172 (1.37)</td>
<td>0.0158 (0.29)</td>
<td>-0.0363 (-0.73)</td>
<td>-0.0473 (-0.92)</td>
</tr>
<tr>
<td>N</td>
<td>5,772</td>
<td>5,772</td>
<td>5,328</td>
<td>458</td>
<td>1,916</td>
<td>1,846</td>
<td>1,552</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.409</td>
<td>0.384</td>
<td>0.351</td>
<td>0.339</td>
<td>0.187</td>
<td>0.316</td>
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</tr>
</tbody>
</table>

Notes: Standard errors in parentheses; *p < 0.05; **p < 0.01; ***p < 0.001
The study found that only private control has positive effects on firm risk. In contrast, central government control, local government control and SOE entity control can significantly reduce firm risk. These findings suggested that the nature of ownership affect firm risk significantly.

Specifically, state indirect control through MOSOEs can reduce firm risk; hence, H4 is accepted. This is because MOSOEs enjoy a degree of autonomy, in that after-tax profit can be retained for their own use. Managers receive explicit monetary rewards based on firm performance, which greatly increases managers’ incentives to maximize profitability. Therefore, the agency problems between controlling shareholders and minority shareholders are moderated in MOSOEs. In addition, SOEs can borrow at below-market rates and the state shares the risk with banks, whereas banks have to bear all the risk for private enterprises. The investors are therefore more willing to invest in SOEs, as they feel that the state will not expropriate shareholders’ interests.

Private control increases firm risk, and thus, H5 is accepted. Private enterprises have several advantages in managing corporate resources: they are more flexible in pursuing commercial objectives, faster in decision-making and more sustainable in long-term orientations. However, compared with state enterprises, the private enterprises are more likely to be influenced by market forces like their counterparts in capitalist countries. Furthermore, private enterprises have to confront unfavorable government policies and are disadvantaged in accessing capital resources (Liang et al., 2012). For example, banks and other financial institutions are more willing to lend to the state enterprises, as the government will share the risk with the bank; however, banks have to undertake the whole residual risk for the private enterprises. Besides, individual investors are more willing to invest in state enterprises than private ones, as they believe the government will not steal their property.

Central government control reduces firm risk, which is consistent with H6. Central government-controlled firms are important state enterprises that are crucial to the...
national economy, and it is likely that the central government tends to maintain the steady of the state enterprises to supply enough jobs and keep the unemployment rate low. This is because the officials in government agencies are public servants who have few incentives to undertake the risky project, as their only responsibilities are to execute government decisions and support the Chinese Communist Party leadership. Their remuneration and promotion are not related to firm value or dividend payout but on how well they implement government policies.

Local government control reduces the firm risk, which contradicts H7. This is likely because the local government has incentives to prioritize the stability of local SOEs and defer the fulfillment of political objectives. Local governments can set their own policies and regulations to manage local state assets, as their fiscal revenue depends on local SOEs. Local governments also treat local SOEs as an important middle-income job provider to maintain social stability.

5. Conclusion and implications

Chinese corporate governance has its own characteristics with board independence and state ownership widely existed among enterprises. This study found that board independence as a symbol of good corporate governance increased firm risk, which suggested that the Chinese independent directors cannot provide sufficient monitoring to constrain the managerial risk-taking behavior. The retained state ownership was found to increase firm risk in the market-oriented state enterprises, as the government may expropriate the shareholder’s interest.

These findings speak to the impact of state enterprise reform on risk management. First, it confirmed that SOEs managed by central and local government bureaucrats reduced firm risk, as the government has objectives of maximizing social stability, employment rates and wages. Second, SOE-controlled firms, which have easier access to resources from both government and the market also reduce firm risk. Third, private enterprises facing financial disadvantages found it difficult to compete with their counterparts controlled by SOE entities or bureaucrats that increased the firm risk.

The contrasting findings between MOSOE and private firms suggest that elements of reform in MOSOE could be usefully adopted for private firms. In addition, the Chinese Government should strengthen market supervision through improved transparency and information disclosure to guarantee that all enterprises receive equal treatment before further transformation and privatization. Besides, the enterprises should set up their incentive and evaluation system to encourage directors and managers to work toward value creation. Indeed, the findings shed light on an economic reform approach that may work for other transitional economies like Vietnam, where state enterprises remain larger players among enterprises. Without fully developed market conditions and legal infrastructure, partial privatization is a good strategy to achieve stable performance.

Notes

1. According to the China Securities Regulatory Commission (CSRC) (2001), an independent director hired by a listed company is one who does not assume any post other than directorship in the company and who has no relationships with the company and its major shareholders that might affect independent and objective judgment.

2. The China Securities Regulatory Commission (CSRC) stipulated that by the end of June 2003, Chinese listed companies must have at least three independent directors on their board.

3. According to the China Securities Regulatory Commission (CSRC), the ultimate controlling shareholders are the investors who, hold directly or indirectly 50% of the total outstanding shares and control directly or indirectly 30% of total voting rights, can use the voting rights to select more
than 50% of board directors, have a significant influence over decision-making in shareholders’ meetings and govern other situations recognized by CSRC.

4. Pyramid structure is defined as a group of firms whose ownership structure displays a top-down chain of control.

References


Table AI  Correlation matrix

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<th>RV</th>
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<th>SO</th>
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<th>FirmSize</th>
<th>ROA</th>
<th>TobinQ</th>
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Notes: *p < 0.05; **p < 0.01; ***p < 0.001