EFFECTIVENESS OF CORPORATE GOVERNANCE STRUCTURE: AN ALTERNATIVE METRIC ON THE PERFORMANCE OF LISTED CHINESE COMPANIES

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Abstract

We analyse a panel data set covering the years 2001 to 2005 and comprised of a stratified sample of A, AB and AH non financial companies listed on China's Shanghai and Shenzhen stock exchanges to provide empirical evidence on the influence of corporate control and governance characteristics on the quality and independence of corporate decision making in these companies. The characteristics considered are the level of concentration in and type of ownership of the companies, particularly high levels of government and foreign ownership, and the composition (expertise) and size of the companies' two boards. Performance outcomes, and by association the quality and independence of corporate policy decisions, are measured in the form of firm bad debt to accounts receivable ratio ($^{BD}/_{AR}$). We find that for our sample firms' concentration of ownership, including state and foreign ownership, and board size and independence are significant factors in determining the levels of the bad debt ratio.

Keywords: China; Corporate Governance; Corporate Control

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1. Introduction

The core of China's corporate regulation framework is comprised of *The Company Law*, *The Securities Law*, and *The Code of Corporate Governance for Listed Companies in China* (*The Code*). Given its importance it is not surprising that, having established this framework, China has been active in evolving its regulatory environment. Over 300 laws and directives have been issued relating to the securities and futures markets since 1992 (Lin, 2004).

While evolving rapidly, questions exist as to the quality and effectiveness of China's corporate governance environment. Concerns reflect the emergence of agency problems following establishment of the Shanghai and Shenzhen stock exchanges in 1990 and 1992, respectively. Evidence regarding ineffectiveness of listed companies' supervisory boards (Dahya et al, 2003; Lin, 2004), weak independence of boards of directors, and the impact on minority shareholders of high levels of ownership concentration (Lin, 2004) support these concerns. Thus, former SOEs, privatised and listed, appear able to engage in corporate governance practices associated with misuse or misappropriation of state and/or corporate assets.

This paper develops and tests a set of hypotheses regarding the impact of the corporate control and governance characteristics of listed non financial Chinese companies on the quality and independence of corporate policy decision making. The first set of characteristics is based on the level of concentration in and type of ownership. The second relate to the composition and independence of the Board of Directors and Supervisory Board under China's two-tier board structure. Of interest are the impact of high levels of ownership concentration, particularly government and foreign ownership, and expertise and independence of the boards in these companies. The quality and independence of corporate policy decisions is measured in terms of the sampled firms' bad debt to accounts receivable ratios. This study addresses a gap in the literature in relation to the impacts on corporate governance outcomes in China of high concentrations in ownership and board size and composition under China's two-tier board system.

The structure of the paper is as follows. Section 2 provides a brief review of literature on China's corporate governance framework, and also develops the set of hypotheses to be tested. Section 3 outlines the research methodology and describes the data. Section 4 presents the results of the analysis and their discussion. Section 5 provides a brief conclusion.

2. Literature and Hypotheses

For China the core of the corporate governance framework is comprised of *The Company Law of the People's Republic of China (The Company Law)* (proclaimed December 1993, revised in 2005), *The Securities Law of the People's Republic of China (The Securities Law)* (proclaimed December 1998, revised 2005), and *The Code of Corporate Governance for Listed Companies in China* (*The Code*) (issued January 2002 by the CSRC and the State Economic and Trade Commission (SETC), and revised 2005).[i] *The Code* is the primary official document specifically dealing with corporate governance. Its intended role is as a 'measuring standard' specifying good practice; a set of guidelines allowing companies and their investors to conduct a self-evaluation of whether (or not) good corporate governance is in place.[ii] Thus, rather than providing a legally enforceable piece of legislation or regulation, it requires all listed companies in China to "act in the spirit of *The Code* in their efforts to improve corporate governance" (*The Code*, 2005).

Consistent with *The Company Law*, *The Code* outlines requirements regarding the corporate control and governance characteristics of listed Chinese companies. Chapter 2 deals with the responsibilities of controlling shareholders with respect to the company and other shareholders. Its intent is that controlling shareholders act in the interests of both these parties, and be prevented from advantaging themselves at their cost. Chapter 3 covers the duties, responsibilities, composition and independence of the board of directors. Chapter 4 outlines requirements for the supervisory board under China's two-tier board structure, including roles, reporting responsibilities, and requisite skill set. Guidelines on the quality of expertise of members of each of the boards, independence between the board of directors and the supervisory board, and the ability of the supervisory board to monitor the performance of the company and board of directors are of primary importance.

For China potential deficiencies in the above corporate governance framework may be identified, relating to corporate ownership and control, the independence of the board of directors, and to performance of the supervisory board. Each may be recognised as reflecting corporate governance aspects of the agency problem, including government interference, implying that these problems have not been adequately addressed (Qiang, 2003).

2.1. Ownership, Majority Shareholders and Corporate Control

China's listed companies usually have five classes of ownership: state shares, legal person shares, employee shares, domestic minority shares, and foreign institutional and/or foreign investor shares (Sun and Tong, 2003; Wei et al, 2005; Firth et al, 2007; Wei, 2007). Concentration and composition are key matters when considering the corporate governance impact of these different ownership classes.

Ownership concentration determines the distribution of power. Contrary to the widely accepted views of Berle and Means (1932), large corporations face problems in the separation of ownership and control because they are managed by controlling shareholders and not by their professional managers (La Porta et al, 1999). Ownership concentration may reduce managers' freedom to take risks, make strategic decisions and take advantage of opportunities. High levels of ownership concentration may affect management incentives and corporate policy choices through investor pressure on managers (Brickley et al, 1988; Pound 1988; Bushee 1998). Thus, while a group of shareholders with a large total share of the equity might be more effective at monitoring management, their powers must be restrained to prevent them taking advantage of other shareholders (Clarke, 1998). High ownership concentration provides both incentive and opportunity for controlling shareholders and managers to engage in expropriation (Morck et al, 1988; Shleifer and Vishny, 1997; La Porta et al, 1999).

In China minority shareholders are relatively weak and unable to counter the majority shareholders' influence, being viewed as speculators expecting to gain a 'free ride' based on the performance of the firm (Lin, 2004). Contrary to *The Code*, related-party transactions between controlling shareholders may be detrimental to minority shareholders, and controlling shareholders may act to advantage themselves at their cost. Thus China's corporate governance may be relatively ineffective in protecting minority shareholders' rights, providing us with the first of our hypotheses:

H_1: High levels of concentration in ownership in listed Chinese firms will be associated with poorer performance.

As well as concentration in ownership, a history as state-owned enterprises before listing means that government is a feature of the ownership structure of many listed companies in China. State ownership has been associated with a negative impact on firm performance (Wei et al, 2005; Gunasekarage et al, 2007). Agency problems may arise due to differences between state and non state shareholders objectives. For

example, for the State (central/local), maintenance of employment may take precedence over profitability. Thus our second hypothesis is:

H_2: High levels of state ownership in listed Chinese firms will be associated with poorer corporate performance.

With respect to corporate performance our third hypothesis deals with the impact of high levels of foreign ownership in these listed Chinese companies:

H_3: High levels of foreign ownership in listed Chinese firms will be associated with improved corporate performance.

That a high level of foreign ownership may be a factor in improving corporate governance and, more broadly, accounting standards, reflects international investors' incentives to push for improvements in these areas. This is to better guarantee their interests (Šević, 2005; Krzywda et al, 1995). Thus we conjecture that this pressure will, on average, have a positive effect on firms in which foreign investors have significant control.

2.2. Board Independence and Expertise

China's decision to adopt a two-tier board system to promote better governance was made in the early 1990s partly because many enterprises and their directors were perceived to be engaging in questionable related-party transactions. *The Code* gives particular attention to two aspects of these boards: director independence on the board of directors; and qualifications and knowledge of supervisory board members.

Since 2003 at least one-third of directors on the board of directors have been required to be independent from the listed company employing them and its major shareholders, and limited to independent director in their role in the listed company. Independence may be important due to behavioural motivations. Independent directors may work in the best interests of the minority shareholders in order to maintain their good reputation in society (Fama and Jensen, 1983).[iii] Thus both larger boards and those with a higher proportion of independent directors will have more individuals with these incentives, improving corporate performance. So our fourth set of hypotheses is:

H_{4A}: An increase in the number of board members that are independent in listed Chinese firms will be associated with improved corporate performance.
H_{4B}: An increase in the size of the board in listed Chinese firms will be associated with improved corporate performance.

Under China's two-tier board structure the supervisory board has a responsibility and duty to oversee both the board of directors' and senior managements' performance, and to protect the company's and stakeholders' rights and interests. Under *The Company Law* they have powers to investigate their company's operating status without interference and report directly to the CSRC and related authorities. Xiao et al (2004) argue that several key supervisor characteristics determine the role of the supervisory board, including the proportion who are insiders and shareholders, and their professional knowledge or work experience. The latter are prerequisites to an ability to identify issues related to financial and managerial performance. Dahya et al (2003) also highlight the importance of supervisory board capacity to its ability to fulfil its stated functions, identifying four types of behavioural roles that they can engage in, depending on the independence and capacity of their members. These roles are: honoured guest, friendly advisor, censored watchdog, and independent watchdog. If the supervisory board takes on the role of honoured guest, friendly advisor or censored watchdog, its annual report is unlikely to provide useful information to minority shareholders and investors. The role of independent watchdog requires that supervisory board members have capacity to act with independence and expertise. Supervisory boards that have a higher number of members with appropriate professional knowledge or work experience should be better able to improve corporate performance. Larger supervisory boards may also better ensure a combination of members with the requisite set of skills and/or experience. This leads to our final set of hypotheses:

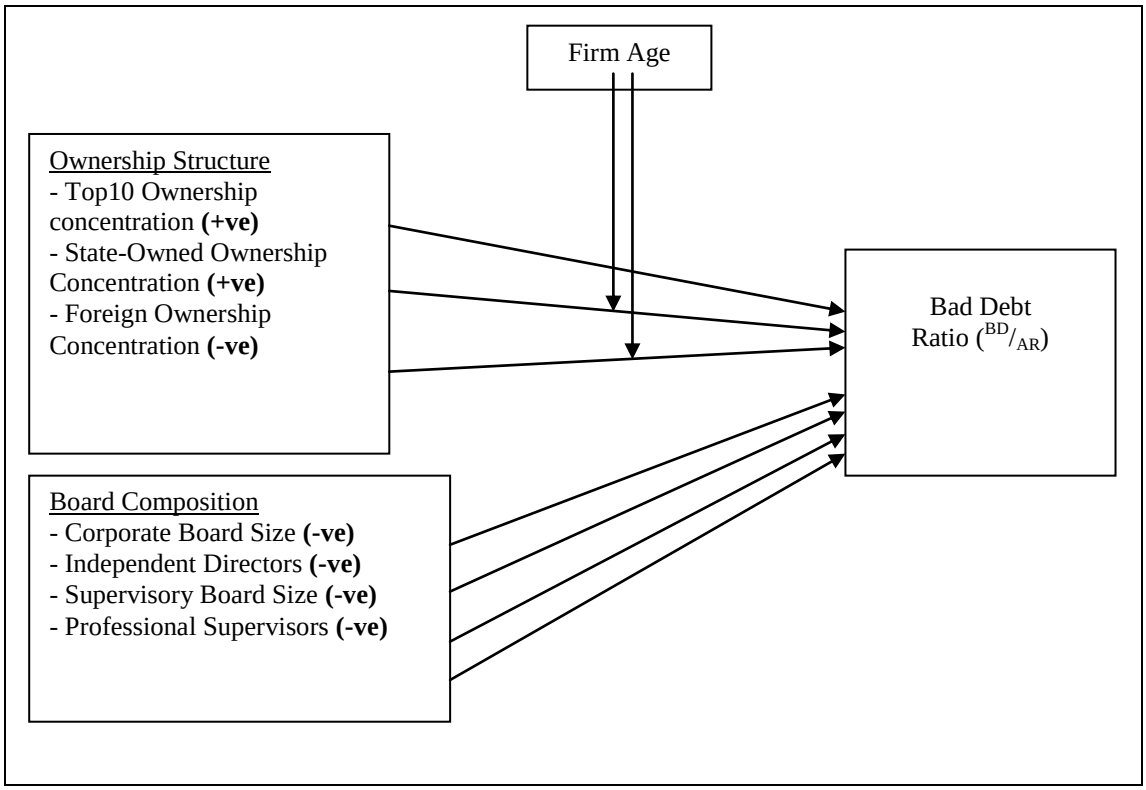
H_{5A}: An increase in the number of supervisory board members with professional knowledge or work experience in listed Chinese firms will be associated with improved corporate performance.
H_{5B}: An increase in the size of the supervisory board in listed Chinese firms will be associated with improved corporate performance.

3. Research Methodology

3.1. Research Schema

Agency theory is the basis for the hypothesized relationships between ownership structure and the composition of the two boards of listed Chinese companies in this study, which are depicted in Figure 1. The empirical schema identifies these two classes of factors as primary influences on the dependent variable (defined as the value of bad debts to account receivables ($^{BD}/_{AR}$). Additionally, time since listing (Firm Age) is used to moderate ownership structure factors, recognising several important features likely to be present in China's privatisation process. Prior to listing, significant improvements in the structure of the balance sheet and firm performance, particularly profitability, are required; especially for state-controlled flagship firms. This suggests that these firms may start in a good balance sheet position in relation to our dependent variable. Thus problems due to state control/influence may only become apparent over time. For firms with high levels of foreign ownership, however, this need not be the case. China's focus on building a set of large, internationally competitive companies, especially in key industries such as telecommunications, energy, transport, etc., suggests that it has allowed weaker companies to come under foreign control. Thus a concern is that, should foreign ownership exert a positive influence, performance may only be impacted over time.

Figure 1. Empirical Schema



The choice of $^{BD}/_{AR}$ to indicate the quality of corporate performance reflects the core characteristics of bad debts. First, the likelihood that these will be impacted by management decisions; the board of directors, in consultation with management, ultimately has responsibility for decisions on credit policy with respect to standards and terms. Thus it, along with the firm's management, determines corporate practice, as reflected in initial credit evaluation, ongoing credit monitoring and collection, and forgiveness of delinquency and default. Where problems arise in these areas, action would be expected from the supervisory board. Second, bad debts will be impacted by management (i.e., internal) decisions, suggesting that while there may be common trends/cycles in bad debts over time, much variation in bad debts between different enterprises should reflect firm-specific influences and decisions.

3.2. Sample and data

This study focuses on non financial A-share listed firms on either the Shanghai or Shenzhen stock exchanges. In order to test the effects of types of ownership—particularly high levels by state and foreign investors—the

sample is divided into three groups: A-share, AB-share, and AH-share companies. A-share companies have issued A-shares only, and are listed on the domestic stock exchanges. AB-share companies have issued both A-shares[iv] and B-shares domestically,[v] with an initial A-share offering. They are also listed on the stock exchanges in China. However, AH-share companies have issued both A-shares and H-shares,[vi] and have floated their shares simultaneously on the Hong Kong Stock Exchange and one of China's two mainland stock exchanges.

A sample size of 120 companies was selected from listed companies in China's Shanghai SSE180 and Shenzhen SSE100 for the 2001 to 2005 period via a stratified sampling method. 46 companies[vii] were randomly selected from the A-share group, and 42 companies randomly selected from the AB-share group. Only 32 companies were listed on both the Hong Kong Stock Exchange and one of the mainland Chinese stock exchanges, thus all were selected for our sample. The final sample of non-financial companies (Table 1) consists of 117 companies listed on the Shanghai and Shenzhen stock exchanges.[viii] Over the 2001 to 2005 period this has resulted in 540 observations.[ix]

Table 1. Composition of Sample

Share Type	No. of Sample	Percentage of Sample	No. of observations	Percentage of observations
A	45	38.46	191	35.37
AB	42	35.90	210	38.89
AH	30	25.64	139	25.74
Total	117	100.00	540	100.00

3.3. Model Development and Variable Measurement

The panel data regression model to be empirically investigated in this study is:

$$BD/AR_{i,t} = \alpha + \beta_1 TOP10_{i,t} + \beta_2 STOP10_{i,t} + \beta_3 STOP10_{i,t} * AGE_{i,t} + \beta_4 FORTOP10_{i,t} + \beta_5 FORTOP10_{i,t} * AGE_{i,t} + \beta_6 INDP_{i,t} + \beta_7 BSIZE_{i,t} + \beta_8 TSB_{i,t} + \beta_9 PROFSB_{i,t} + \varepsilon_{i,t}$$

The variables are comprised of three types: one dependent variable, seven independent variables, and one moderating variable. The definition and measurement for each of the variables are listed Table 2:

Table 2. Definition and Measurement of Variables

Variable Acronym	Definition	Expected Sign	Measurement
Dependent:			
$^{BD}/_{AR}$	The bad debt ratio relative to accounts receivable ($^{BD}/_{AR}$)	N/A	$BD/AR_{i,t} = \frac{Bad\ Debts_{i,t}}{\text{Accounts Receivables}_{i,t}}$. Where: *Bad Debts* = total bad debts at end of a reporting year; Receivables = value of accounts receivable at end of a reporting year; *i* = sampled company; *t* = year.
Independent:			
TOP10	Overall ownership concentration	+ve	Proportion of total shares held by the top 10 shareholders
STOP10	State ownership concentration	+ve	Proportion of shares held by the state in those held by top 10 shareholders
FORTOP10	Foreign ownership concentration	-ve	Proportion of shares held by foreign owners from those held by top 10 shareholders
INDP	Independent directors	-ve	Number of independent directors on the corporate board

BSIZE	Board of directors size	-ve	Number of directors on the board
TSB	Supervisory board size	-ve	Number of supervisory board members
PROFSB	Professionalism of the supervisory board	-ve	Number of supervisory board members with professional knowledge/work experience
Moderating:			
AGE	Firm age	N/A	Years since initial listing

4. Results

4.1. Descriptive Statistics

Table 3 profiles the corporate governance characteristics of the sample listed A-share, AB-share and AH-share Chinese companies. First, mean ownership concentration (i.e., TOP10) is 65.5 per cent, consistent with previous studies by Xu and Wang (1999) and Deng and Wang (2006) that show high ownership concentration in listed companies in China. This supports the potential for larger shareholders to dominate listed firms in China (Deng and Wang, 2006). Second, mean state ownership concentration in top 10 company shareholders (i.e., STOP10) is 64.86 per cent, supporting the state's maintenance of a dominant role in the operation of many former SOEs. Third, the mean concentration of foreign ownership in the top 10 company shareholders (i.e., FORTOP10) is only 14.08 per cent. Fourth, the mean number of independent directors (i.e., INDP) is 2.93, with a range of zero to six. The minimum reflects that appointment of independent directors was rare before CSRC guidelines requiring at least one-third of the directors to be independent became effective from 2003. Fifth, the mean number of supervisors with professional knowledge/experience in such areas as law and accounting (PROFSB) is 1.86, with a range from zero to five. The lower value of the range reflects the period prior to the 2002 issue of *The Code* by the CSRC.

4.2. Multivariate Analysis and Hypothesis Testing

This study uses generalized least squares (GLS) fixed-effects methods. A panel regression model was estimated using the ownership structure variables (two moderated by Firm Age) and the board composition variables. Table 4 provides the panel regression results to test the five hypotheses. These reveal an adjusted-R^2 of 0.35 for the panel regression. The *F* statistic for the regression model indicates that a statistically significant component of the variation in $^{BD}/_{AR}$ is explained by variation in the set of independent variables. The possible existence of multicollinearity was examined. Gujarati (2003) argues that correlations between the independent variables should not be deemed harmful for multivariate analysis unless they exceed 0.8. No correlations between independent variables were found to reach this level.[x] However multicollinearity can still exist even when none of the bivariate correlation coefficients is very large, as one independent variable may be a linear function of a set of independent variables (Gujarati, 2003). Hence, multicollinearity was also tested for using the Variance Inflation Factor (VIF).[xi] The results are that the largest VIF is 1.92, with all other VIFs being below 1.86. Thus, no serious multicollinearity problem was found in the regression model. The discussion that follows examines regression results in terms of the five hypotheses established earlier.

Table 3. Descriptive Statistics on Variables

Variable	Mean	Median	Min	Max	Standard Deviation
Sample:	2001-2005		Observations:	540	
BD/AR	0.2609	0.0959	0.0000	13.1147	0.8403
TOP10	0.6550	0.6616	0.2145	0.9967	0.1627
STOP10	0.6486	0.7067	0.0000	1.0000	0.3078
FORTOP10	0.1408	0.0398	0.0000	0.5906	0.1670
INDP	2.9259	3.0000	0.0000	6.0000	1.3762
BSIZE	10.4130	10.0000	5.0000	19.0000	2.4217
TSB	4.5889	5.0000	2.0000	12.0000	1.6697
PROFSB	1.8593	2.0000	0.0000	5.0000	1.0385
AGE	6.7259	9.0000	0.0000	14.0000	3.4906

H_1 states that a higher level of ownership concentration is associated with poor corporate policy decisions and performance, defined in terms of higher $^{BD}/_{AR}$. This negative effect arises from poor decisions due to an agency conflict between majority and minority shareholders. The ownership concentration measure

is assumed to reflect the distribution of power within in a firm. The positive relationship between ownership concentration (TOP10) and $^{BD}/_{AR}$ (Table 4) is consistent with the perspective of Shleifer and Vishny (1997) that agency problems involve expropriation from minority by majority shareholders, referred to as 'tunnelling', and likely to be a significant problem in emerging market economies. Thus, the first hypothesis is supported.

H_2 implies that where the state sector holds a greater percentage of shares this is associated with a higher level of $^{BD}/_{AR}$. Thus corporatisation of former SOEs in China via share issue has not effectively dealt with agency problems associated with public ownership (Chen, 2004). In contrast to H_2 we find that in the case of higher levels of state control (STOP10) the coefficient is negative, suggesting that rather than increase $^{BD}/_{AR}$ higher levels of state ownership reduce it. However, as argued, consideration needs to be given to the financial requirements required of SOEs prior to listing in China. Thus, we also focus on the coefficient of the level of state control combined with our moderator variable (STOP10*AGE), which has a positive coefficient. As newly listed former SOEs start with a relatively clean bill of financial health, we expect a relatively low initial level for $^{BD}/_{AR}$, and thus potentially a negative coefficient on STOP10. It is important to H_2 that high levels of state ownership are associated with an increase in the level of $^{BD}/_{AR}$ over time (STOP10*AGE). We therefore find support for H_2, given the impact of our moderation variable, accepting it, suggesting agency problems still exist within our sample firm set due to a misalignment between shareholder and state objectives.

Table 4. Panel Regression Results $^{BD}/_{AR}$

Dependent variable:		$^{BD}/_{AR}$		
Sample:		2001 – 2005		
Cross-sections:	117	Panel obsv:	540	
Adjusted-R^2:	0.35	R^2:	0.50	
F significance:	0.00	F-statistic:	3.30**	
Independent variables:	Expected sign	Coefficient	Standard error	t-statistic
Constant	N/A	-0.4247	0.2545	-1.6688
TOP10	+	0.7163	0.2407	2.9755**
STOP10	–	-1.0485	0.1705	-6.1502**
*STOP10*AGE*	+	0.1517	0.0198	7.6741**
FORTOP10	+	0.3903	0.1954	1.9977*
*FORTOP10*AGE*	–	-0.0671	0.0118	-5.6683**
INDP	–	-0.0365	0.0180	-2.0302*
BSIZE	–	0.0381	0.0132	2.8932**
TSB	–	0.0099	0.0150	0.6604
PROFSB	–	-0.0364	0.0142	-2.5695*

Notes: * Statistically significant at the 5% level.
** Statistically significant at the 1% level.

H_3 implies that a greater percentage of shareholding by foreign investors (FORTOP10) will be associated with a lower level of $^{BD}/_{AR}$. The expectation is that improving China's corporate governance and, more broadly, accounting standards, is in international investors' interests. While the coefficient on FORTOP10 is positive, the moderated coefficient of the share of foreign ownership in the top ten shareholders by firm age (FORTOP10*AGE) has the expected negative sign; the impact of foreign ownership occurs progressively over time. H_3 is supported and cautiously accepted.[xii]

H_{4A} and H_{4B} argue that the larger the number of independent directors on the board and the larger the corporate board the lower will be $^{BD}/_{AR}$. The results indicate that there is a negative relationship between $^{BD}/_{AR}$ and the number of independent directors. H_{4A} is supported, adding weight to the agency argument of Fama and Jensen (1983) that independent directors are motivated to work in the best interests of shareholders in order to maintain good personal reputations. However, when considering board size, we find the opposite result to that hypothesized; it appears that larger boards worsen corporate performance. While this latter result may reflect that it is only been required since 2003 that at least one-third of board members be independent, we reject H_{4B}.

H_{5A} and H_{5B} state that larger proportions of supervisory board members with relevant professional knowledge/work experience and larger supervisory boards will tend to reduce $^{BD}/_{AR}$. H_{5A} argues that the supervisory board will require high professionalism from its members to effectively carry out its role of overseeing the performance of the corporate board and management and protecting stakeholders' rights and interests. The coefficient on supervisory board skills (PROFSB) is of the hypothesized sign and statistically

significant. However, the coefficient for supervisory board size (TSB) is insignificant (Table 4), suggesting further research is required. We conclude that, consistent with Dahya et al (2002), our results on the effectiveness of supervisory boards in improving corporate governance may be questioned. Supervisory boards of listed companies in China may have tended to become 'censored watchdogs' (Dahya et al, 2003), during a period when rapid corporate expansion and the dominance of the corporate board has occurred. Thus, we reject our fifth set of hypotheses.

5. Conclusions

Our paper has addressed whether the corporate governance structures charged with shaping corporate decision-making behaviour in China are effective. The structures consist of *The Company Law*, *The Securities Law*, and *The Code* (a code rather than legal requirement). This was based on analysis of an unbalanced panel data set covering 117 companies listed on the Shanghai and Shenzhen stock exchanges over 2001 to 2005 (540 observations). Outcomes considered relate to: corporate ownership and the exercise of control by majority shareholders at the expense of minority shareholders; the independence of the board of directors and the quality of their decisions; and performance of the supervisory board in protecting the company's and stakeholders' rights and interests. Failure in any of these areas suggests that corporate governance structures have not properly addressed an aspect of the agency problem.

The novel choice of the ratio of bad debt to account receivables as our performance metric reflects that the sample firms' boards and management have direct influence over credit policy, as reflected in initial credit evaluation, ongoing credit monitoring and collection, and forgiveness of delinquency and default. We hypothesized that due to agency problems that high levels of concentration in firm ownership, and high levels of state control of enterprises, would be associated with poorer corporate performance and thus higher levels of the bad debt ratio. High levels of foreign ownership, high levels of independent directors on the corporate board, and high levels of skill and experience on the supervisory board were hypothesized to decrease bad debt ratio.

Our results suggest that ownership concentration in general, and in particular high levels of state ownership, are associated with an increase in the bad debt ratio. However, in the latter case it is apparent that, rather than state dominated firms starting with a poorer balance sheet position, state influence has a negative impact over an extended period. Such an outcome suggests that in some cases state objectives rather than those of non state shareholders may dominate in the decision making process. Similarly, consistent with the likely objectives of foreign investors, high levels of foreign ownership are found to impact the bad debt ratio over an extended time; in this case, acting to reduce the bad debt ratio.

Board size and independence are found to be significant factors in determining the bad debt ratio for these listed Chinese firms. Independence of the board was shown to be a significant factor in reducing the bad debt ratio. However, rather than a larger board leading to improved performance, we find that increases in the size of the board are associated with higher bad debt ratios. We have argued that this may reflect that it is only relatively recently (i.e., in 2003) that requirements regarding board independence in China were established, one of the limitations of this study. Future research should seek to increase the size and scope of the sample utilised, in order to address concerns related to the sample size and the length of period covered.

In common with previous research we have failed to find support for the importance of the size of the supervisory board in corporate policy decision making. However, with respect to the impact of the qualifications and experience of the board we find a significant negative effect on the bad debt ratio. In rejecting support for the importance of the supervisory board, due to conflict in our results, we recognise another limitation of this study, suggesting further exploration of the panel data set, and choice and properties of performance metrics used in this study is required.

Overall our results suggest that China needs to continue to address the underlying effectiveness of its corporate governance framework. It must ensure that its corporate governance model addresses the issue of majority shareholder influences on firm decision making. This is especially the case with the strong links that still appear to remain between the state and formerly state-owned enterprises. We also suggest that it must continue to act to ensure that the supervisory board's effectiveness is enhanced, in order that it behaves as an independent watchdog (as per Dahya et al, 2003).

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Endnotes

[i] To this may be added a variety of other laws, including the *Audit Law* (1994), *Accounting Law* (1999), etc.

[ii] *The Code* is based on the OECD (2004), *OECD Principles of Corporate Governance*.

[iii] While independent as defined in *The Code*, the effectiveness of the corporate board in China may differ from that of Western boards due to a close connection between controlling investors and the central or provincial government. The government may influence the appointment of directors and senior managers, and even interfere with the decision-making of a listed firm (Firth et al, 2007).

[iv] A-shares are common stock subscribed and traded in RMB, and reserved for trading by Chinese citizens. The A-share market was launched in 1990 in Shanghai.

[v] B-shares are traded in foreign currencies. Launched in 1992, China's B-share market was restricted to foreign investors before 19 February 2001.

[vi] H-shares are securities of companies incorporated in mainland China and nominated by the Chinese Government for listing and trading on the Hong Kong Stock Exchange, being quoted and traded in HKD. There are no restrictions on holdings by international investors.

[vii] These samples are randomly selected from A-share companies included in the benchmark indices after removing dual-listed companies (these being either AB-share companies or AH-share companies).

[viii] One company found to be a financial company and two companies listed after 2005 have been removed. This results in 117 companies being present in the final sample.

[ix] 45 observations for which the data was incomplete have been excluded, resulting in 540 observations.

[x] The largest absolute value of correlation was 0.4517.

[xi] The critical value of the VIF to test for multicollinearity is 10. Gujarati (2003) suggests that there is no evidence of multicollinearity unless the VIF of a variable exceeds 10.

[xii] This caution recognises that additional information is required to properly explain why firms with high levels of foreign ownership may initially be expected to have higher levels of $^{BD}/_{AR}$.