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Abstract

This article contributes to the international corporate governance literature by examining factors that affect CEO compensation in China. The article models of CEO pay based on an understanding of the unique economic and structural reforms undertaken by the privatized State Owned Enterprises. The findings show that CEO compensation depends, in part, on the firm's operating profits and this indicates that incentive systems are being used to motivate top managers. Corporate governance factors have a significant impact on CEO compensation, but they do so in ways that differ from those in other countries. Our conclusions are robust across different formulations of the basic model and they have public policy implications for China and other transitional economies that are moving away from state ownership of business enterprises.
Keywords: Ownership; board structure; executive compensation.

How Ownership and Corporate Governance Influence Chief Executive Pay in China's Listed Firms

1. Introduction

The literature documents well China's economic reforms and the privatization of its industrial enterprises (e.g., Li et al., 2004). Paradoxically, strong economic growth, fueled by pent-up domestic demand and burgeoning exports, is accompanied by poor corporate performance using accounting and stock market measures of success (Chen et al., 1998). Three reasons put forward for firms' poor performances are the government's interference with commercial decisions, poor corporate governance, and the lack of incentives for top managers (Chen et al., 2006).

This article sheds light on the incentive issue by examining the compensation of CEOs in China's listed firms. In particular, we investigate whether a CEO's pay depends on the firm's performance and whether ownership and boardroom characteristics have an impact on both pay and the pay-for-performance relation. The article identifies the main influences on CEO pay and critique the apparent pay processes used by firms. Now is an opportune time to examine CEO compensation in China as the listed company experiment has been in operation for more than 10 years. We need to learn lessons from the past and make recommendations that will assist future policy making.

The findings show a positive pay-performance relation in China when performance is measured as return on assets. Thus, firms reward their CEOs when their firms have good operating profits. In contrast, stock returns do not relate with CEO compensation. The article provides evidence that state ownership acts to reduce compensation levels and the presence of a foreign shareholder acts to increase pay levels. Foreign-invested firms have higher pay-for-performance sensitivities. Internal

governance does have an impact on CEO compensation. Firms with large boards of directors pay their CEOs less, firms with a lot of non-executive directors are more likely to use performance-based pay, and a firm that has a joint CEO-chairman position is less likely to use performance-based pay.

The article has the following structure. Section 2 provides a brief description of China's privatization program and discusses how top executive reward systems have changed. Section 3 reviews the theoretical foundations of CEO pay and develops hypotheses about the determinants of executive compensation in China. Section 4 describes the research method. Section 5 reports the empirical results. Section 6 discusses the results and Part 7 concludes the paper and discusses the policy implications and the limitations of the study.

2. Institutional background

The reorganization of state owned enterprises (SOEs) is a key ingredient in the economic modernization of China. Here, the operational activities of many, but not all, SOEs are reorganized into companies with share capital and profit making objectives. Many of the corporatized enterprises have subsequently sold shares to the public (a process called privatization) and these shares have been listed on the stock market. However in many cases the government has retained a significant ownership stake[1], which often amounts to effective control. In 2001 the government introduced a plan to sell off the state's remaining shares in listed firms (the so-called second stage of privatization) but this was shelved after strong protests from private investors. The private investors were concerned that the sale of state shares would flood the market and stock prices would plummet. In 2005 the government resurrected the plan to sell state shares in listed firms and made the plan more palatable for private investors by reducing the number of new IPOs (thereby reducing the supply of other new shares) and requiring firms to compensate private investors (the compensation will be

[1] When the government keeps an ownership interest a more apt description is partial privatization. In common with other studies we use the more simple term privatization.

mainly by way of issuing bonus shares). The reorganization of listed firms has been modeled on U.S. corporations in a bold attempt to instill western-style discipline and incentives (Tam, 2000). For example, managers have more discretion in making business decisions and they are held accountable to stockholders rather than to the state and the political hierarchy. Evidence suggests that this objective has met with only partial success (Chen et al., 2006).

After the economic reforms began, managers were given more autonomy and incentive pay systems began to appear (Groves et al., 1994). In the early 1980s the government introduced a contract responsibility system (CRS) for SOEs. Under the CRS, managers were rewarded if the SOE's performance exceeded expectations (as laid out in the contract). Firms that earned higher profits than expected were able to retain the surplus and managers were paid bonuses based on that surplus. Although there were problems with the CRS (Chen et al., 1998) it did sow the seed for further developments in reward systems.

In the early- and mid-1990s the top manager of the SOE (or unit of a SOE) became the CEO of the company once it listed and their pay was a function of the civil service grade that they occupied. Incentive and reward systems were considered to be quite weak during this time (see Huang and Zhang, 1995; Qian, 1995; Yang, 1998; and Zheng, 1998). As the reform process evolved, pay levels departed from civil service rates and became more varied across firms. An embryonic labor market has developed and CEO turnover is quite high (Firth et al., 2006). CEOs are increasingly being appointed from outside the firm. Managerial compensation is decided by the board of directors and does not need the approval of stockholders. During the time of our study, compensation committees did not exist.

Share ownership by CEOs and executive directors is very low (Xu, 2004) and their main source of income is from cash compensation. In 1999, the government considered allowing listed firms to offer stock options to the CEO and other senior managers. However, after much debate, the

government decided against allowing this practice. One reason for not allowing executive stock options is that there is no source from which to give shares to the executives who wish to exercise their options; treasury stock (share repurchases) is not allowed and any new issue of shares (to give to the executives) requires regulatory approval, which is difficult to get. The lack of executive stock options is one reason why share ownership by CEOs and top managers is so low. The absence of executive stock options removes one method of aligning the interests of managers and the shareholders (we note, however, that the use of stock options in the U.S. has been subject to criticism (Bebchuk and Fried, 2004)).

A major prerequisite to having a vibrant stock market is good corporate governance. This is especially so in China where most listed firms have a dominant or controlling shareholder. To promote good corporate governance, China's stock market regulator, the China Securities Regulatory Commission (CSRC), issued *The Code of Corporate Governance for Listed Firms in China*. The Code lays out detailed standards to which firms should adhere and it is similar in many respects to codes of governance in other markets (e.g., Hong Kong, the U.K.). Despite the good intentions of the Code, there are conflicting views on how well they have been accepted or implemented by firms and there are also conflicting views on whether they have had a good effect on firms' performances (Bai et al., 2003; Lin, 2000). .

3. Theoretical foundation and hypotheses

Because relatively little is known about how top management compensation is actually set in Chinese listed firms our hypotheses are exploratory in nature. We draw upon our knowledge of China's reforms to guide us in formulating the hypotheses and we buttress this with information gained from interviewing company officers. China's corporate reforms are aimed at emulating practices in North America and Europe and so we draw on the international literature on executive pay in deriving the hypotheses. We focus on whether performance drives CEO pay (pay contingent

on performance). Additional research questions are whether the type of share owner and the boardroom characteristics have an impact on pay and the pay-for-performance relation.

3.1. Performance

Senior managers in China were brought up in a socialist environment where economic efficiency and corporate profitability were secondary to fulfilling government objectives. With the transformation to a market economy it is imperative that these senior managers refocus their efforts on maximizing profits and shareholder value (Cragg and Dyck, 2000; Wolfram, 1998). In order to induce CEOs to maximize shareholder wealth, firms need to introduce efficient incentive systems. One such system is to tie remuneration to firm performance. This pay-for-performance link is a basic tenet of principal-agent theory (Jensen and Murphy, 1990). We hypothesize that the CEO's compensation depends on the firm's financial performance. The hypothesis is predicated on the following stylized facts. First, in the early part of the reforms there is documented evidence that top management pay in SOEs depends on performance (Groves et al., 1994; Mengistae and Xu, 2004). We believe this practice is expanded after the SOEs are privatized. Second, the intent of the reforms is to emulate practices in the U.S. and other capitalist countries, including the adoption of performance-related pay for CEOs[2]. Third, sections 77 and 78 of *The Code of Corporate Governance for Listed Firms in China* states that a manager's salary should reflect the company's performance. *The Code* is very influential. The hypothesis is:

Hypothesis 1: A CEO's compensation depends on the firm's performance.

[2] However, we note that some empirical research in Britain, the U.S., and elsewhere, has resulted in mixed findings on the pay-for-performance relation (e.g., Conyon and Murphy, 2000; Core et al., 1999; Gregg et al., 1993).

3.2. Ownership, governance structure, and CEO pay

Corporate governance relates to the way a firm is directed and controlled. The form of the governance structure is important when ownership is separated from management. When managers are given considerable, if not unbridled, autonomy they may engage in self-serving behavior that detracts from shareholder wealth. In order to monitor and, where necessary, control the actions of professional managers, firms have developed governance and reporting mechanisms. In the case of top management pay, CEOs and executive directors have incentives to award themselves high levels of compensation. In response to possible excessive pay, Cadbury (1992), Hampel (1998), Greenbury (1995), and others, urge firms to adopt a set of recommended practices and decision-making mechanisms. Good corporate governance includes active oversight by investors and the appointment of independent directors.

China's listed firms have unique ownership structures. In almost all firms there is a dominant shareholder who has significant influence over the way a firm is run and on the appointment and pay of the CEO. Xu (2004) shows that, on average, the largest shareholder in a firm owns 43% of the issued shares, while the second largest owns less than 5%; thus the largest shareholder usually has effective control of the firm. Furthermore, the state is the largest shareholder in many listed firms. For these firms, the CEO is often a state bureaucrat who is seconded to the firm (and who returns to the state ministry from whence they came when their term as CEO ends). As state bureaucrats receive relatively low salaries we believe that their pay as a CEO at a listed firm will be lower than the CEOs at firms where the controlling shareholder is not the state. This leads to our second hypothesis:

Hypothesis 2: CEO pay is lower when the firm is controlled by the state.

The state has been characterized as being a poor monitor of a firm's financial performance because they are too detached from the firm (Shleifer, 1998). Moreover, the state may pressure the firm to pursue objectives other than profit maximization (e.g., to increase employment). These

reasons suggest that state controlled firms are less likely to adopt performance-related pay schemes for the CEO. To test this relation we formulate the following hypothesis:

Hypothesis 2A: The positive relation between CEO pay and performance will be weaker in firms whose controlling shareholder is the state.

In China, the major shareholder is considered to be an insider and this shareholder has a crucial say in the appointment and remuneration of the CEO. This power can lead to abuses unless there is effective monitoring by outside investors. In capitalist economies, outside investors monitor management actions and can take steps to discipline or remove poorly performing executives. The costs of this monitoring role are quite high, however, and so in practice it is only large investors who can afford to actively intervene in a company's affairs (Demsetz and Lehn, 1985; Shleifer and Vishny, 1986; Khan et al., 2005). In contrast, when ownership is dispersed there is greater managerial power and CEOs can award themselves higher pay (Firth et al., 1999). While China has no direct equivalent to the type of institutional investors seen in the U.S., there are large outside shareholders who are independent of the largest shareholder. We hypothesize that these large outside investors will help constrain abuses that lead to 'excessive' CEO pay and they will encourage the use of performance-related compensation schemes. This leads to our third hypothesis:

Hypothesis 3: There is a negative relation between CEO compensation and the voting strength of large outside investors.

Hypothesis 3A: The positive relation between CEO pay and firm performance is stronger when large outside shareholders have higher ownership.

Some Chinese listed firms are allowed to issue shares to international investors (these are called B-shares). In order to induce foreign investors to buy its shares, a firm is more likely to adopt international standards of governance and business practices. Foreign investors are likely to pressure firms to hire better qualified CEOs who have international experience. These managers are able to

negotiate higher pay. We also believe that foreign investors will exert pressure on firms to use performance-related pay schemes to reward their CEOs. The two foreign investor hypotheses are:

Hypothesis 4: There is a positive relation between CEO compensation and the presence of foreign ownership.

Hypothesis 4A: The positive relation between CEO pay and firm performance will be stronger if the firm has foreign shareholders.

The board of directors is responsible for the internal governance of firms and it has oversight over the CEO's compensation. As a consequence of this, the characteristics of the board have been used to help explain top executive pay in North America, Europe, and many developed countries. For example, a more independent board may act to restrain 'excessive' CEO pay (Boyd, 1994; Lambert et al., 1993) and to insist on linking the pay to the firm's performance. However, some studies find that independent directors inflate a CEO's pay (Firth et al., 1999). This might arise because the independent non-executive directors use the high pay for the CEO as a comparison benchmark when they negotiate or renegotiate their remuneration at the firms or organizations where they work full-time. Thus they have an incentive for average executive pay to rise. Large boards of directors are likely to have a wider level of expertise although they can become so unwieldy that they become ineffective in monitoring the CEO (Jensen, 1993). Core et al. (1999) find that large boards are associated with excessive CEO pay. Some firms have the same person occupying the positions of CEO and chairman of the board. In this circumstance, the CEO/chairman has a lot of power and this has the potential to lead to excessive pay that bears no resemblance to performance. The empirical evidence on CEO/chairman duality has reached mixed conclusions. For example, Core et al. (1999) find that duality leads to higher pay in the U.S., while Conyon (1997) finds no relation in his study of British firms.

China's listed firms have boards of directors and their duties and responsibilities are laid out in *The Company Law* of 1993 (as amended in 1999) and *The Code of Corporate Governance.* The duties and responsibilities are, on the face of it, similar to those in the U.S. Because research in other countries has reached no consensus on the impact of independence, board size, and CEO/chairman duality on CEO pay, we present our hypotheses in null form. The hypotheses are:

Hypothesis 5: There is no relation between CEO pay and board independence (board size, duality).

Hypothesis 6: The positive relation between pay and performance is not affected by board independence (board size, duality).

4. Research method

4.1. Sample

Our sample consists of non-financial companies that are listed on the Shanghai and Shenzhen stock exchanges throughout the years 1998 to 2000. The start date is the first year that listed companies were required to disclose top management compensation. We exclude financial companies because their financial characteristics are far different from other firms. Moreover, financial firms are subject to more regulation and this may have an impact on CEO pay. We use the company annual reports as our source of information for executive compensation, ownership, non-executive directors, board size, and CEO/chairman characteristics. As the independent variables are lagged values from year t-1 we need data from 1997. Accounting and stock market data are obtained from the CSMAR Database. Missing annual reports and missing observations on the CSMAR Database reduce the sample size. The final sample consists of 549 companies and 1647 firm-year observations.

4.2. Variables

The dependent variable is *CEO PAY.* Since 1998 listed firms have been required to disclose the compensation of the highest paid executive in the company and we use this as a proxy for the pay

of the CEO. The CEO's total cash compensation includes base salary, bonuses, and commissions (unfortunately the pay is not broken down into these components). Bonus pay is likely to be a function of firm performance, but the formula used and the actual bonus that is paid is not disclosed (bonus pay is aggregated into total pay). We use the natural log of the *CEO PAY* in the regression models.

We use two measures of performance, namely, return on assets (*ROA*), which is the operating profit divided by assets, and stock return (*RETURN*). The first measure, *ROA*, is more dependent on and more under the control of managers, and maximizing profitability is the goal or target that the CEO strives for. We use operating profit (also known as "core earnings") rather than net income as the net income includes gains and losses from asset sales and inter-company transfers (also known as "non-core earnings"); these gains and losses from asset sales and transfers are often outside the control of the CEO and so we do not include them in our measure of performance (however, replications of our tests using net income gives similar results and conclusions to those based on operating profit). Problems with the return on assets measure include the encouragement of a short term or myopic outlook at the expense of longer-term profitability, and the manipulation of accounting numbers by managers (although operating profit is harder to manipulate than net income). The second measure, stock return, represents the benefits to shareholders. A characteristic of stock returns is that they are harder for managers to manipulate than earnings and they ostensibly measure the longer-term profitability of the firm. One drawback to the use of stock returns is that share prices are subject to the vagaries of the stock market and to changes in the macro-environment including interest rates, inflation, and commodity prices; these factors are outside the control of the managers. In our regressions we use lagged performance from year t-1 to explain cash compensation. Thus, *CEO PAY* is determined by performance in the prior year. As a sensitivity test, we rerun our analyses

with contemporaneous performance measures; the results are broadly consistent with those derived from lagged measures of performance.

If the state is the major shareholder in a firm then the variable *STATE* is coded one (1) and zero (0) otherwise. We measure large outside investors as the collective percentage shareholdings of the second through tenth largest shareholders; this variable is designated *OUTSIDE*. Firms have to disclose the ten largest shareholders and the percentage of shares they own. The shareholders represented by *OUTSIDE* are independent of the major shareholder and thus they can act as monitors of both the CEO and the major shareholder. Firms with foreign shareholders (*FOREIGN*) are coded one (1) and firms without are coded zero (0).

NONEXEC is the proportion of non-executive directors on the board. It was not until 2003 that Chinese listed firms were *required* to have independent directors. We use non-executive directors as a proxy for independent directors. *BOARD* is the number of directors on the board. *DUAL* is an indicator variable capturing cases where the CEO and chairman are the same person (*DUAL* = 1) and where they are different (*DUAL* = 0).

The ownership and boardroom characteristics are measured at the beginning of the year and they appear as main effects in the regression models. They are also interacted with the two performance measures (*ROA* and *RETURN*); the interaction terms are used to test whether ownership and board characteristics have an effect on the pay-performance relation. The interaction terms using *ROA* as the measure of performance are ROA_{t-1}**STATE*, ROA_{t-1}**OUTSIDE*, ROA_{t-1}**FOREIGN*, ROA_{t-1}**NONEXEC*, ROA_{t-1}**BOARD*, and ROA_{t-1}**DUAL*. Interaction terms using $RETURN_{t-1}$ are $RETURN_{t-1}$**STATE*, $RETURN_{t-1}$**OUTSIDE*, $RETURN_{t-1}$**FOREIGN*, $RETURN_{t-1}$**NONEXEC*, $RETURN_{t-1}$**BOARD*, and $RETURN_{t-1}$**DUAL*.

We use two categories of control variables in our models. These categories are (a) operating characteristics, and (b) other control factors. The operating characteristics are firm size (*SIZE*), risk

(*RISK*), growth opportunities (*GROWTH*), and debt (*DEBT*). Extensive research in many countries has shown that firm size is positively and significantly associated with compensation levels (Jensen and Murphy, 1990; Conyon, 1997; Firth et al., 1996, 1999). Complexity of the job, the skills required, the number of hierarchical structures, and the ability to pay, all point toward large firms paying their CEOs more. We take the natural log of the book asset value as our proxy for firm size and we measure it as at the beginning of the year.

Lippert and Moore (1994) and Lippert and Porter (1997) find CEO compensation is higher at firms with greater stock return volatility (risk). High business risk is passed down to the CEO (e.g., job tenure) and so higher compensation is demanded (Aggarwal and Samwick, 1999). In our model, *RISK* is defined as the standard deviation of the monthly stock returns of the company measured over the previous 12 months. Managers are often charged with developing growth opportunities for firms and in which case they should be rewarded for their success in this endeavor. We follow previous researchers (e.g., Lippert and Moore, 1994) and use lagged market value to book asset value as a proxy for growth opportunities (*GROWTH*). A firm with external debt is subject to monitoring by the debt holders and so CEOs face restrictions on their managerial discretion. John and John (1993) argue that pay policy can be used as a pre-commitment device to reduce the agency cost of debt. We therefore include *DEBT* as a control variable. *DEBT* is defined as the book value of the long-term debt to the book value of the shareholders' equity. *RISK*, *GROWTH*, and *DEBT* are measured at the beginning of the year.

Other control factors are included in the model to account for regional and industry differences (see Table 1 for the definitions of *AREA* and *IND*). *AREA*s 1 and 2 are more prosperous and have a higher cost of living than *AREA*s 3 and 4. Therefore we expect CEO compensation to be higher in *AREA*s 1 and 2. Industry is based on stock exchange classifications. Finally, *YEAR* is added to control for time. Table 1 lists the variables and definitions used in our study.

Please Insert Table 1 Here

4.3. Model

We use regression analysis to test the relation between pay, performance, ownership, and boardroom variables. The general model is:

$$CEO\ PAY = a + ß_1\ PERFORMANCE + ß_2\ OWNERSHIP + ß_3\ BOARDROOM + ß_4\ OPERATING\ CHARACTERISTICS + ß_5\ CONTROL\ FACTORS + e \quad (1)$$

5. Empirical results

5.1. Sample characteristics

Table 2 presents descriptive statistics on compensation, firm size characteristics, the six categories of variables proposed to explain managerial compensation, and the operating characteristics. The median CEO compensation ranges from RMB39,000 in 1998 to RMB60,000 in 2000. CEO pay is much lower than in developed countries (see, for example, Core et al., (1999) for the U.S.; Conyon (1997) for the U.K.; Zhou (1999) for Canada; Firth et al. (1999) for Hong Kong). Although low by standards in the West, CEO compensation in China is approximately twelve times higher than the average worker. This differential between the CEO's pay and the average worker is much higher than in some other developing countries (Jones and Mygind, 2004).

Please Insert Table 2 Here

The accounting performance measures (*ROA*) are very poor and show a deteriorating trend. In contrast, however, stock returns (*RETURN*) are reasonable in 1998 and 1999 and very good in 2000. It is clear that *ROA* and *RETURN* give very different indicators of a firm's financial performance and they will have different pay-performance sensitivities for CEO pay. They give different indicators of performance for a number of reasons. Stock prices are forward looking and incorporate investors' expectations for the future; in contrast, *ROA* is a historical number. On the other hand, stock prices

are affected by interest rate changes and monetary policy, which is something the managers do not have control over.

The state is the largest single shareholder in about 56% of the observations (*STATE* = 0.56). The variable *OUTSIDE* has yearly medians of 9% (2000), 9% (1999), and 8% (1998). The combined shareholdings of the second through tenth largest shareholder are generally much lower than the ownership by the largest shareholder and so the largest shareholder has control over, or substantial influence on, the listed firm. The proportion of the non-executive directors is about 50% and this is comparable to the ratio of non-executive directors in the U.S. (Core et al., 1999), Britain (Ezzamel and Watson, 1997), and Hong Kong (Firth et al., 1999). The mean board size is nine. As a comparison, the average board size for U.S. companies is 13 (Core et al., 1999) and 9 for U.K. companies (Ezzamel and Watson, 1997). Board size is therefore comparable to those observed in developed countries. In 1998, approximately 32% of the board chairmen also held the position of chief executive officer, but this ratio reduces to 22% in 1999 and 16% in 2000. The reduction in the percentage of the dual roles is the result of an administrative instruction made in 1998 that requested firms to separate the roles of chairman and CEO. As a comparison, Conyon (1997) reports 23% of firms have dual CEO and chairman roles in his U.K. sample.

5.2. Regression results

The regression results are shown in Table 3. In panel A, we use return on assets (*ROA*) as our prime performance measure, while in panel B we use stock return (*RETURN*). Model 1 shows the results for performance (*ROA*, *RETURN*), model 2 adds ownership and board variables, model 3 adds performance interaction terms, model 4 adds control variables (but no interactions), and model 5 is the full model. The interaction terms are used to investigate whether specific ownership structures are associated with performance-related pay for the CEO. Correlations among the independent variables are low to moderate (for example, all correlations are less than an absolute value of 0.40). We also

compute variance inflation factors for each variable and they are all below 3.5. These diagnostic statistics suggest that multicollinearity is not a major problem in our models.

Please Insert Table 3 Here

We find that lagged *ROA* is significantly and positively associated with *CEO PAY* (panel A). Note, however, that *ROA* alone explains just 2% of the variability in *CEO PAY* (model 1). The evidence supports hypothesis 1. In panel B, however, we find no relation between pay and lagged stock return. The coefficients on *STATE* and *OUTSIDE* are negative and statistically significant, while the coefficients on *FOREIGN* are positive and statistically significant. The results provide support for hypotheses 2, 3, and 4. Firms with large boards pay their CEOs less and this result is statistically significant. Thus the null hypothesis for *BOARD* is rejected. The coefficients on *NONEXEC* and *DUAL* are not significant.

ROA_{t-1}**FOREIGN* has positive and significant coefficients in Table 3, panel A. Thus we find evidence that foreign-invested companies give more weight to a firm's profitability when deciding on the CEO's pay. The other performance-ownership interaction terms are not significant in panels A and B. Moreover, the *STATE* interaction terms have positive coefficients, which contrast with our expectations.

In panel A, the coefficients on ROA_{t-1}**NONEXEC* are positive and significant, which indicates that firms that have a high proportion of non-executive directors are more likely to relate their CEO's pay to accounting-based performance. In contrast, the coefficients on $RETURN_{t-1}$**NONEXEC* are not significant (see panel B). Firms where the CEO and the chairman is the same person, place less weight on performance as a criterion in setting the CEO's compensation (see panel A). Board size has no statistically significant impact on whether a CEO's pay is based on performance.

As expected, firm size is positive and highly significant. The debt (*DEBT*) variable is statistically significant in panel A but not in panel B. *GROWTH* and *RISK* are not significant. The addition of the governance factors (ownership and board structure) increase R-squares to about 12 percent in panel A and 9 percent in panel B. The inclusion of the interaction terms (ownership and performance) marginally improves the adjusted R-squares. Most significant of all, the addition of the operating characteristics and location and industry control factors increase the R-squares from 12 percent to about 37 percent in panel A (9 percent to 32 percent in panel B) and so these factors account for the bulk of the explanatory power of the model.

We also test our models where performance, size, growth, and debt are measured contemporaneously. The results are similar to those shown in Table 3. In further sensitivity tests we use the percentage of shares owned by the state (*%STATE*) and the percentage owned by foreigners (*%FOREIGN*) in place of *STATE* and *FOREIGN*. The results from using *%STATE* and *%FOREIGN* in the regression models are qualitatively the same as the results from using the indicator variables *STATE* and *FOREIGN*. We also include *FOREIGN* and *%FOREIGN* in the same regression; *FOREIGN* is significant and *%FOREIGN* is marginally significant. From these results we conclude that the mere presence of foreign investors increases the CEO pay and the percentage of shares owned by foreigners is of lesser importance. Given the rapidly changing nature of the Chinese economy and the frequent changes in regulations, we also run regressions on yearly data (i.e., separate regressions for 1998, 1999, and 2000 data). The results are similar to those shown in Table 3. Thus inter-temporal differences are slight.

To confirm our results on the pay-for-performance relation we examine the sensitivity of compensation to performance by regressing change in pay on change in operating profitability and stock return. We also estimate the elasticity of compensation with respect to performance by regressing the change in the log of CEO pay on the change in the log of performance. We include

controls for *STATE*, *OUTSIDE*, *FOREIGN*, *NONEXEC*, *BOARD*, and *DUAL*. The results show significant pay sensitivities and elasticities for ROA_{t-1} but not for $RETURN_{t-1}$. When we include interaction terms in the models we find that the pay-performance sensitivities and elasticities are positive and significant for ROA_{t-1}**FOREIGN* and ROA_{t-1}**NONEXEC*. ROA_{t-1}**DUAL* has negative coefficients.

6. Discussion

We find that a CEO's compensation depends, in part, on the firm's performance. In particular, compensation is greater when return on assets is high. However, there is no association between stock return and a CEO's pay. The emphasis on operating profits to help determine a CEO's pay, rather than stock returns, contrasts with U.S. practice. Stock returns tend to move together in China (Morck et al., 2000) reflecting market-wide factors; firm specific factors have less influence on stock prices. We therefore believe firms are reluctant to reward CEOs on the basis of stock returns and, instead, use accounting-based measures of performance. Foreign-invested companies are more likely to base the CEO's pay on the firm's operating profitability.

The type of owner seems to matter in explaining CEO pay; state controlled firms pay less and foreign-invested firms pay more. CEOs of firms controlled by the state are often state bureaucrats and they are paid in line with the senior civil servant salary levels. The trend is for the state to reduce its ownership and for there to be more foreign investment in listed firms as China opens up its economy. Moreover, the labor market is becoming more liquid with a greatly expanded pool of managerial talent. All this suggests that CEO pay will rise in the coming years and fewer bureaucrats will occupy the CEO position.

Large board size appears to constrain CEO pay although the exact reasons for this are unknown. Boards with a large proportion of non-executive directors are more likely to implement performance-related pay schemes for their CEOs (performance based on operating profits). Thus, the

independent or non-executive directors help to align the interests of shareholders and the CEO via the compensation of the CEO. When one person is both the CEO and the chairman he or she has a lot of power (and they can become entrenched). Our results show that firms with a dual CEO/chairman place far less weight on performance-related pay. The performance (ROA) and boardroom interactions show that the internal governance structure does play a role in incentivizing top management by making CEO pay contingent on the firm's performance.

7. Conclusion

A central theme of the debate on top management pay is whether compensation is related to firm performance. This question is very important in China because merit based pay was an alien concept under the central planning system that existed prior to the economic reforms. We find a positive relation between CEO compensation and performance based on return on assets (*ROA*). Ownership structure has a significant influence on pay. In particular, firms with substantial government ownership and firms with large outside investors have lower CEO compensation. The presence of a foreign shareholder is associated with higher CEO pay. There is statistically significant evidence consistent with foreign shareholders pressuring firms to adopt performance-related pay schemes that are based on profitability. Firms with large boards pay their CEOs less and this result contrasts with the predictions of Jensen (1993). The results are consistent with non-executive directors, our proxy for independent directors, encouraging the use of performance-related pay while CEO/chairman duality reduces the use of performance-related compensation.

One of the problems in carrying out empirical research on China's listed firms is the paucity of data especially when compared to North America and some Western nations. For example, unlike some other countries, total compensation is not broken down into salary, benefits, and bonuses. We do not know for sure if bonuses are paid but we can infer them because of the statistical link between operating profitability and compensation (and because of evidence from studies that use survey data

on SOEs). We cannot identify independent directors in our sample (the data do not become available until 2003) and so we use non-executive directors as a proxy. Another limitation of our study is that the compensation of the CEO is not directly given. Therefore we assume the highest paid executive is the CEO. These and other limitations can be overcome in the future as and when more detailed disclosure is made.

While China's economic growth is envied by many, the profitability of individual listed firms has been lamentable. One cause of poor performance is the lack of incentives for top management. We therefore believe it is crucial that CEOs be rewarded on the basis of their firms' performances. One policy implication of our study is that firms should increase the number of truly independent non-executive directors on the board. We believe this will result in a greater use of performance-based pay for the CEO. Another implication of the study is that firms should be discouraged from having a joint CEO/chairman as this reduces the use of performance-based pay. Unlike other countries, stock options are not granted in China. The lack of executive stock options is a missing ingredient in the design of incentive systems that align the interests of managers and investors[3]. This is something that the Chinese government and its economic planners need to redress. The lack of stock options as a reward mechanism is exacerbated by the very low share ownership by CEOs and top executives. To reap the full rewards of privatization, the state needs to step back from using political considerations in appointing and controlling CEOs. A thoroughly independent appointments committee may help in this regard. Allied to this, however, there must be a concerted effort to improve the incentives and rewards for CEOs. Without adequate top management rewards, the efforts exerted in economic restructuring may be in vain.

[3] Note, however, that executive stock options do not always lead to improved future performance (McGuire and Matta, 2003).

Governments and other stakeholders should encourage firms, or even mandate them, to provide more extensive financial disclosures on top executive pay. The increasing autonomy given to managers needs to be balanced with more accountability and transparency. Good corporate governance mechanisms can do a lot to enhance the effectiveness of the CEO. Improving financial transparency helps investors in their monitoring and oversight roles.

China's listed firms are evolving fast as are its business practices and corporate governance. These rapid changes provide a lot of scope for future research. Increasing disclosure by firms (e.g., the breakdown of pay into base salary and bonuses) and by the state reducing constraints on the forms of CEO pay (e.g., stock options) will facilitate future research in CEO pay. China's brand of economic reforms is exportable to other developing countries. However before this happens, more scientific study is necessary so that we have a better understanding of how the reforms work and how they impact incentives and rewards.

References

Aggarwal, R., and A.A. Samwick. "The Other Side of the Trade-Off: The Impact of Risk on Executive Compensation." *Journal of Political Economy*, 107 (1999), 65-105.

Bai, C.E., J. Liu, J. Lu, F.M. Song, and J. Zhang. "Corporate Governance and Market Valuation in China". Working paper. The University of Hong Kong (2003).

Bebchuk, L., and J. Fried. *Pay Without Performance: The Unfullfilled Promise of Executive Compensation.* Boston, MA: Harvard University Press (2004).

Boyd, B. "Board Control and CEO Compensation." *Strategic Management Journal*, 15 (1994), 335-344.

Cadbury, A. *Report of the Committee on the Financial Aspects of Corporate Governance*. London: Gee Publishing (1992).

Chen, G., M. Firth, and O.M. Rui. "The Economic Performance of Privatized Firms in the People's Republic of China", Working Paper, The Chinese University of Hong Kong, (1998).

Chen, G., M. Firth, and O.M. Rui. "Have China's Enterprise Reforms led to Improved Efficiency and Profitability?" *Emerging Markets Review*, 7 (2006), 82-109.

Conyon, M.J. "Corporate Governance and Executive Compensation." *International Journal of Industrial Organization*, 15 (1997), 493-509.

Conyon, M.J., and K.J. Murphy. "The Prince and the Pauper? CEO Pay in the United States and United Kingdom." *Economic Journal*, 110 (2000), 640-671.

Core, J.E., R.H. Holthausen, and D.F. Larcker. "Corporate Governance, Chief Executive Officer Compensation and Firm Performance." *Journal of Financial Economics*, 51 (1999), 371-406.

Cragg, M.I., and I.J. Dyck. "Executive Pay and U.K. Privatization: The Demise of 'One Country, Two Systems'." *Journal of Business Research*, 47 (2000), 3-18.

Demsetz, H., and K. Lehn. "The Structure of Corporate Ownership: Causes and Consequences." *Journal of Political Economy,* 93 (1985), 1155-1177.

Ezzamel, M., and R. Watson. "Executive Remuneration and Corporate Performance." In *Corporate Governance: Responsibilities, Risks and Remuneration,* Keasey, K., and M. Wright, eds. John Wiley & Sons (1997).

Firth, M., J.C. Lohne, R. Ropstad, and J. Sjo. "The Remuneration of CEOs and Corporate Financial Performance in Norway." *Managerial and Decision Economics*, 17 (1996), 291-301.

Firth, M., M. Tam, and M. Tang. "The Determinants of Top Management Pay." *Omega*, 27 (1999), 613-635.

Firth, M., P. Fung, and O.M. Rui. "Firm performance, governance structure, and top management turnover in a transitional economy." Forthcoming, *Journal of Management Studies* (2006).

Greenbury, R. *Directors' Remuneration: Report of a Study Group Chaired by Sir Richard Greenbury.* London: Gee Publishing (1995).

Gregg, P., P. Machin, and S. Szymanski. "The Disappearing Relationship between Directors, Pay and Corporate Performance." *British Journal of Industrial Relations*, 31 (1993), 1-9.

Groves, T., Y. Hong, J. McMillan, and B. Naughton. "Autonomy and incentives in Chinese state enterprises". Quarterly Journal of Economics 109, (1994), 873-892.

Hampel, R. *Committee on Corporate Governance: Final Report*. London: Gee Publishing (1998).

Huang, W., and Y. Zhang. "On the Absence of Agent's Incentive in the State Owned Enterprises." *Economic Research Journal,* 8 (1995), 13-15. (In Chinese).

Jensen, M.C. "The Modern Industrial Revolution, Exit and the Failure of Internal Control Systems." *Journal of Finance*, 48 (1993), 831-80.

Jensen, M.C., and K.J. Murphy. "Performance and Top Management Incentives." *Journal of Political Economy,* 98 (1990), 225-264.

John, K., and T. John. "Top-Management Compensation and Capital Structure", *Journal of Finance*, 48 (1993), 949-974.

Jones, D.C. and N. Mygind. "Majority Ownership and Executive Compensation." Working paper, Hamilton College (2004).

Khan, R., R. Dharwadkar, and P. Brandes. "Institutional ownership and CEO compensation: a longitudinal examination." *Journal of Business Research*, 58 (2005), 1078-1088.

Lambert, R., D. Larcker, and K. Weigelt. "The Structure of Organizational Incentives." *Administrative Science Quarterly*, 38 (1993), 438-461.

Li, S., I. Vertinsky, and D. Zhou. "The Emergence of Private Ownership in China". *Journal of Business Research*, 57 (2004), 1145-1152.

Lin, C. "Corporatisation and Corporate Governance in China's Economic Transition." Working paper, Oxford University (2000).

Lippert, R.L., and W.T. Moore. "Compensation Contracts of Chief Executive Officers: Determinants of Pay-Performance Sensitivity." *Journal of Financial Research*, 3 (1994), 321-332.

Lippert, R.L., and G. Porter. "Understanding CEO Pay: A Test of Two Pay to Performance Sensitivity Measures with Alternative Measures of Alignment and Influence." *Journal of Business Research*, 40 (1997), 127-138.

McGuire, J., and E. Matta. "CEO Stock Options: The Silent Dimension of Ownership." *Academy of Management Journal*, 46 (2003), 255-265.

Mengistae, T. and L.C. Xu. "Agency Theory and Executive Compensation: The Case of Chinese State-Owned Enterprises." *Journal of Labor Economics*, 22 (3) (2004), 615-637.

Morck, R., B. Yeung, and W. Yu. "The Information Content of Stock Markets: Why do Emerging Markets have Synchronous Stock Price Movements?" *Journal of Financial Economics*, 58 (2000), 215-260.

Qian, Y. "Reforming Corporate Governance and Finance in China." In M. Aoki and H.K. Kim, (eds) *Corporate Governance In Transitional Economies - Insider Control And The Role Of Banks*, The World Bank (1995), 215-252.

Shleifer, A., and R.W. Vishny. "Large Shareholders and Corporate Control." *Journal of Political Economy*, 95 (1986), 461-488.

Shleifer, A. "State Versus Private Ownership." *Journal of Economic Perspectives*, 14 (4) (1998), 133-150.

Tam, O.K. "Models of Corporate Governance for Chinese Companies." *Corporate Governance*, 8 (2000), 52-64.

Wolfram, C.D. "Increases in Executive Pay Following Privatization." *Journal of Economics and Management Strategy*, 7 (1998), 327-361.

Xu, L. "Types of Large Shareholders, Corporate Governance, and Firm Performance." Working paper, Zhongshan University (2004).

Yang, Y. "Research on Agency Problems of State Owned Enterprises." *Investment Research*, 7 (1998), 8-12. (In Chinese).

Zheng, C. "A Study of the Motivation and Constraint Mechanisms of the Management of the State Owned Enterprises." *Journal of Finance and Economics*, 5 (1998), 27-31. (In Chinese).

Zhou, X. "Executive Compensation and Managerial Incentives: A Comparison between Canada and the United States." *Journal of Corporate Finance*, 5 (1999), 277-301.

TABLE 1
Variable Definitions, Proxies, and their Predicted Relationships

Variables		Definition
Compensation		
Executive compensation	CEO PAY	Natural log of the cash payment
Performance		
Return on assets	ROA	Operating profit /total assets
Stock return	RETURN	Annual stock return
Governance Structure		
State ownership	STATE	Equal to 1 if the state is the largest shareholder in the company
Outside ownership	OUTSIDE	Percentage of shares owned by the second largest to tenth largest stockholder
Foreign share	FOREIGN	Equal to 1 if the company issues foreign shares
Board composition	NONEXEC	Percentage of non-executive directors on the board
Board size	BOARD	The number of directors on the board
Duality	DUAL	Equal to 1 if the chairman also serves as the CEO
Operating Characteristics		
Firm size	SIZE	Natural log of total assets
Equity risk	RISK	Standard deviation of monthly stock returns over 12 months
Growth opportunity	GROWTH	Market value/book value of assets
Long term debt ratio	DEBT	Book value of long term debt/book value of shareholders' equity
Other Variables		
Area 1	AREA1	Equal to 1 for companies registered in Shanghai or Shenzhen

Area 2	AREA2	Equal to 1 for companies registered in the coastal provinces including Beijing and Tianjin
Area 3	AREA3	Equal to 1 for companies registered in the inland provinces (i.e., except those in Areas 1, 2 & 4)
Area 4	AREA4	Equal to 1 for companies registered in the less developed regions (including the provinces of Inner Mongolia, Ningxia, Gansu, Qinghai, Xinjiang, Tibet, Yunnan and Guizhou)
Industry 1	IND1	Equal to 1 for the utilities sector
Industry 2	IND2	Equal to 1 for the properties sector
Industry 3	IND3	Equal to 1 for the conglomerates (composites) sector
Industry 4	IND4	Equal to 1 for the industrial and manufacturing sector
Industry 5	IND5	Equal to 1 for the commercial sector

Table 2
Descriptive Statistics

Variables	Year	Mean	Median	Min	Max	Standard Deviation
CEO PAY (000s)	2000	85	60	9	1000	86.83
	1999	69	50	9	660	73.97
	1998	52	39	8	446	47.68
Firm Characteristics						
Net Income (million)	2000	45	32	-934	1523	157
	1999	43	31	-956	835	124
	1998	36	32	-1044	2004	155
Sales (million)	2000	918	442	0	20467	1679
	1999	780	368	-30	14386	1363
	1998	697	327	-52	11602	1205
Assets (million)	2000	1706	1083	114	22099	2152
	1999	1534	914	123	21908	2075
	1998	1422	853	119	22209	2017
Shareholders' Funds (million)	2000	811	507	-1334	13817	1245
	1999	728	441	-1299	12958	1170
	1998	693	429	-320	12581	1072
Performance						
Operating profitability % (*ROA*)	2000	2.83	4.53	-91.20	29.82	9.81
	1999	3.41	4.87	-49.83	34.21	8.70
	1998	3.90	5.12	-41.62	35.10	8.34
Stock Return % (*RETURN*)	2000	74.31	63.93	-28.80	440.16	56.26
	1999	22.23	13.09	-45.07	391.29	42.96
	1998	13.49	7.35	-53.66	413.78	45.26
Ownership and Board Structure						
State Ownership (*STATE*)	2000	0.56	1	0	1	0.50
	1999	0.55	1	0	1	0.50
	1998	0.57	1	0	1	0.50
Outside Ownership (*OUTSIDE*)	2000	0.16	0.09	0.03	0.74	0.21
	1999	0.17	0.09	0.02	0.73	0.20
	1998	0.17	0.08	0.02	0.71	0.20
Foreign Share Ownership (*FOREIGN*)	2000	0.16	0	0	1	0.37
	1999	0.16	0	0	1	0.37
	1998	0.16	0	0	1	0.37
Board Composition (*NONEXEC*)	2000	0.51	0.56	0	1	0.26
	1999	0.50	0.56	0	1	0.26
	1998	0.52	0.56	0	1	0.29
Board Size (*BOARD*)	2000	9.46	9	5	18	2.62
	1999	9.66	9	5	19	2.73
	1998	9.73	9	5	19	2.86
Duality (*DUAL*)	2000	0.16	0	0	1	0.37

	1999	0.22	0	0	1	0.41
	1998	0.32	0	0	1	0.47
Operating Characteristics						
SIZE (log of total assets)	2000	7.01	6.98	4.74	10.00	0.88
	1999	6.89	6.81	4.81	9.99	0.87
	1998	6.83	6.75	4.78	10.01	0.85
Equity Risk (*RISK*)	2000	0.12	0.11	0.03	0.67	0.07
	1999	0.15	0.13	0.02	0.45	0.07
	1998	0.12	0.12	0.04	2.01	0.28
GROWTH	2000	3.69	3.14	0	18.27	2.39
	1999	2.47	2.12	0	13.19	1.53
	1998	2.62	1.95	0	24.21	4.87
Long term debt/equity ratio	2000	0.11	0.03	-2.59	2.01	0.29
(*DEBT*)	1999	0.07	0.01	-2.81	6.32	0.39
	1998	0.13	0.04	-0.25	3.78	0.27

TABLE 3
Regression of Compensation on Performance, Ownership, and Board Characteristics
[reduce regression coefficients and intercepts to two decimal places]
Panel A: Performance is measured by ROA $_{t-1}$

Variables	**1**	**2**	**3**	**4**	**5**
Intercept	4.790***	4.294***	4.306***	2.536***	2.507***
	(28.029)	(24.251)	(18.955)	(13.871)	(13.632)
Performance					
ROA $_{t-1}$	0.110**	0.113**	0.097**	0.123***	0.118**
	(2.328)	(2.168)	(2.067)	(3.488)	(2.194)
Ownership and Board Structure					
STATE		-0.179***	-0.201***	-0.181***	-0.219***
		(-4.339)	(-4.320)	(-4.937)	(-5.070)
OUTSIDE		-0.395**	-0.258***	-0.331***	-0.317***
		(-2.170)	(-2.991)	(-3.466)	(-4.695)
FOREIGN		0.366***	0.352***	0.145**	0.135**
		(3.402)	(2.841)	(2.689)	(2.503)
NONEXEC		0.073	0.068	-0.082	-0.089
		(0.902)	(0.833)	(-1.114)	(-1.196)
BOARD		-0.026*	-0.025**	-0.037***	-0.034***
		(-1.890)	(-2.361)	(-4.127)	(-5.074)
DUAL		0.118	0.119	0.015	-0.018
		(1.444)	(1.455)	(0.352)	(-0.391)
Performance Interactions					
*ROA $_{t-1}$*STATE*			0.039		0.016
			(1.002)		(1.308)

*ROA $_{t-1}$*OUTSIDE*			0.013		0.036
			(0.341)		(0.412)
*ROA $_{t-1}$*FOREIGN*			0.011*		0.012**
			(1.907)		(1.963)
*ROA$_{t-1}$*NONEXEC*			0.107**		0.115**
			(2.136)		(2.003)
*ROA$_{t-1}$*BOARD*			0.009		0.007
			(1.366)		(0.985)
*ROA$_{t-1}$*DUAL*			-0.013*		-0.008**
			(-1.741)		(-1.967)
Operating Characteristics					
SIZE				0.254***	0.256***
				(10.479)	(10.495)
RISK				0.159	0.213
				(0.511)	(0.672)
GROWTH				0.007	0.005
				(1.211)	(1.288)
DEBT				-0.146**	-0.144**
				(-2.396)	(-2.330)
Other variables					
AREA				√	√
IND				√	√
YEAR				√	√
Adjusted R^2	0.02	0.117	0.126	0.345	0.366

Panel B: Performance is measured by RETURN $_{t-1}$					
Intercept	4.207	4.358***	4.375***	2.410***	2.439***
	(40.723)	(27.249)	(27.156)	(11.238)	(11.184)
Performance					
RETURN $_{t-1}$	0.007	0.009	0.086	0.048	0.017
	(0.133)	(0.179)	(0.516)	(0.621)	(0.214)
Ownership and Board Structure					
STATE		-0.161***	-0.182***	-0.164***	-0.198***
		(-3.215)	(-3.337)	(-3.717)	-(4.027)
OUTSIDE		-0.401***	-0.358***	-0.435***	-0.313***
		(-3.026)	(-3.201)	(-3.297)	(-3.004)
FOREIGN		0.535***	0.573***	0.117**	0.150**
		(3.138)	(3.262)	(2.033)	(2.217)
NONEXEC		0.054	0.051	-0.106	-0.113
		(0.551)	(0.516)	(-1.197)	(-1.207)
BOARD		-0.022	-0.021	-0.032***	-0.032***
		(-1.393)	(-1.362)	(-3.863)	(-3.808)
DUAL		-0.021	-0.016	0.064	0.062
		(-0.325)	(-0.252)	(1.127)	(1.095)
Performance Interactions					
*RETURN $_{t-1}$*STATE*			0.113		0.149
			(1.017)		(1.573)
*RETURN $_{t-1}$*OUTSIDE*			0.137		0.006
			(1.294)		(0.081)
*RETURN $_{t-1}$*FOREIGN*			0.366		0.286
			(1.474)		(1.595)
*RETURN $_{t-1}$*NONEXEC*			0.009		0.012
			(0.832)		(0.893)
*RETURN $_{t-1}$*BOARD*			0.003		0.001
			(0.480)		(0.385)
*RETURN $_{t-1}$*DUAL*			-0.006		-0.013
			(-0.814)		(-1.264)
Operating Characteristics					
SIZE				0.277***	0.280***
				(9.866)	(9.853)
RISK				0.047	0.041
				(0.136)	(0.119)
GROWTH				0.004	0.005
				(0.769)	(0.749)
DEBT				-0.095	-0.097
				(-1.317)	(-1.361)
Other variables					
AREA				√	√

IND				√	√
YEAR				√	√
Adjusted R^2	0.001	0.086	0.089	0.316	0.317

Table 3 shows the coefficients from a regression using the following model:

$$CEO\ PAY = a + b_1 PERFORMANCE_{t-1} + b_2 OWNERSHIP + b_3 BOARD\ STRUCTURE + b_4\ OPERATING\ CHARACTERISTICS + b_5\ CONTROL\ FACTORS + e.$$

CEO PAY = the natural log of cash payment; *ROA* = operating profit in year t-1 divided by total assets; *RETURN* = annual stock return in year t-1; *STATE* = a dummy variable coded one (1) if the state is the largest shareholder in the company; *OUTSIDE* = percentage of shares owned by the second largest to tenth largest shareholder; *FOREIGN* = a dummy variable equal to one (1) if the company has issued foreign shares; *NONEXEC* = the proportion of unpaid directors to total number of directors on the board; *BOARD* = the number of directors on the board; *DUAL* = a dummy variable if the chairman also serves as CEO; *SIZE* = the natural log of total assets; *RISK* = the standard deviation of the monthly stock return; *GROWTH* = the ratio of market value to book value of assets; *DEBT* = book value of the long term debt to book value of the shareholders' equity.

√ indicates area, industry, and year controls (*AREA, IND, YEAR*) have been included.

t-statistics are provided in parentheses. *, **, and *** denote significance at the 0.10, 0.05, and 0.01 levels, (two tailed test