LIQUIDITY, MANAGEMENT EFFORT AND PERFORMANCE

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ABSTRACT

This research examines reform in China. We argue the reform will lead the socialist-market-economy into capitalism. Reform offers opportunities to alter ownership of equity and frees management from control of the communist party. This research discusses the relation between market liquidity, investment decision and financial performance. The results from an analysis of 1002 firms show that reforms have significant impacts on the investment decisions. We discover there is a nonlinear relationship between market liquidity and financial performance. We argue this explains a high ratio of tradable-shareholders shareholdings. We divide tradable shareholders into five groups by different ranges ownership percentage. The results were significant but the directions of influence in each group were different. We suggest that the province-policy may be an important variable in the future research.

JEL: Classification: G12, G34, P2

KEYWORDS: Liquidity, division of equity tradability, consideration, investment decision, nontradable share.

INTRODUCTION

Liquidity is drawing attention increasingly from traders, regulators, exchange officials and academics. Recent empirical evidence supports the theory that liquidity can increase investing activities of firms. This occurs reducing agency problems, holding larger-than-expected cash balances (Opler, Pinkowitz, Stulz and Willamson, 1999), and that public pools of liquidity allows firms to diversify their portfolios because of information asymmetry between firms and public market (Myers and Majluf, 1984).

When Insiders sell their stocks, reducing their share holds, they allow more shares to circulate in secondary markets, increasing market liquidity. The increase of market liquidity has the effect that speculators engage in the stock market introducing additional volatility in stock prices. They buy and sell stocks to gain benefits depending on market information. The marginal benefit they make must be equal to the marginal cost of external corporate governance. Holmstrom and Tirole (1993) pointed out this effect has the benefit of producing external corporate governance.

Due to the unique history of China, listed companies in A-share market can divide their stocks into tradable and nontradable shares. At the end of year 2004, nontradable shares account for 64% of all shares. Obviously, the different market system and structure between tradable and nontradable shares seriously complicate securities market development. Managers focus more on the nontradable shareholders' supervision and their evaluation of stock performance. Nontradable shareholders only rely on net value as an indicator of management performance. As a result, management only allows some tradable stocks to be listed. The premium from selling newly listed stocks can be converted into owners' equity and improve the company's net value. In other words, managers do not pay attention to market performance which relates to interests of tradable shareholders, but they do pay attention to the intrinsic value of any tradable stocks. The extent to which tradable stocks can be converted into nontradable stocks is called the intrinsic coefficient. When the intrinsic coefficient is higher, the contribution of tradability acknowledged by nontradable stocks is larger producing greater tradability value. The result is that management can

willfully deprive the interest of minority shareholders. The effect causes minority shareholders to be unwilling to hold stocks for a long time. Reform significantly improves liquidity in Chinese capital market. According to the market liquidity theory, speed, spread, volume and flexibility, affect liquidity. From the perspective of nontradability theory, the removal of liquidity limits on nontradable shares can increase the liquidity of nontradable shares causing the price of nontradable shares to rise. On the other hand, transaction costs and liquidity influence tradability. We can explain the influence in transaction cost theory. If we need to buy tradable shares during the reform to remove the nontradability liquidity limit, the stock price, the stock price decreases.

Roll, Schwartz and Subrahmanyam (2007) explored the joint structure of the future-cash basis and stock market liquidity. Officer (2007) described the level and determinants of multiples paid to get unlisted targets. We screen the larger-than-liquidity change after the reform of the division of equity tradability in China. Clearly, when external investors hold many shares, they will watch company management. That brings a positive effect on investment decisions of the company. We try to discern whether market liquidity affects investing activities and the firm performance. The reform in Chinese capital market results from the lack of liquidity. It is obvious that the lack of liquidity creates incomplete corporate governance, straying from customary practice.

Many papers discuss the relation between liquidity and managers' performance. Holmstrom and Tirole (1993) explored the relation between releasing shares from insiders and market value of the company and find a negative relationship. If a company's market value is too low, it can be increased raise increasing the stockholding of insiders. If a company's market value is too high, it can be reduced by decreasing the stockholding of insiders. Hadlock (1998) discussed the degree of relation between investment-cash flow sensitivity and stockholding of managers. Kaplan and Zingales (1997) discussed the relationship between investment-cash flow sensitivity and the time option. Boyle and Gupthrie (2003) explored the reaction of investment-cash flow sensitivity on liquidity and the effect of uncertainty on investment. Baum, Caglayan, Ozkan, and Talavera (2006) argued the influences of liquidity and uncertainty on managers' performance. Some papers study the relation between liquidity and corporate governance. Maug (1998) explored the motive for supervision of major shareholders from the liquidity perspective. Admati, Pfledierer, Zechner (1994) believed that minor shareholders lack inside news so they diversify their investment in holding shares. They also prefer to diversify their asset allocation. Moyen (2002) pointed out the investment in a high liquidity company is sensitive to the change of cash flow. Brockman and Chung (2001) proposed that liquidity is important because low liquidity leads to high capital cost and low firm value. Amihud and Mendelson (1986) proved the expected rate of return and transaction costs are related.

This paper discusses relationships between liquidity, managers' performance and firm financial performance under the equity tradability Chinese capital markets. The rest of this paper is structured as follows: Section 2 contains our literature review. We describe our data and methodology in Section 3； Section 4 reports the results of the various statistical analyses and Section 5 presents the conclusion, limitations and suggestions.

LITERATURE REVIEW

Market efficiency hypothesis point out that firm specific risk causes stock volatility under the condition of information asymmetry. However, a potential conflict of interest among managers and shareholders exists in the concentration of ownership. When the ownership is dispersed, managers are motivated to hold more control to entrench outsiders. To sum up, market liquidity is caused by dispersion of ownership. It is necessary to explore the relation between corporate governance and market liquidity in the Chinese capital market. Some argue there the lack of governance relates to the lack of liquidity of the institution of nontradable stocks in China. We examine this relationship by using a two-stage regression. The results support our hypotheses that market liquidity can reduce agency problems, consistent with Jensen and

Meckling (1976).

Zwiebel (1995) explained that liquidity can increase the willingness of major shareholders to watch management and to cooperate with controlling shareholders to realize the benefit. Hoshi, Kashyap and Scharfstein (1991) found liquidity and investing activities are directly related. Companies closer to banks have better access to financing and can keep a high liquidity, thereby supporting investing activities. Why banks prefer to finance companies with closer relation is because banks have more opportunities to know the real financial situation of the company and reduce information asymmetry. The study divided samples into two sets of firms, independent firms and group firms, and predicted that liquidity is a more important determinant of investment for independent firms than for group firms with close banking ties. The proxy variables are cash flow and short-term investment. To be different from liquidity, we use the compensation rate as the proxy variable for liquidity because our research focuses more on the liquidity created by relisted companies after reform.

Baum, Caglayan, Ozkan, and Talavera (2006) developed a static cash management model, which includes the signal deletion mechanism. They argued cash possession, bond interests and uncertainty are positively related. Specifically, they found companies increase cash on hand because of uncertainty. Boyle and Gupthrie (2003) pointed out small firms are more aggressive in entering new markets or launching new products than big ones, which are less financially constrained firms. Myers and Majluf (1984) proved that when firm insiders have information that outsiders do not have, the latter ones will interpret any attempts of the firm to raise external funds as an indication the firm is overvalued. Therefore, they lower their estimation of firm value, raise the firm's cost of external financing and lower project NPV's. When the firm has limited access to external funds, great cash flow not only relaxes the constraint on current investment, but also decreases the likelihood that future investment will be constrained and increases the value of the timing option. Therefore, the opportunity cost of current investment will decrease.

If the interest of managers is consistent with shareholders, the need to replace managers is low (Jensen and Murphy, 1990). Morck, Shleifer, and Vishny (1988) thought that management ownership relates to the power of top management. Outside control from the market influences inside supervision procedures. When management ownership is higher, the probability of outsiders' control is lower. Denis, Denis, Sarin (1997) found that ownership structure has an important influence on inside control. They found that CEO turnover negatively relates to management ownership and chairperson ownership under the control of market performance, turnover rate and other potential determinants. Denis, Denis, Sarin (1997) argued that management ownership might limit the effect of internal control. Management ownership relates to the takeover when managers turnover.

Broussard, Buchenroth, and Pilotte (2004) hypothesized that, when the sensitivity of management reward to performance is higher, the agency cost of major shareholders is lower. It means that issuing the stock option closer to the market price can decrease the agency problem. In other words, the reform of division of equity tradability increases the number of tradable shares. The proxy variable is the ratio of nontradable shares. If the ratio of nontradable shares is higher before the reform, market liquidity will improve after the reform. At the same time, higher management ownership has positive impact on market return (Shleifer and Vishny 1986). Huang (2002) found that investment-cash flow sensitivity was better when firms with higher financing constraint and others conversely. Li (2007) pointed the liquidity of a relisted company positively relates to the market performance. Lin (2007) discussed the influence of company size, capital structure, the ratio of market price to net asset value and the ownership of the largest shareholders on performance.

Hypothesis 1: Market liquidity positively relates to investment decisions in the reform of the division of equity tradability in Chinese capital market.

Hypothesis 2: Under the condition of manager turnover, liquidity positively relates to investment decisions. Under the condition without manager turnover, liquidity negatively relates to investment decisions.

Hypothesis 3: The degree of diversification negatively relates to investment decisions.

Some papers often used liquidity as a proxy variable for investment activities. High liquidity is a signal of good performance. Fazzari, Hubbard and Petersen (1988) mentioned that a low-dividend policy would increase retained earnings and reduce constraints on liquidity. Therefore, we deduce the relationship between investment and liquidity is significant. That means the over-investment hypothesis and underinvestment hypothesis provided by Myers and Majluf (1984) explain management entrenchment. We believed the board of directors inclines to execute the low-dividend policy to examine management performance and understand managers' investing decision when liquidity is high.

Holmstrom and Tirole (1993) found that managers had more opportunities to get stock bonuses after the company is listed. Stock bonuses not only increased liquidity but also provide a good way for external investors to watch the company. Under equilibrium among external investors, major stockholders and managers, the ideal quantity of stock holdings and equilibrium prices will be reached. If managers performed better, external investors would like to hold more shares, and we guess the relation between the two is positive.

McConnell and Servaes (1990) argued that, when low shareholding insiders increase their holdings, the interest of minor shareholders can improve but, when the shareholding of insiders is high, interests between insiders and minor shareholders will be inconsistent. Given that insiders can affect investment-cash flow sensitivity in a nonlinear method, managers invest excessively in internal cash. Hadlock et al. (1998) thought the investment-cash flow sensitivity would drop as the stock insiders hold decreases. That will produce more snatch effect when managers hold certain proportion of stocks in the company. The board of directors wants to replace the mangers, which is not easy to do. External shareholders also think acquisition and merger are not easy. Entrenchment effects cause the incentive perusal of managers to be weak when they face external shareholders. Therefore, the incentive effect aims at managers who are lacking in ownership.

Slovin and Sushka (1993) discussed the impact of the transfer of controlling rights on corporate performance under the hypothesis that the controlling shareholder dies. They found the relation between stock price and the death of controlling shareholders is positive, especially when the shareholding of major shareholder is above 10%. Brennan, Chordia, and Subrahmanyam (1998) revealed the deregulation for nontradable shares increased outstanding shares, leading to a decline in the price of tradable shares. This can be confirmed if government selling state shares through IPO or issuing more new stocks, leads to lower market price of shares.

Reform of the division of equity tradability is intended to solve the problem of the lack of liquidity caused by limits on nontradable stocks. To reduce the impact on the stock market, it needs nontradable shareholders to offer reasonable compensation to tradable shareholders. Xie and Yang (2007) found the consideration rate positively relates to market performance. Condensing stocks and paying cash have the most significant influence on market performance. Using the method of "the lowest stock price and nearly buy at the mentioned date" has no significant influence on market remuneration.

We use the consideration as the proxy variable of liquidity. The influence is mainly on manager performance and second on the market performance. We use two stages regression to test the relation among market liquidity, management performance and financial performance. Li (2007) studied the influence of relisted companies on market performance and the relation between the consideration and

market performance. The paper pointed out that investors are sensitive to the proportion of consideration in the early stage of reform. He (2006) pointed out the major shareholders would issue equity financing for their interests before the reform because interests of major shareholders are from dividends and cash capital increases not from market returns. This will have an entrenchment effect on minor shareholders. After the reform, managers will avoid equity financing and prefer debt financing. The interest of major shareholders will be consistent with minority shareholder because of the increasing number of minority shareholders. Our research infers that the increase of outside shareholders will raise the debt ratio. They are incline to debt financing that extrapolates the incremental debt ratio. This method of financing would increase consistent interests between external investors and large shareholders. The increase of management ownership will improve the efficiency of investment spending and improve market performance.

Pang (2007) developed a model to show increasing liquidity improves the ownership structure after the reform. Outside shareholders can decide whether the reform can improve the governance. This implies that external investors help to strengthen corporate governance, which increases management performance. Our hypothesis is as follows:

Hypothesis 4: Financial performance has an impact on liquidity and management performance.

DATA AND METHODOLOGY

To verify hypothesis one, we use the compensation rate and the current asset to stockholder equity rate to measure liquidity. The proxy variable of investment decision is capital expenses. The following regression equation was estimated to identify the determinants of ROA and net value per share. The related variables and the definitions are depicted in Table 1

We use the two stages least regression method to test the relation between market liquidity and performance. The regression model is as follows:

$$Y=\beta X+\varepsilon \quad [1]$$

$$Y= LC\_K\beta 1+ CA\_K\beta 2+\beta 3\ldots iX+\varepsilon\ldots \quad [2]$$

The explanation and operating definition of the dependent variables and control variables are depicted in Table 1. The management ownership rate is used to be the weight by the formula [1]. We use the WLS regression approach to understand the significance of measurement.

Descriptive Statistics

There are total 1,348 firms selected from Shanghai Stock Exchange and Shenzhen Stock Exchange from year 2005 to 2007. Of the 1,348 firms, ST and ST*S shares were removed from the sample. The final sample consists of 1002 firms. ST and ST*S shares whose operating losses have lasted for three years might go private. It is too complex to include ST and ST*S shares in samples to our main thesis in the market liquidity. In all samples, the maximum ratio of current asset to the market value of equity is 0.782, the minimum ratio is -0.0645, and the average value is 0.644. In addition, the ratio of capital investment to replacement cost can reach 99 times. There are many firms inclined to invest more than historical costs

Table 1: Operating Definition

Dependent Variable		
X variables	**Means**	**Operating Definition**
LC_K	Rate of current asset to Capitalization	Current asset is divided by market value of outstanding number of stock
CA_K	Investment expenses to replace cost	Investment expenses is divided by fixed asset deducted the depreciate
Cmpen%	Compensation rate	Compensation volume to divided by equity
H_5 index	Degree of diversification	To use Herfindahl index instead of degree of diversification
FL1	First large shareholders of tradability	Reveal first large tradability originally The annual report record holding rate after Relisted
Debt%	Debt ratio	Total debt is divided by total asset
D/E	Debt to equity ratio	Total debt is divided by equity
L_CTRL	Dummy variable for last controller type	1 means nonstated owner, 0 means stated-owner
Mo%	Holding share rate of managers	The holding share ratio from top management
Transfer	Transferred from ownership agreement	1 means the situation of referred ownership agreement，0 otherwise
Turnover	Dummy for CEO was dismissed	1 replace CEO after relisted; 0 otherwise
SEO	Dummy for seasoned	1 within season one year after relisted;0 otherwise
Control Variable		
Firm Scale	Firm scale	Nature logarithm of total asset
FB%	Holding rate of first large shareholder	Holding rate of shareholders after relist
CRL	Control power to other company	1 means have the control to others, 0 otherwise。
BOARD	Board size	The number seat of board

Table 2: Descriptive Statistics

Variable Symbol	Minimum	Average	Middle	Maximum	Standard Deviation
CA_K	0.001	0.947	0.28	99.01	8.77
LC_K	-0.0645	0.644	0.104	0.782	25.268
Cmpen%	0	1.87	1.5	29	1.41
H_5 index	0.01	0.191	0.159	0.288	0.151
FL1	0	0.02	0.01	0.579	0.043
Debt%	0.011	0.414	0.456	0.98	0.22
L_CTRL	0	0.322	0	1	0.555
FB%	0.052	0.319	0.257	0.826	0.173
Mo%	0	0.9563%	0.0022%	62.2597%	0.054
Transfer	0	1.148	0.827	1	2.154
Turnover	0	0.423	0	1	0.494
Firm Scale	16.884	21.14	21.11	26.69	0.86
CRL	0	0.22	0	1	0.415
BOARD	4	9.5	9	21	2.115

*There are 1,348 samples in Shanghai and ShaJing Zhen stock exchange markets. We filter the unsuitable data and keep 1,002 samples. The degree of freedom is 1001. We delete ST and ST*S shares whose operating losses have lasted for three years might go private. Of the total 1001 samples, there are 696 state-owned companies. Table 2 shows the statistics analysis of regression model: $Y=X\beta+\varepsilon$.*

The average is close to the median, both numbers are below one. The minimum rate of compensation to capital stock is 0%, and the maximum rate is 29%. Therefore, we must delete outliers in the regression. The Herfindahl index is between 0.01 and 0.288, the average is 0.191, and the median is 0.159. All samples are close to the average. Although the maximum ownership of the largest shareholders of tradable shares exceeds 57.9%, there are no largest shareholders of tradable shares in some companies. Companies without largest shareholders of tradable shares are because of the national loan funds. We remove the smallest and the biggest samples in robustness tests.

Managerial ownership ratio will influence managers' investing decisions. In Table 4, the maximum management ownership is 62.259%, but both the average and the median are under 1%. The standard deviation is 0.054, which represents samples have great deviation. The ratio of managerial ownership is low after the deviated values are excluded. We use the management ownership ratio by weighted-least square regression to test the heterogeneity of error terms and analyze the influence on investment decisions.

The maximum members on the board of directors are twenty-one. Since this number is far greater than the median and the average, we still need to do the robustness test. Company size was converted to natural log amount, and it lies between 16 and 26. We separate all samples into big companies and small companies. The paper discovered that management ownership ratio highly relates to the ownership type of final controlling shareholders, major shareholder and diversifications and equity transfer agreement. When choosing a parameter, we rely on the ratio of managerial ownership to calculate least square regression. Because some measurement variables are highly correlated, we merged two or more variables into one. We check their representatives, which have powerful meanings without using this method. In differences between hypotheses, we still care about their relevance and use different models to examine it by the two-stage least square regression.

RESULTS

At first, we used WLS (Weight Least Squares) to estimate the model by weighting management ownership in table 3. WLS needs residual values and has heterogeneity and the rate of stockholding of managers is lower than that of others. We use the characteristic of manager shareholder rate to weight others' independent variables.

The compensation rate always positively relates to investment decision. This is an important clue to explain the relation. We support the hypothesis 1. The control variables such as firm-scale also positively affect investment decisions. We can further explore the condition of division of tradable equity.

The board size has different results as shown in Table 3. We judge their difference by the influence of transfer agreement. That is proof of the concept that the merger and acquisitions have a power over external governance. Results supporting the management entrancement hypothesis or information

asymmetry hypothesis are different from our hypothesis. We guess that managers prefer to use internal funds to support their investment rather than external financing activities. Therefore, their investing actions tend to conservation. Transfer equity agreement has a positive influence on investing decisions not considering major shareholders because major shareholders, who watch managers, will decrease their stocks and influence on the company. Under the circumstances, the influence is not significant between transfer equity agreements and investment decisions. Basing on the above, we conclude the outcomes support the corporate governance and hypothesis 1.

If market liquidity can signal that external investors can campaign to be directors through buy-and-hold strategy, much more pressure will be put on managers' performance. We have a positive value on the reform of the division of equity tradability in Chinese capital market.

Table 3: The Test on Liquidity to Investment (WLS Regression by Manager Stock Holdings)

Model	1	2	3	4	5
Intercept	10.035***	1.753	3.785	3.42*	-0.143
	4.773	1.366	2.05	1.85	-0.075
Cmpen%	0.098***	0.107***	0.243***	0.11***	0.045
	2.397	3.239	3.06	3.29	0.18
H_5 Indx				-0.085***	-0.08***
				-2.628	-2.56
FL1		0.585***	0.611***	0.6***	0.583***
		18.04	17.84	17.53	17.3
Transf.			0.754***	0.088***	0.08***
			2.95	2.815	2.59
Debt%			0.089**	0.069*	0.016
			2.352	1.78	0.42
Firm Scale	0.156**	0.184***	-0.09**	-0.082**	-0.02
	3.773	2.851	-2.51	-2.255	-0.514
Board	-0.196***	-0.06*	0.17***	0.086***	0.064**
	-4.896	-1.732	2.602	2.54	1.94
TURNOVER					0.192***
					5.44
R-square	0.07	0.393	0.41	0.413	0.44
Adj. R square	0.067	0.389	0.4	0.406	0.433
F-test	15.71	99.34	69.625	61.242	59.787

*The dependent variable is CA_K. CA is the investment expenses for the year company relisted. K is the replacement cost, the book value of fixed asset reducing the depreciation and the reservation. The formula is Y=Xβ+ε and X is the independent variable. We filter the unsuitable data and keep 1,002 samples. The degree of freedom is 1001. We delete ST and ST*S shares whose operating losses have lasted for three years might go private. Of the total 1001 samples, there are 696 state-owned companies. The result of White F-test is over 59.133 and it is very significant. The multiregression model uses the ratio of management ownership to solve with WLS. We explore the influence of dummy variables of management turnover on Model 1 from 2005 to 2007. ***, confidence level 1% ; **, confidence level 2.5% ; *, confidence level 5%.*

We also conclude the relation between diversification and investment decision is negative. The corporation diversifies investments in different industries and businesses instead of the allocation, which has the waste of dispensing at the decision. We find a negative relation exists because of the information asymmetry after diversification.

However, we do not have a strong evidence to explain the relation between market liquidity and investment decisions under the manager turnover. This outcome surprises us. It is inconsistent with the Denis, Denis, Saran (1997), whose statement shows the different context in the Asian corporation. We argue managers are recruited not only by their profession but also by having more "Guan-XI" from the personnel-channel (network). The conclusion does not support our hypothesis 2.

Second, we use the two-stage regression to estimate the relation between investing activities and performance. The results in Table 4 and 5 are different. ROA and net value per share serve as dependent variables in Table 4 and 5 separately to discuss the effect of proxy variable of cash flow and liquidity and proxy variable of manager effort and control variable on firm performance. In Table 4 and 5, we divide the 1,002 samples into five groups according to the percentage of the largest tradable shareholder ownership. The range of percentage of the largest tradable shareholder ownership in first group is 0-0.21%; the second group 0.21%-0.72%; the third group 0.72%-1.29%; the fourth group 1.29%-2.39%; and the fifth group 2.4%-57.88%. In the fifth group, the number of samples of the largest tradable shareholder ownership over 5% is 55. In other words, the ownership of the other four groups is average and centralized.

In Table 4, we found the rate of current assets to equity has a significant influence on the rate of returns of assets in the fourth group. We find significant influences in groups one and five after considering cross-multiple items but the result in the fifth group, which show a negative relation, is different from the first group. It means that cash flow per share negatively relates to ROA when there are major shareholders

Table 4: The Result as a Predicted Variable by ROA

DV:ROA	**1**		**2**		**3**		**4**		**5**	
LC_K	.012	.264***	-.03	.024	.168	4.52	.21***	-.02	-.08	-.47***
	.2	2.543	-.57	.33	0.67	1.15	4.37	-.19	.99	-2.81
CA_K	-.09	-.077	.003	.02	-.18	-.98***	-.074	.06	1.95***	5.2***
	-1.33	-1.49	.057	.31	-.69	-3.09	-.55	.55	8.863	4.21
Cmpen%	-.688**	-.64***	-.37***	-1.46**	-.77***	-3.6***	-.14	.88***	.32***	.65***
	-3.88	-5.42	-7.1	-2.27	-3.63	-8.25	-1.35	3.91	2.97	2.5
Turnover	.466***	1.15***	0.16***	-.48***	.062	-1.0***	.3***	-.11	-.68***	-.18
	4.776	13.34	2.53	-3.45	.29	-4.28	3.85	-1.08	-4.64	-.96
H_5 index	-.257**	-.196**	-.05	.10	.16	-.38*	.42***	.44***	-.26***	-.24***
	-2.34	-2.6	-.5	.92	.8	-1.9	5.895	7.81	-3.53	-3.02
Debt%	-.16	-.025	.19*	.196*	-.26*	.011	.23***	-.022	-.011	.03
	-1.36	-.32	1.69	1.9	-1.67	.08	3.9	-.41	-.09	.26
L_CTRL	-.04	-.01	-.09***	-.09***	.03	.01	.33***	.2***	-.045	-.104*
	-.87	-.266	-2.66	-2.87	.38	.17	3.44	2.51	-.881	-1.89
Transfer	-.01	.013	-.09**	-.07	-.02	-.03	-.09	-.25***	.016	-.07
	-.183	.414	-1.91	-1.59	-.3	-.57	-.7	-2.5	.225	-.98
SEO	-.55***	-.137	-.77***	-.5***	-.18	-.2	.26***	-.065	-.23***	-.26***
	-2.99	-1.02	-14.77	-6.86	-1.22	-1.4	3.42	-.997	-3.02	-3.68
FB%	-1.2***	-.56***	0.14	-.24	-.36**	-2.7***	-.79***	.222	1.06***	1.07***
	-5.44	-3.57	1.21	-1.4	-1.98	-7.28	-19.3	.996	8.463	2.94
Firm Scale	.77***	.453***	-.25	-.233	.48***	.38***	-.59***	-.23***	0.2	1.8*
	3.7	3.21	-1.49	-1.52	2.96	2.64	-6.53	-2.82	1.127	0.08
Cmpen%xFB.		.63***		.89		2.9***		-1.7***		-.58
		3.42		1.39		6.93		-5.28		-1.44
CA_KxTurn.		-1.1***		.87***		.74***		-0.15*		-3.9***
		-11.6		4.53		4.2		-1.75		-2.77
LAxH_5 in.		-.06		-.1		-3.62		0.26**		.28**
		-.6		-1.2		-.89		2.46		2.2

*Dependent variable is ROA. The formula is a 2-stage regression model. X is the independent variable. We filter the unsuitable data and keep 1,002 observations. We delete ST and ST*S shares whose operating losses have lasted for three years might go private. Of the total 1001 samples, there are 696 state-owned companies. ***, confidence level 1%；**, confidence level 2.5%；*, confidence level 5%. The period is from 2005 to 2007. The 2-stage regression have interact term to test the regression. The design is compensation to multiple the first block holders, the Investment expenses to replace cost to multiple the turnover dummy variable, the large control holders to multiple the Herfindahl index.*

in capital market. When the percentage of the largest tradable shareholders ownership is under 2.4%, cash flow per share significantly and positively relates to ROA. When the percentage is between 0.21% and 1.29%, it does not significantly relate to ROA. This means cash flow is limited because major shareholders watch it. Market liquidity positively relates to performance when watching works and conversely. The argument is consistent with Bolton and Thadden (1998) that the major shareholders care more about investees' investment decisions and internal funds because major shareholders have more invested. We also found that major shareholders prefer to have liquidity negatively related to ROA. It means that corporations have poor performance when managers are under market pressure.

The rate of investment expenditure to replacement cost positively relates to ROA in group 5. We found the result perplexing about cash flow per share and we cannot understand the reason so we suggest further research is necessary. The rate of compensation of the reform has significant effect under different

conditions. The influence is negative in the first three groups, and it is positive in the latter two groups. It is evident that the percentage of the largest tradable shareholder ownership has different effects on the relation between liquidity and ROA. It is a non-linear relation. This finding is an important contribution of this paper

In Table 5, the compensation rate of the reform significantly relates to the financial performance based on liquidity. Investment decision has a positive impact on group 3 and group 5 but the others cannot be discriminated. The result shows the influence is only on the investment decision and asset value. However, the higher the degree of diversification, the higher the net value per share is. It means that only the good performance of a company matters. Issuing new shares can raise the liquidity but the influence of issuing new shares is different in each group. The relations are negative from groups one to four, while the relation is positive for group five. We point out the important latent variables are market investors and managers performance. The conclusion is consistent with Table 7. Turnover ratio significantly and negatively relates to ROA. With greater diversification, most of parts negatively relates to ROA except group 4. The reason ought to be that, when shareholding rate of market investors is low, the performance

Table 5: Result as a Proxy by per Share Net Asset Value

DV:PNV	**1**		**2**		**3**		**4**		**5**	
LC_K	-.09	.28***	.02	.26***	-.76***	16.5***	.22***	.52***	.065	.33**
	.93	2.67	.288	2.54	-3.47	7.13	4.3	5.87	.77	2.16
CA_K	-.04	-.07	-.11	-.077	.83***	-.04	.21	-.07	-.164	5.77***
	-.71	-1.31	-1.53	-1.49	3.63	-.23	1.403	-.58	-.711	5.21
Cmpen%	.05	-.36***	.085	-.64***	1.04	-.6**	-.231**	.038	.25***	.85***
	1.33	-3.05	1.59	-5.42	.3	-2.38	-2.03	.17	2.63	3.47
Turnover	.38***	.7***	.43***	1.15***	.89***	-.16	.48***	.15	.032	.53***
	4.99	8.18	4.05	13.34	4.73	-1.12	6.38	1.45	.197	3.03
H_5 index	-.27***	-.19***	-.29***	-.2***	1.24***	1.66***	-.86***	-.88***	-.19**	.007
	-3.11	-2.54	-2.44	-2.6	7.28	14.3	-10.49	-14.2	-2.35	.098
Debt%	-.33***	-.27***	-.22*	-.025	-.06	.43***	-.28***	-.42***	.08	.173
	-3.623	-3.35	-1.72	-.32	-.46	5.32	-4.453	-7.33	.61	1.6
L_CTRL	-.05	-.03	-.05	-.009	-.016	-.03	.05	-.12	.17***	.045
	-1.27	-1.07	-.888	-.266	-.25	-.76	.482	-1.46	2.97	.895
Transfer	-.025	-.02	-.02	.013	-.013	-.025	-.32**	-.03	.18**	.14**
	-.72	-.68	-.41	.414	-.21	-.731	-2.28	-.27	2.33	2.176
SEO	-.27*	-.12	-.61***	-.137	-.63***	-1.2***	.07	-.07	.34***	.265***
	-1.86	-.896	-3.06	-1.02	-4.84	-14.14	.859	-.93	4.27	4.05
FB%	-.14*	-.38**	-.31***	-.56***	.96***	.523**	.51***	.76***	.64***	.98***
	-1.72	-2.45	-2.81	-3.57	6.1	2.41	10.8	3.68	4.45	3.09
Firm Scale	.65***	-.088*	.95***	.45***	.78***	1.1***	.88	.21***	-.53***	-.44***
	4.08	-1.79	4.33	3.21	5.55	13.03	.38	2.66	-3.05	-2.93
Cmpen%xFB.		.41**		.63***		.74***		-.18		-1.2***
		2.24		3.42		3.001		-.56		-3.14
CA_KxTurn.		-.46***		-1.1***		1.09***		.18*		-6.6***
		-4.81		-11.6		10.42		1.88		-5.28
LAxH_5 in.		-.21**		-.06		-16.5**		-.44***		-.37***
		-2.08		-.603		-6.86		-5.56		-3.22

*Dependent variable is Net value per share. The formula is 2-stage regression model. X is independent variable. We filter the unsuitable data and keep 1,002 samples. The degree of freedom is 1001. We delete ST and ST*S shares whose operating losses have lasted for three years might go private. Of the total 1001 samples, there are 696 state-owned companies. ***, confidence level 1%；**, confidence level 2.5%；*, confidence level 5%. The period is from 2005 to 2007. The 2-stage regression have interact term to test the regression. The design is compensation to multiple the first block holders, the Investment expenses to replace cost to multiple the turnover dummy variable, the large control holders to multiple the Herfindahl index。*

will be poorer with greater diversification. However, when shareholding of major shareholders reaches a certain critical point, performance will also be poorer with greater diversification. When the percentage of major shareholder ownership is between 1.29% and 2.39, the performance is better. Sometimes, the result also happens to extraneous variables. For example, debt ratio, the final shareholders and transfer equity agreement, have significant impact on group 4. The shareholding rate of largest shareholders negatively relates to financial performance among group 1, 3, and 4. There is no impact on group 2, and the relation is positive in group 5. Firm size only influences group 1, 3 and 4, and the impact is negative on group 4, and positive on group 1 and 3. We get the answer from multigroups. The primary conclusion is that under the diversification of holding shares of market investor, liquidity has a significant impact on manager performance as well as financial performance.

From Table 5, it is sufficient to understand that reform increases market liquidity has a significant effect on manager's performance and financial performance. However, the different shareholdings of outside major shareholders have different influence other than merely nonlinear relation. The reason might be that China's listed companies in different provinces have specialties, management characteristics, and many other differences from each other. Our research examine whether it is the utility as a dummy variable and the result is insignificant. In other words, whether samples are utilities does not change our conclusion. Then, the final shareholders have effect on ROA in the group 2, 3 to 4, but no effect on net value per share. The conclusion supports reform of the division of equity tradability whose goal is to make management focus not only on net value per share but also on ROA. We are looking forward to the achievement.

CONCLUSION

We have some solid conclusions about the market liquidity and performance after the reform but the capital market is not completely free and we are concerned about the control from Chinese bureau systems. However, we discovered the relation supports our hypothesis 1, 3, 4, and rejects hypothesis 2. We notice that missing data from Chinese financial and economic database has an influence on our results.

The paper focuses on the influence of market liquidity on investment decisions, manager performance and financial performance after the reform. We further study the influence market uncertainty has on market return reasons and the change of the attitude of control shareholders toward the corporate governance and management performance before and after the reform. We also examine the topic of liquidity. From the results, we can tell that whether the managers own shares or not and whether the managers have replacement pressure influence how liquidity influences investment decisions. External major shareholders have significant influence on investment decisions and financial performance when managers hold shares. This means corporate governance works.

Although the empirical result shows that the two proxy variables of liquidity, cash flow and compensation rate, have a significant influence on investment decisions and financial performance, the compensation rate does not affect investment decisions and financial performance in some conditions. Obviously, the nontradable shareholders offer the exact amount to tradable shareholders in the consideration project. The primary consideration affecting the management decision is free cash flow. Our research will help identify the truth about the issues of control interests and cash flow and the issues of control interests and corporate governance.

This study originally assumes liquidity has impact on investment decisions and the impact will influence the financial performance through investment decisions. We find there is no relation after using two stage regression. Then we divide samples into five groups according to the percentage of the largest tradable shareholder ownership. Most samples are under 2.4%. We find that every group has significant but not all positive influence. Originally, we assume the relation has a lot to do with the firm attributes. Therefore,

we add a dummy variable indicating whether the firm is a utility and find the relation is insignificant. We continue to use other dummy variables to examine dependent variables. We discover that these dummy variables such as equity transfer agreement and types of final shareholders don't have much to do with dependent variables. We are also show how market uncertainty and financing costs affect the performance of the company.

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Appendix: The Correlation Table of Pearson

	b	c	d	e	f	g	h	i	j	k	l	m	n	o
A	0.81	0.02	-0.2	-0.01	-0.02	-0.01	-0.04	-0.02	-0.01	-0.01	-0.01	-0.03	0.06	0.02
B		-0.03	-0.02	-0.01	0	-0.01	0.02	0.01	0.02	-0.01	-0.05	0.04	0.06	0.02
C			-0.1	-0.04	-0.01	-0.04	0.04	-0.03	0.02	0.03	0.011	0.01	0.05	0
D				0.01	-0.1**	-0.04	-0.13**	0.43**	0.09**	-0.13**	0.03	0.12**	-0.05	0.044
E					0.03	-0.01	-0.04	0.02	-0.04	0.01	0.04	0.09**	0.01	0.04
F						0.48**	0.04	-0.07**	-0.02	0.02	0.07**	0.2**	0.02	-0.01
G							0.05	-0.04	-0.01	-0.02	0.011	-0.04	0.02	-0.01
H								-0.2**	-0.1**	0.13**	0.03	-0.2**	0	-0.2
I									-0.1**	-0.09**	0.02	0.2**	0	-0.02
J										-0.07*	0.01	-0.08*	-0.08*	-0.04
K											0.03	-0.1**	0.12**	-0.04
L												0.06	-0.4	0.05
M													0.02	0.2**
N														-0.01

a:LC_K、b:CA_K、c:Cmpen%、d:H_5 index、e:FL1、f:Debt%、g:D/E、h:L_CTRL、i:FB%、j:Mo%、k:Transfer、l:Turnover、m:Firm Scale、n:CRL. LC_K : Rate of current asset to capitalization, CA_K : Investment expenditure to replace cost, Cmpen% : Compensation rate, H_5 index : Degree of diversification, FL1 : First large shareholders of tradability, Debt% : Debt ratio, D/E : Debt to equity ratio, L_CTRL : Dummy variable for last controller type, FB% : Holding share rate of first large shareholder，Mo%: Holding share rate of managers, Transfer: Transferred from ownership agreement, Turnover: Dummy for CEO was dismissed, Firm Scale: Firm scale, CRL: Control power to other company.

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