

Financing-Motivated Mergers and Acquisitions: Evidence from Corporate China

Julan Du, Oliver M. Rui, and Sonia M.L. Wong¹

Abstract

In China's state-dominated financial system, stock market listing becomes a channel to help state-owned enterprises to raise external finance. Many enterprises, especially non-state-owned or private ones, face serious restrictions in getting access to bank and equity market financing. This kind of highly discriminative financial repression policy nurtures financing-motivated mergers and acquisitions where the non-listed companies, especially those private ones, make use of acquisitions of block shares in listed companies as a means to get access to equity market. They tend to rush to conduct rights offerings and bank borrowings immediately after being listed. However, the post-acquisition financing activities do not seem to have improved the corporate operational performance of the target companies. State acquired companies with post-acquisition rights offerings exhibit significant declining earnings performance. This suggests that the fund-seeking acquirers do not use the additional funds raised efficiently.

¹ From the Chinese University of Hong Kong, Chinese University of Hong Kong, and Lingnan University respectively. Corresponding author: Julan Du, Department of Economics, Chinese University of Hong Kong, Shatin, N.T., Hong Kong; Email: julandu@cuhk.edu.hk; julan.du@gmail.com. Tel: 852-2609-8008; Fax: 852-2603-5805. An earmarked research grant (CUHK4112/04H) from the Research Grants Council of Hong Kong Government is gratefully acknowledged. We thank Xi Li and Kun Li for their assistance in research.

I. Introduction

Since its re-opening in the early 1990s, China's emerging stock market has registered a spectacular growth. It has grown to be one of the largest stock markets in Asia with a market capitalization roughly equal to the nation's GDP, i.e., around 2.5 trillion US dollars in 2007. In retrospect, China's experiment with stock markets and listed companies was conducted in a state-dominated financial system with severe financial repression. Under this system, listed companies exhibit some behavioral pattern that differs dramatically from that in a well-developed market economy.

China has maintained a state-dominated financial system where the governments at various levels control the allocation of financial resources in both the banking sector and the securities market. Usually the government-guided financial resource allocation favors those large-scale state-owned enterprises that are important to the economic development of the country and the specific region. Some smaller state-owned enterprises and most of non-state enterprises are largely hard to secure financing from the state-controlled financial system.

As listed companies have many privileges including raising external finance from the capital market, it is valuable to secure controlling block shares of the listed companies. This prompts the outside entities, especially those who are eager to secure funds such as non-state enterprises, to acquire block shares in listed companies. Once they become controlling shareholders, the acquirers can enjoy the privileges including getting access to the capital market and banking sector to raise external finance.

The market for corporate control has developed quite rapidly in China. Merger and acquisition activities involving China's listed companies have been increasing at a remarkable rate.² It has also been closely associated with the privatization process.

² In 1997, 33 out of 613 listed companies disclosed involvement in takeover activities. In 2003, out of 1359 listed companies, 172 disclosed information on merger and acquisition operations.

The period between 1997 and 2002 witnessed the most recent upsurge, where considerable numbers of former SOEs were bought out and partially privatized.³

Because the majority of shares in China's listed companies were nontradable state and legal person shares, acquisitions typically took the form of negotiation-based block share transfers, where the incumbent state or legal person block shareholder negotiated with a potential acquirer about transferring part or all of the shares held by the former to the latter. Once they reached an agreement, the acquirer became a new large shareholder, and in many cases the acquirer served as the new largest shareholder controlling corporate business strategy. Hence, acquisition allows a non-listed acquiring company to gain control of a listed company and indirectly secure the benefits of a listed company.

This nurtures the mergers and acquisition for the purpose of seeking external finance, which is a unique feature of acquisitions in a highly repressed financial system, one prominent example of which is the state-dominated Chinese financial system. We provide evidence to show that the acquired companies, especially those privately acquired firms, truly exhibit a stronger tendency to conduct seasoned equity offerings and banking borrowings in the post-acquisition stage. However, we find that the post-acquisition financing activities, in general, do not help improve the operational performance of target companies but retard or even lower the earnings performance of the target companies. The post-acquisition financing activities, especially those of state acquired companies, significantly lower the earnings of the target companies. This suggests that the cash-thirsty acquirers, particularly those state acquirers, did not use the external finance raised efficiently so that the post-acquisition financing activities do not improve corporate operational performance.

³ The State-owned Assets Supervision and Administration Commission (SASAC) of the State Council were established in 2003, attempting to ameliorate the protracted problems of SOEs. This triggered a new round of privatization in recent years.

We also find that those target companies with post-acquisition seasoned equity offerings display a more serious symptom of fund occupation, i.e., a larger proportion of company funds are occupied by the controlling shareholder. This could partly explain why post-acquisition financing activities may be efficiency-decreasing. In addition, we detect a striking pattern of clustering of the earnings of target companies with financing activities around the seasoned equity offering qualifying threshold earnings levels in response to regulatory changes. This gives us some support to our conjecture that the acquirers are purposely targeting potentially qualified listed companies for acquisition and there may be earnings management to boost corporate earnings in order to secure the right to conduct seasoned equity offerings.

The rest of the paper is organized as follows. Section II provides a conceptual framework of financing-motivated mergers and acquisitions under financial repression. Data and methodology are discussed in Section III. Section IV analyzes the financing activities in the post-acquisition stage. Section V conducts event study to see how the stock market reacts to the announcement of block share transfers. The negative impact of financing activities on corporate operating performance is studied in Section VI. Section VII examines the fund occupation patterns of the acquired companies. Section VIII studies the clustering pattern of post-acquisition financing activities. Concluding remarks are included in Section IX.

II. Conceptual Framework

Mergers and acquisitions in China's listed companies differ from those in the Western mature markets not only in the form of acquisition --- the prevalence of negotiation-based block share transfers --- but also in the strong financing motivation that the acquirers have.

China has maintained a “state-dominated” financial system where the State controls the flow of financial resources. This is a variant of the financial repression policy documented by McKinnon and Shaw (1973) in a transition economy.

In China, financial repression is implemented by the State through discriminative treatment of enterprises of different types in obtaining access to bank lending and capital markets. State enterprises that are relatively small or engaged in industries that do not fit the industrial plans of the central and regional governments may face difficulties in securing external finance. However, the most serious discrimination occurs to non-state enterprises, especially private enterprises. They are largely denied the privileges to get access to the state-controlled financial system. Discrimination against non-state enterprises is one central aspect of the state-dominated financial system in China. This is also a heritage from a state-run centrally-planned economy. As China has been transforming itself from a central planning economy to a market-oriented one through an incremental reform approach, the Chinese economy understandably inherits many characteristics of a command economy.

Due to the difference in the nature of ownership, SOEs and non-state enterprises, especially private enterprises, are treated asymmetrically in the state-dominated financial system: SOEs, especially those large-scale key SOEs with strong government support, are favored in both bank loans and stock market listing quotas allocation, while the private enterprises are largely denied such financial resources from the official financial system. Gordon and Li (1991) show that most private enterprises find it extremely difficult to obtain credit from state-owned banks, and it is well known that private enterprises are hardly able to be granted an approval for public share offerings. As Boyreau-Debray and Wei (2005) point out, the government

tends to allocate capital to favor the state sector against the private sector systematically. State banks, which hold over 80% of deposits in China, serve as instruments for the government to plan and distribute credit to major SOEs at a low interest rate. The stock market was also established with the purpose of helping SOEs to raise more funds from the public. Private enterprises found it extremely difficult to secure bank loans and obtain approvals to go public. It is reported that among the 106 IPOs in China in 1998, only 5 are private enterprises. By the end of 1998, only 3.06% of the listed companies got listed as private enterprises. Under these restrictions, the private sector has to rely heavily on the quite limited private funds provided inside the sector and face a higher interest rate than that in the official financial system.

The highly state-dominated and state-guided financial system causes inefficiency in the allocation of financial resources. As shown by Boyreau-Debray and Wei (2005), capital mobility is low in China, and the government does not allocate financial resources on the basis of economic efficiency; it tends to allocate capital systematically in favor of inefficient state-owned firms against the private sector. It is reported that the SOEs are still extremely inefficient with one third of them being loss makers and the remaining just break even or are marginally profitable, but they seize the majority of bank loans (Bai and Song, 2004).

In the context of a highly state-controlled and discriminative financial system, mergers and acquisitions could be a channel for disfavored business entities, especially private enterprises, to obtain access to the country's limited financial resources. In other words, acquisitions could be motivated by the desire to raise external finance through stock markets and banks in the post-acquisition stage.

The financing-motivated acquisitions, as a result of the state-dominated financial system in China, are strikingly different from the conventional motivations

for mergers and acquisitions documented in the literature based on the experience of the Western matured capital markets. The traditional view (e.g., Manne, 1965; Bradley et al., 1988) believes that mergers and acquisitions take place in order to maximize stockholder wealth, where acquisitions serve as a means to seize the efficiency gain potentially stemming from economies of scale and scope, managerial and financial synergies, and superior management. More recent literature based on agency theory argues that corporate managers conduct mergers and acquisitions to expand the size of their companies so as to facilitate their empire-building (see, e.g., Ravenscraft and Scherer, 1987). Many works such as Firth (1991), Baker et al. (1988) and Conyon and Clegg (1994) affirm the perspective by their findings that executive rewards increase with firm size in the wake of acquisitions.

The view of financing-motivated acquisitions emphasizes the strong desire of acquirers to take advantage of the existing listed companies to indirectly get listed on the equity market within the context of a highly state-dominated and ownership-discriminative financial system. The China Securities Regulatory Commission (CSRC), the regulatory authority of securities markets in China, adopts a quota system to control the stock issuance in the country. It first sets the size of total stock issuance for the whole country and then rations annual listing quota to all the provinces, which in turn ration to the local governments and enterprises. Governments at various levels usually favor state-owned enterprises for listing. Private enterprises that are denied the listing rights but in dire need of external finance may indirectly get access to equity market through acquisition of listed SOEs.

The financing-motivated acquisitions can serve as a way to get around the restrictions set by the state-dominated financial system. The enterprises that are discriminated in the state allocation of financial resources may circuitously obtain

access to external financing through acquisition of listed companies. China's listed companies are widely regarded as "shells" under which the block shareholders, no matter state-owned or privately-owned, can obtain favor from governments and access a large equity market and banking sector to raise more external funds. The government protection, privileges and favorable treatments that listed companies are entitled to constitute the value of "shells". By acquiring bulk shares in listed companies, the acquirers that are originally denied many rights and privileges in the financial system are able to obtain these benefits by controlling the "shells". This kind of acquisition activity allows those disfavored investors to indirectly get listed in the equity market by borrowing the "shell" from the existing listed companies.

Theoretically speaking, this indirect entry into the state-controlled financial system can be efficiency-improving. The fund-lacking acquirers with good investment projects can raise more external finance after acquisition to help complete their investment projects. This efficiency improvement can be reflected in the increase of firm value and investment return to the shareholders of both the acquiring and the target companies. Even if the firm value or investment return of either the acquiring or the target company worsens, the overall efficiency improvement can still be achieved if the combined value of the acquiring and target companies has increased.

However, this listing by borrowing "shell" could also be efficiency-deteriorating. If the acquirers inefficiently use or misuse the funds raised, the overall value of the acquirer and the target may decrease. This is particularly the case if the managers of the acquiring companies do not have good investment projects in hand and simply raise external finance after acquisition to conduct empire-building or tunneling to divert target companies' funds into their own uses with high private benefits.

Because the acquiring companies are mostly non-listed companies in China, and the private acquirers are almost invariably non-listed companies, we lack data to conduct a thorough analysis of how acquisitions affect the overall economic efficiency. However, we will focus on how acquisitions and the post-acquisition financing activities affect the operational performance of targeted listed companies and assess whether acquisitions and financing activities have improved the return to stock market investors. Examining the impacts of acquisitions and the post-acquisition financing activities on listed target companies is important. As listed companies raise capital from a large number of institutional and individual investors, the post-acquisition earnings performance is central to the interests of numerous investors in the public equity market. The welfare gains or losses of those investors are of central concern to the equity market regulators and the government.

In our view, an examination of the relationship between the post-acquisition financing activities and the target companies' performance could help us judge whether the acquirers utilize the external funds raised efficiently or not. Given the scarcity of the listed companies, the acquirers should make wise use of funds raised and improve the target companies' operating performance if the acquirers have a long term plan to make good use of the various privileges enjoyed by the listed companies. The controlling right over the acquired listed company should provide a good platform for the acquirers to fulfill the business and investment goals that otherwise cannot materialize.

However, the financing-motivated acquirers may have a short-term objective under China's distorted economic and financial system. They may rush to raise external finance after acquisition by taking advantage of the shell value of the acquired company. Under the general state of weak legal institutions, deficient

investor protection, inadequate stock market regulation, and poor corporate governance, the managers of the acquiring firm may well use inefficiently or even misuse the funds raised through the public equity market, i.e., they try to divert newly raised funds to pursue their own interests at the cost of equity investors in the public market. This could lead to a worsening corporate performance for the target company.

III. Data and Matching Group Methodology

We collect the data on acquisitions of China's listed companies from the China Stock Market Accounting Research (CSMAR) restructuring database. We select entries on the acquisitions of listed companies that lead to the change of the largest shareholder of the listed company in the period 1998 to 2002 by checking every entry's accompanying remarks. In particular, the database only reports the year in which acquisition contracts were negotiated and drafted. However, the actual transaction year might be one or even several years later because block transfers of state shares to the acquirers typically need a substantial period for the approval from the regulatory authorities. To tackle this problem, we check the tables reporting changes of shareholders for every acquired sample listed company, and thus specify the exact year during which actual transactions take place. In this process, we also correct some misreported entries in the original CSMAR database.

Since we need to examine the financing activities and operating performances of the target companies within three years after acquisition, we only include sample companies that were acquired during or before 2001. Thus, our sample of acquired companies covers the period from year 1998 to year 2001.

As ownership nature of the acquiring company is presumably an important determinant of the tendency to conduct financing-motivated acquisitions, we decompose the whole sample into two sub-sample groups --- private acquirers and

state acquirers. In specifying the identity of the acquirers, we again consult the CSMAR restructuring database where all current privately controlled listed companies in China's two stock exchanges are listed. We retrospect the dates and historical events of the privatization process of these companies and compare the results with the dates and accompanied remarks of our whole sample group to determine the sub-sample group of companies that were acquired by private entities.

Finally, following the usual practice in the literature, we exclude banks, security companies, trust investment companies and other financial firms because their financial reporting standards and requirements are different from those in other industries.

As a result, we end up with a sample of 162 acquisitions of China's listed companies across a broad range of industries from 1998 to 2001. The subgroup of companies acquired by private entities consists of 94 companies and the remaining 68 sample companies are categorized into the subgroup of companies acquired by state-owned entities.

In Table 1 we report the summary statistics for both the whole sample and the two sub-samples on the book value of total assets, operating income, and the ratio of EBIT/Total Assets in the year before the company was acquired. The mean book value of the total assets of the full sample equals approximately 792 million yuan. The average of the EBIT/Total Asset ratio for the whole sample is 0.703%, a relatively low return. The two subgroups report similar mean book value of total assets, with the mean for the private subgroup being 812 million yuan and that for the state subgroup at 765 million yuan. But the operating income differs substantially, with the mean of the private subgroup at 2.025 million yuan and the mean of the state subgroup at 21.7 million yuan. The ratio EBIT/Assets displays similar patterns. An average firm

acquired by state-owned entities achieved 1.27% on EBIT/Assets, while the mean EBIT/Asset for the private subgroup is only 0.29%.

Table 2 shows the industry, acquisition year and province affiliation distribution of the whole sample and the two sub-samples. Most of the sample companies belong to manufacturing, retail and property industries. For the year distribution, there is an upward trend from 1997 to 2000, and a decrease in 2001 for both the full sample and the subgroups. In terms of province distribution, the three groups are largely consistent with each other where Shanghai, Guangdong, Zhejiang, Sichuan, Hubei, Jiangsu, Shandong, and Beijing have the largest numbers of events in the whole sample and the two subgroups.

To compare the effects of acquisitions on financing activities, restructuring activities and operational performance between different sample groups in the post-acquisition stage, it is necessary to control the effects from other potentially important factors. We follow the performance-based control group matching method described by Barber and Lyon (1996) and recently adopted by Huson, Malatesta and Parrino (2004). The Barber and Lyon method focuses on the performance similarity and industry similarity simultaneously in their matching process. We slightly extend their method by imposing size similarity and year correspondence as additional criteria in selecting our matching or control groups for the sample groups. In addition, we attempted to impose ownership attributes similarity in order to achieve the best matching for the private subgroup. Unfortunately, during 1998 to 2001 nearly all privately-controlled listed companies belong to our private sub-sample group. Therefore, the criteria for selecting our control groups are year correspondence and similarities in firm size, industry, and operating performances. As we control more

dimensions than Barber and Lyon did, our selection process is more rigorous and hence requires more efforts in implementation.

We select control groups from the firms that were listed in Shanghai and Shenzhen stock exchanges and were not involved in any change in the largest shareholder in the sampling period. Our control group matching method is performed as follows. Firstly, each company in the sample group is matched to comparison companies whose operating performance measure (EBIT/Assets) and size measure (Book Value of Total Assets) in the year before that sample company's acquisition transaction are within $\pm 20\%$ of the operating performance and size measures of that sample company in the year before acquisition. If there are no such companies, we expand our filter-band from $\pm 20\%$ to $\pm 25\%$ and repeat the process. Secondly, if we find a list of control companies, we choose the one that is engaged in the same industry as the sample company. If there are no such companies, we expand our filter-band by another $\pm 5\%$ and repeat step one. If we cannot find a perfect match using even the $\pm 30\%$ band, we choose a company whose total asset value is closest to that of the sample company. Finally, if we still have room for control firm choice when all the four criteria are fulfilled, we choose the company with the value of total assets that is closest to the acquisition sample company. Hence, we adopt one-to-one matching between our acquisition sample and the control group. The last step is to re-check the control group list to ensure that there are no repeated items.

In our study, most of the acquisition sample companies could be matched to control companies in the same industry using the $\pm 25\%$ band width. For several companies with large negative return in the year before acquisition, we expand the band to 30% or match them to companies with EBIT/Asset ratio around zero.

We also consider the method that matches each sample company to a control company using operating and size similarity for the three-year average before the acquisition. Unfortunately, a sizable portion of our sample companies were acquired within 3 years of their getting listed, and China's emerging stock markets have a short history starting only in 1990, which makes our sample already relatively small compared with that in the studies of mature markets. Hence, we stick to the method described above.

IV. Comparison of the Post-acquisition Financing Activities

The financing activities of listed companies in China mainly consist of making borrowings from banks and raising equity from capital markets. There is no clear indication of bank loans in companies' annual reports. However, we focus on the changes in corporate debt of listed companies because bank loans account for the majority of corporate debt in China.

In Table 3, we take a look at the post-acquisition debt financing of listed companies in China. We compare the ratios of total debt to total assets, current debt to total assets and long-term debt to total assets between the acquisition group and its control group, the state-acquired group and its control group and the privately-acquired group and its control group in the post-acquisition years. The two-sample-mean comparison t-tests show that the acquisition group as a whole displays statistically significant higher ratios of total debt to total assets and current debt to total assets than the control group. Similarly, the state-acquired subgroup and the privately-acquired subgroup exhibit higher ratios of total debt to total assets and current debt to total assets than their control groups, respectively. The privately-acquired subgroup shows a higher ratio of total debt to total assets than the state-acquired subgroup, where the difference is weakly significant in year 2 after

acquisition. In terms of the ratio of current debt to total debt, the privately-acquired subgroup is statistically significantly higher than the state-acquired subgroup in years 2 and 3 after acquisition. The results for the ratio of long-term debt to total assets are much less significant. However, we still detect that the acquisition group has higher long-term debt than the control group has in years 2 and 3 after acquisition, the state-acquired subgroup has more long-term debt than the state control subgroup in year 1 after acquisition, and the privately-acquired subgroup has more long-term debt than the private control group in year 2 after acquisition. These results suggest that the acquired companies show stronger tendency to raise debt, especially short-term current debt, than their non-acquired counterparts in the post-acquisition years. And privately-acquired companies exhibit stronger inclination to raise debt, especially current debt, than state-acquired companies in the post-acquisition years.

In Table 4, we look at the rights offerings or rights issues as a mode of post-acquisition financing for listed companies in China. Unlike bank loans, rights offerings are the unique channel of fund raising for listed companies in the public equity market and they constitute the unique strength or shell value of listed companies. Since rights offerings are the dominant form of security issuance (accounting for most of the seasoned equity offerings) in the post-IPO stage of listed companies in China, we use seasoned equity offerings (SEOs) and rights offerings interchangeably for our analysis in the subsequent text. We collect data on rights offerings for both our sample groups and the control groups. We generate dummy variables to indicate whether rights offerings take place in the first, second and third year after acquisition. As shown in Panel 1 of Table 4, the companies with acquisition events implement substantially more (over 30%) financing activities within three years following the acquisitions. More importantly, about 54.3% of the subgroup of

companies acquired by private entities conduct rights offerings, whereas only 35.3% of the sample of the state-acquired subgroup exerts rights offerings.

For a more rigorous statistical test on the effects of acquisitions and ownership attributes on the probability of financing activities, we utilize t-test to compare the frequency of financing activities of different sample groups in Panel 2 of Table 4. We find that the acquisition sample companies carry out significantly more financing activities in the first year after acquisition than the control group companies do. This suggests that the post-acquisition target companies conduct financing activities more frequently and their financing activities tend to cluster in the first year following acquisition.

As regards the two subgroups, the privately acquired companies implement substantially more SEOs than the state acquired companies do in the first year following acquisition; there is no significant difference between the two subgroups in the subsequent two years. This demonstrates the clustering of SEOs in the year right after acquisition. However, over the three year period, the private acquirer group still exhibits significantly more frequent SEOs than the state acquirer group does.

In Panel 3, we further conduct probit model regressions to see how acquisition and acquirer's ownership identity affect the likelihood of financing. One regression model is specified as $fin_t = \alpha + \beta * MA + \gamma * control_variables + \varepsilon$, and the other regression model takes the form of $fin_t = \alpha + \beta_1 * MA + \beta_2 * (MA * Private) + \gamma * control_variables + \varepsilon$, where fin_t is the dummy variable indicating whether there is financing in year t after acquisition ($t=1, 2, 3$), MA is a dummy variable that equals one if an acquisition activity has occurred in the company and zero otherwise, and $MA * Private$ is the interaction term between the dummy variable MA and the dummy variable for a private acquirer.

The estimation results of regression model one shows that companies with acquisitions are significantly more likely to initiate SEOs in the first year following acquisition.

Regression model two introduces the difference between the private and state acquirer groups. The results show that it is the private acquirer sample firms that are mainly responsible for the higher likelihood of SEOs in the first year after acquisition and in the whole three year period following acquisition.

These findings demonstrate that the privately acquired companies are much more eager to conduct SEOs right after acquisition than the state acquired companies do. This suggests that buying into listed companies creates a channel for private enterprises, which are particularly repressed in China's state-dominated financial system, to get access to the financing opportunities of equity markets.

V. How did the Market Respond to the Announcement of Acquisitions?

To see how the stock market responded to the announcement of block share transfers, we conduct event study around the announcement date of block share transfers leading to the change in the largest shareholder.

We need to calculate the abnormal return after the news. The stock return (in percentage terms) is defined as the logarithm difference between the stock closing price on day t and the closing price of the previous day:

$$R_{it} = \ln (P_{it} / P_{i,t-1}) \quad (1)$$

where P_{it} is the closing price of stock i on day t .

The abnormal returns for each listed company are expressed as follows:

$$AR_{it} = R_{it} - E(R_{it} / X_t) \quad (2)$$

AR_{it} , R_{it} , $E(R_{it} / X_t)$ stand for the abnormal, actual, and normal returns respectively for time period t . X_t is the conditioning information for the normal return model.

To calculate $E(R_{it} / X_t)$, we employ the following market model proposed by Fama (1976) which assumes a stable linear relation between the market return and the security return, i.e.,

$$E(R_{it} / X_t) = \alpha_i + \beta_i R_{mt}, \text{ where } R_{mt} \text{ stands for market return at time } t.$$

To estimate α_i together with β_i , we adopt the estimation window from **150** (?) to **30** (?) days before the block share transfer announcement. And the standard market model regression for stock i is:

$$R_{it} = \alpha_i + \beta_i R_{mt} + e_{it} \quad (3)$$

Therefore, we use OLS estimation with previous 120 trading days' stock price data to get α_i and β_i .

With the parameter estimates for the normal performance model, the abnormal returns can be calculated as $AR_{it} = R_{it} - E(R_{it} / X_t)$.

Subsequently, we can calculate the cumulative abnormal return as expressed in the following way:

$$CAR_i = \sum_{t=1}^t AR_{it} \quad (4)$$

that is, CAR for firm i is the aggregation of abnormal returns over the event window. This shows the cumulative effect of block share transfers of a certain firm on risk adjusted stock returns during the event window.

To see the market response in various periods, we adopt the following event windows: the announcement day (day 0), (-1, 1), (-2, 2), (-3, 3), (-4, 4), (-5, 5), (-6, 6),

(-7, 7), (-8, 8), (-9, 9), (-10, 10), (-10, 20), (-10, 30), (-10, 60), (-10, 90), and (-10, 120).

In order to carry out event study, we need to identify the announcement date of block share transfers for various acquisition companies. However, because it is hard to find the exact date of block share transfers announcement for many companies, we finally end up with 76 acquisition companies with identifiable block share transfer announcement dates, among which 34 are state acquired companies and 42 are privately acquired companies.

In Table 5, we see that the whole sample of acquired target companies mostly exhibit positive and often statistically significant CARs. This reflects the generally positive response of markets to the occurrence of block share transfers. We also find that the privately-acquired subgroup shows more frequently significant positive CARs than the state-acquired subgroup. State-acquired subgroup without post-acquisition financing shows more significant and more frequent positive CARs than state-acquired subgroup with financing. State-acquired subgroup with financing often displays negative CARs. Privately-acquired subgroup with financing displays more significant and more frequent positive CARs than privately-acquired subgroup without financing. This pattern shows that the market responds somewhat positively to the block share transfers to private acquirers with post-acquisition financing and somewhat negatively to the block share transfers to state acquirers with post-acquisition financing.

VI. Financing and Corporate Operating Performance

In this section, we are investigating how the financing-motivated acquisitions have affected the corporate operating performance of the target firms. We employ the ratio of EBIT to Total Assets as a measure of operating performance, return on assets

(ROA). We compute ROA as the operating income for different years (0, 1, 2, 3) divided by the total assets of the year preceding acquisition (year -1). Because financing activities will automatically enlarge the amount of total assets, using total assets of different years to calculate ROAs may lead to a decline in ROA even if the EBIT does not decrease over years. Using the total assets of year -1 can control for the denominator effect. For target companies without financing, an increase in ROA in years 0-3 most probably means an improvement in earnings performance because the denominator of ROA, i.e., the total assets, is unlikely to increase substantially in the case without financing. For target companies with financing activities, a decrease in the ROA constructed in our way in years 0-3 reinforces the conclusion that earnings performance has declined, though an increase in ROA does not necessarily imply earnings improvement because the total assets will increase following financing activities and the ROA we constructed holds it constant.

To better facilitate comparison between different sample groups, we calculate the control-group-adjusted ROA, that is, the ROA of the acquisition company minus the ROA of the corresponding control group company.

Panel A of Table 6 compares the post-acquisition performance of target companies with and without financing activities. The acquired companies without financing activities demonstrate statistically significant higher earnings in the first and second years after acquisition than in the year before acquisition; the earnings in the first two years after acquisition are also significantly higher than those in the acquisition year for the target companies without financing. In contrast, the companies with post-acquisition financing activities achieve statistically significant higher earnings in the first year after acquisition than in the year before acquisition. Moreover, earnings in years 2 and 3 are lower than those in year 1 after acquisition.

In Panel B of Table 6, we compare the post-acquisition performance of privately acquired firms with financing activities and privately acquired firms without financing activities. The privately acquired companies without financing activities exhibit statistically significant higher earnings in the first year after acquisition than in the year before acquisition and the acquisition year. The privately acquired companies without financing activities display statistically significant higher earnings in the first and second year after acquisition than in the year prior to acquisition and the acquisition year.

Panel C of Table 6 compares the state acquired companies with financing activities and state acquired companies without financing activities. The state acquired companies with financing activities show declining earnings performance in the three post-acquisition years than in the acquisition year. In contrast, the state acquired companies without financing activities exhibit consistently increasing earnings performance in the acquisition year and the three post-acquisition years than in the year preceding acquisition. These results suggest that the post-acquisition financing activities, especially those of the state acquired companies, tend to lower or at least do not improve target company earnings.

After examining the changes in ROA over time, we compare the control-group-adjusted ROA of different sample groups. In Panel D of Table 6, we first compare the acquisition sample group with financing activities with the acquisition sample group without financing activities. It is clear that the latter group has higher ROA than the former group in the three years after acquisition, and the difference is statistically significant in year 2. We next compare the privately acquired group with financing activities and the privately acquired group without financing activities. The former group often shows higher ROA than the latter group, though the difference is

not significant. Then, in Panel E, we compare the state acquired group with financing activities and the state acquired group without financing activities. The former group exhibits lower ROA than the latter group in the three years after acquisition. Finally, we compare the privately acquired group with financing with the state acquired group with financing, and the privately acquired group without financing with the state acquired group without financing. The privately acquired group with financing has lower ROA than the state acquired group in the acquisition year. However, the former exhibits higher ROA than the latter in the three years after acquisition. In contrast, the privately acquired group without financing shows lower ROA than the state acquired group without financing in years 0-3. This exhibits clearly that the state-acquired group with financing performs particularly poorly.

To further analyze the impact of financing activities on post-acquisition performance of target companies, we turn to regression analysis. Since SEOs cluster in the first year after acquisition, we create a dummy variable $fin1$ that takes value one if the firm implements SEO in the first year after acquisition, and takes value zero if otherwise. We use the differences in ROA from the year preceding acquisition to each of the three years after acquisition as the dependent variable respectively.

Table 7 presents regressions with the following four specifications:

$$ROA_t - ROA_{-1} = \alpha + \beta_1 * fin1 + \beta_2 * \text{control variables} + \mu, \quad (5)$$

$$ROA_t - ROA_{-1} = \alpha + \beta_1 * \text{Acquisition dummy} + \beta_2 * \text{Acquisition dummy}_{fin1} + \beta_3 * \text{control variables} + \mu, \quad (6)$$

$$ROA_t - ROA_{-1} = \alpha + \beta_1 * \text{Private Acquisition Dummy} + \beta_2 * \text{State Acquisition Dummy} + \beta_3 * \text{control variables} + \beta_4 * \text{Private Acquisition Dummy} * fin1 + \beta_5 * \text{State Acquisition Dummy} * fin1 + \beta_6 * \text{control variables} + \mu, \quad (7)$$

In Panel A, the control variables include company size represented by the logarithm of sales, the province dummies, the industry dummies and the year fixed

effects. In Panel B, we add various corporate restructuring variables as control variables in addition to those listed in Panel A.

After the block transfers are approved and the acquisition transactions are finished, the acquirer-turned new controlling shareholders usually undertake various types of restructuring activities, which would potentially affect the post-acquisition operating performance of the acquired companies.

The CSMAR Database reports altogether six types of restructuring activities, namely, acquisition of other firms (type A), purchase of assets (type B), divestitures (type C), equity transfers (type D), exchange of assets (type E), and debt restructurings (type F). We collect the information on the counts, i.e., number of occurrences of restructuring activities for our acquisition sample groups and the matched control groups in the acquisition year and the three post-acquisition years.

In the first column of both panels in Table 7, we conduct a regression with specification (5) to examine the impact of financial activities in year 1 (*fin1*) on corporate performance on the combined sample including the acquisition group and the control group. The estimated coefficient of the variable *fin1* is consistently negative but it is statistically significant only in the case of $ROA_3 - ROA_{-1}$ with regression specification (5).

In the second column of both panels in Table 7, we estimate regressions with specification (6). We find that the acquired companies typically exhibit higher earnings performance in the post-acquisition years than in the pre-acquisition year, but the acquired firms with financing activities tend to show lower increment in earnings in the post-acquisition years.

Finally, in Column 3 of both panels in Table 7 we conduct regressions with specification (7). Both privately acquired companies and state acquired companies

display higher ROA in the post acquisition years than in the pre-acquisition year, and the effect is statistically significant in years 2 and 3. However, the state acquired companies with financing activities display smaller increment in earnings or sometimes even declining ROA in the post-acquisition years, where the effects are statistically significant.

Next, we examine the differential impact of financing from two subgroups of target companies with private and state acquirers on post-acquisition performance.

The regression model has the following two specifications:

$$\text{Adj. ROA}_t - \text{Adj. ROA}_{-1} = \alpha + \beta_1 * \text{fin1} + \beta_2 * \text{control variables} + \mu,$$

$$\text{Adj. ROA}_t - \text{Adj. ROA}_{-1} = \alpha + \beta_1 * \text{Private_fin1} + \beta_2 * \text{State_fin1} + \beta_3 * \text{control variables} + \mu,$$

where Adj. ROA_t ($t=1, 2, 3$) denotes the control-group-adjusted ROA in the post-acquisition years, ROA_{-1} indicates the performance measure in the year right before acquisition. We specify two dummy variables *Private_fin1* (*Private_fin1*=1 if SEO in year 1 and the acquirer being private, 0 otherwise) and *State_fin1* (*State_fin1*=1 if SEO in year 1 and the acquirer being state-owned, 0 otherwise). We conduct regressions with these two specifications by focusing on the sample of acquired firms.

The regression results are reported in Table 8. In Panel A, the control variables do not include various corporate restructuring variables, whereas in Panel B, the control variables do. Clearly, the acquisition companies with financing activities typically achieve a statistically significant lower earnings performance in the post-acquisition years than the acquired firms without financing activities. The effect is mostly statistically significant in Panel B. Similarly, both state and privately acquired companies with financing activities exhibit lower earnings than the non-financing acquired firms, and the state acquired companies display mostly statistically

significant lower ROA than non-financing acquired companies in Panel A. This suggests that state acquired companies are perhaps the main driving force behind the lower operational performance of the target firms.

VII. Fund Occupation by the Controlling Shareholders

Why is the post-acquisition earnings performance of the target companies with financing activities not satisfactory? Could it be the case that the controlling shareholder occupy or capture the fund and inefficiently use the fund? To see whether this is the case, we collect data on fund occupation by large shareholders of listed companies from the announcements made by the Shanghai and Shenzhen Stock Exchanges. We first look at whether there is fund occupation by the controlling shareholder in China's listed companies. We examine the fund occupation records of each sample target company and dig out the fund occupation record of the acquirer, i.e., the controlling shareholder of the post-acquisition company. We first construct a dummy variable that takes value one if there exists fund occupation by the acquirer and value zero if not. We then calculate the proportion of companies in each sample group where there exists fund occupation by the controlling shareholder. In unreported results, we do not find many significant differences between various sample groups.

We then adopt a more refined method to assess the degree of fund occupation by the acquirers. We calculate the ratio of the amount of funds occupied by the acquirer to the total assets of the listed company, and compare the average ratio of different sample subgroups. Interestingly, some significant patterns emerge as shown in Table 9. The acquired companies exhibit a higher average ratio of occupied funds to total assets than control group companies. The acquired companies with post-

acquisition financing activities have a higher average ratio than the acquired companies without financing activities. This holds true for both state acquired companies group and privately-acquired companies group. This demonstrates clearly that companies with post-acquisition financing activities have more fund occupation by the acquirer than those acquired companies without financing activities. This offers partial explanation for the relatively disappointing earnings performance of acquired companies with financing activities in the post-acquisition years. Although the privately acquired group has more fund occupation by the acquirer than the state acquired group, the latter exhibits a higher degree of inefficiency in fund use so that the latter's earnings performance is particularly disappointing.

VIII. Clustering in Financing and the Role of Post-acquisition Financing Activities

Our results indicate that the state acquired listed firms perform differently from those acquired by private entities, and the deteriorating post-acquisition performance of acquired companies is largely due to the state subgroup. Though the private acquirers exhibit higher tendency to occupy the additional funds raised, the state acquirers seem to use the funds more inefficiently, leading to disappointing earnings performance.

The financing motivation for China's mergers and acquisitions are also testified by the clustering of listed companies' operational performance along the threshold performance criteria stipulated by the CSRC. Following the approach of Chen and Yuan (2004), we examine the pattern of clustering of acquired firms' ROE.

Before 1999, the listed firms must post ROE over 10% for three consecutive years to qualify for a SEO. Between 1999 and 2001, the minimum yearly ROE level

is lowered to 6% but the firm must have an average ROE of 10% for three years. In 2001, the threshold is further lowered to a three-year average ROE of above 6%.

If there is clustering of ROEs in response to regulatory changes, we expect that for financings that occurred before 1999, there would be a clustering of ROE in a small interval just above 10%; for financing activities that occurred between 1999 and 2000, the degree of clustering might have shrunk because the standard is lowered, but there would still be a fairly high degree of clustering a little above 10% because many firms still need to boost their earnings in that year in order to reach the three-year average performance criterion. However, as the criterion is lowered in 2001, the clustering should exhibit a pattern of congregating toward a little above 6%.

In our sample of acquired firms with SEOs in the first year after acquisition, most financings occurred during 1998 to 2000. Table 10 reports our findings. For 1998, 70% of those firms with ex post financing activities report ROE in the interval of 10-12%; for 1999 and 2000 around 50% of the acquired firms with financing cluster at the interval of 10-12% ROE.

Interestingly, in year 2001, all acquired companies with financing registered a ROE between 6% and 10% with the mean at 6.65% and median at 6.449%, which is consistent with the regulatory changes.

These facts reflect that many acquisitions are motivated by financing plans. The acquirers with strong financing motivation purposely choose those companies that are hopefully qualified for rights offerings as their targets. According to Chen and Yuan (2004), these clustering patterns also signal earnings management behavior of the acquirers in order to qualify for rights offerings. This in turn suggests that earnings management could be one additional reason for the declining performance in

the post-acquisition period. The earnings boost for the purpose of rights offerings could not be sustained after the financing activities are completed.

IX. Conclusion

In this paper, we document the financing-motivated mergers and acquisitions under financial repression in Corporate China. We argue that the state-dominated financial system and the discriminative policies in financial resource allocation promotes financing-motivated mergers and acquisitions where the non-listed companies, especially those private ones, make use of acquisition of block shares in listed companies as a means to get access to equity market fund raising. They tend to rush to conduct rights offerings immediately after being listed. The rights offerings in the post-acquisition stage do not seem to have improved the corporate operational performance of the target companies. This suggests that the fund-seeking acquirers utilize the funds inefficiently.

REFERENCES

- Bai, C.E., and M. Song. "Bad News Is Good News." Working paper, The University of Hong Kong, 2004
- Barber, B. M., Lyon, J.D. "Detecting Abnormal Operating Performance: the empirical power and specification of test statistics" *Journal of Financial Economics*, 41, 1996,359-299
- Baker, G. P., M. C. Jensen and K. J. Murphy. "Compensation and Incentives: Practice and Theory." *Journal of Finance*, 43, 1988, 593-616
- Boyreau-Debray, G., Wei, S.J. "Pitfalls of a State-dominated Financial System: The Case of China." NBER Working paper, 2005
- Bradley, M., A. Desal, and E. H. Kim. "Synergistic Gains From Corporate Acquisitions and Their Division Between the Stockholders of Target and Acquiring Firms." *Journal of Financial Economics*, 21, 1988, 3-40
- Bradley, M., and Jarrel, G. "Comment in J. Coffee, Jr., L. Lowenstein and S.R. Ackerman" *Knights, Raiders and Targets*, Oxford University Press, 1988
- Chen, K.C.W., Yuan, H.Q. "Earnings Management and Capital Resource Allocation: Evidence from China's Accounting-Based Regulation of Rights Issues." *The Accounting Review*, 79, 2004, 645-665
- Conyon, M. J., and P. Clegg. "Pay at the Top: A Study of the Sensitivity of Top Director Remuneration to Company Specific Shocks." *National Institute of Economic Review*, 1994.
- Djankov, S., and P. Murrell. "Enterprise Restructuring in Transition: A Quantitative Survey." *Journal of Economic Literature*, 40, 2002, 739-792

- Firth, M. "Corporate Takeovers, Stockholder Returns and Executive Rewards." *Managerial and Decision Economics*, 12, 1991, 421-8
- Gordon, R. H., and W. Li. "Chinese Enterprise Behavior Under the Reforms." *The American Economic Review*, 81, 1991, 202-206
- Grossman S. J. and O.D. Hart. "Takeover Bids, The Free-Rider Problem, and the Theory of the Corporation." *The Bell Journal of Economics*, 11, 1980, 42-64
- Healy, P.M., Palepu, K.G., and Ruback, R.S. "Does Corporate Performance Improve After Mergers?" *Journal of Financial Economics*, 31, 1992, 135-175
- Herman, E., and Lowenstein, L. "The Efficiency Effects of Hostile Takeovers", *Knights, Raiders and Targets*, Oxford University Press, 1988
- Huson, M.R., Malatesta, P.H., and Parrino, R. "Managerial Succession and Firm Performance" *Journal of Financial Economics*, 74, 2004, 237-275
- Jensen, M. "Agency Costs of Free Cash Flows, Corporate Finance and Takeovers." *American Economic Review*, 76, 1986, 323-9
- Jensen, M. C. "Takeovers: Their Causes and Consequences." *The Journal of Economic Perspectives*, 2, 1988, 21-48.
- Magenheim, E.B., and Mueller, D.C. "Are Acquiring Firm Shareholders Better-Off After an Acquisition?" *Knights, Raiders and Targets*, Oxford University Press, 1988
- Mandelker, G. "Risk and Return: The Case of Merging Firms." *Journal of Financial Economics*, 1, 1974, 303-336
- Manne, H. G. "Mergers and the Market for Corporate Control." *The Journal of Political Economy*, 73, 1965, 110-120
- McKinnon, R. *Money and Capital in Economic Development*, Washington DC: Brooking Institution, 1973

Megginson, W., and J. Netter. "From State to Market: A Survey of Empirical Studies on Privatization." *Journal of Economic Literature*, 39, 2001, 321-389.

Ramaswamy, K.P., and Salatka, W. "Impact of Mergers on Long Term Operating Performance of the Combined Firm" Working Paper, 1996, Hong Kong University of Science and Technology

Ravenscraft, D. J., and F. M. Scherer. *Mergers, Sell-offs and Economic Efficiency*, The Brooking Institution, Chapter 7.

Shaw, E. *Financial Deepening in Economic Development*, New York: Oxford University Press, 1973

Table 1**Summary of sample characteristics**

Values for total assets and operating income are in millions of RMB.

	Median	Mean	St. Dev.	Min	Max	Obs.
<i>Panel A: Whole sample group</i>						
Total Assets	534	792	870	113	6,910	162
Operating Income	12.7	10.3	101	-998	279	162
EBIT/ASSET	0.026	0.007	0.074	-0.275	0.162	162
<i>Panel B: Subgroup of firms acquired by private entities</i>						
Total Assets	520	812	996	113	6,910	94
Operating Income	8.54	2.02	124	-998	279	94
EBIT/ASSET	0.023	0.003	0.076	-0.275	0.131	94
<i>Panel C: Subgroup of firms acquired by state-owned entities</i>						
Total Assets	597	765	663	153	4,490	68
Operating Income	17.5	21.7	55.3	-105	266	68
EBIT/ASSET	0.028	0.013	0.072	-0.219	0.161	68
<i>Panel D: Combined control groups</i>						
Total Assets	565	771	724	143	5,470	162
Operating Income	15.6	16.6	55.6	-204	266	162
EBIT/ASSET	0.026	0.015	0.063	-0.212	0.125	162
<i>Panel E: Control subgroup for firms acquired by private entities</i>						
Total Assets	506	779	829	143	5,470	94
Operating Income	13.0	12.8	60.9	-204	266	94
EBIT/ASSET	0.024	0.013	0.067	-0.212	0.125	94
<i>Panel F: Control subgroup for firms acquired by state-owned entities</i>						
Total Assets	604	758	553	192	3,620	68
Operating Income	20.3	21.8	47.3	-83.9	231	68
EBIT/ASSET	0.035	0.019	0.059	-0.155	0.125	68

Table 2

Summary of industry distribution, year distribution and province distribution of the sample groups of listed companies that were acquired during 1998 to 2001.

Industry Distribution			
Industry (Code)	Sample Group	Private Subgroup	State Subgroup
Agriculture (A)	3	3	0
Mining (B)	0	0	0
Manufacturing (C)	88	47	41
Utilities (D)	2	0	2
Construction (E)	5	4	1
Transportation (F)	1	0	1
Information Tech. (G)	0	0	0
Retail (H)	21	9	12
Finance (I)	0	0	0
Real Estate (J)	10	7	3
Social Services (K)	10	9	1
Media (L)	2	1	1
Conglomerates (M)	18	11	6
n/a	2	2	0
Total	161	93	68

Year distribution			
Acquisition Year	All	Private	State
1997	9	9	0
1998	28	17	11
1999	44	28	16
2000	47	28	19
2001	33	11	22
Total	161	93	68

Province Distribution			
Province	Whole Sample	Private Subgroup	State Subgroup
Shanghai	22	15	7
Guangdong	21	13	8
Zhejiang	13	6	7
Sichuan	13	9	4
Hubei	12	2	10
Jiangsu	9	6	3
Shandong	8	2	6
Beijing	7	2	5
Hunan	7	6	1
Hainan	6	3	3
Liaoning	5	4	1
Chongqing	5	4	1
Jilin	4	4	0
Fujian	4	4	0
Guangxi	4	2	2
Hebei	3	1	2
Yunnan	3	1	2
Inner Mogonlia	2	1	1
Heilongjiang	2	2	0
Guizhou	2	1	1
Shanxi	2	1	1
Qinghai	2	2	0
Xinjiang	2	2	0
Tianjin	1	0	1
Anhui	1	0	1
Jiangxi	1	0	1
Ningxia	1	1	0
Total	162	94	68

Table 3 Bank Financing Activities

<i>Panel A: Total Debt/Total Assets in the years following M&A</i>		
Total Debt Year (SEO)	Treatment Group vs Control Group t-statistics	State Subgroup vs State Control Subgroup t-statistics
<i>TotalDebt_1</i>	3.224 ^a	2.498 ^b
<i>TotalDebt_2</i>	4.047 ^a	2.058 ^b
<i>TotalDebt_3</i>	3.212 ^a	2.152 ^b
Total Debt Year (SEO)	Private Subgroup vs Private Control Subgroup t-statistics	Private Subgroup vs State Subgroup t-statistics
<i>TotalDebt_1</i>	2.174 ^b	0.680
<i>TotalDebt_2</i>	3.518 ^a	1.539 ^d
<i>TotalDebt_3</i>	2.434 ^b	1.262
<i>Panel B: Current Debt/Total Assets in the years following M&A</i>		
Current Debt Year (SEO)	Treatment Group vs Control Group t-statistics	State Subgroup vs State Control Subgroup t-statistics
<i>CurrentDebt_1</i>	3.156 ^a	2.364 ^b
<i>CurrentDebt_2</i>	4.359 ^a	2.490 ^b
<i>CurrentDebt_3</i>	3.433 ^a	2.552 ^b
Current Debt Year (SEO)	Private Subgroup vs Private Control Subgroup t-statistics	Private Subgroup vs State Subgroup t-statistics
<i>CurrentDebt_1</i>	2.242 ^b	1.032
<i>CurrentDebt_2</i>	3.621 ^a	1.980 ^b
<i>CurrentDebt_3</i>	2.561 ^b	1.786 ^c
<i>Panel C: Long-term Debt/Total Assets in the years following M&A</i>		
Long-term Debt Year (SEO)	Treatment Group vs Control Group t-statistics	State Subgroup vs State Control Subgroup t-statistics
<i>Long-termDebt_1</i>	1.341	1.562 ^d
<i>Long-termDebt_2</i>	1.892 ^c	1.023
<i>Long-termDebt_3</i>	1.424 ^d	0.946
Long-term Debt Year (SEO)	Private Subgroup vs Private Control Subgroup t-statistics	Private Subgroup vs State Subgroup t-statistics
<i>Long-termDebt_1</i>	0.376	-0.611
<i>Long-termDebt_2</i>	1.646 ^c	-0.115
<i>Long-termDebt_3</i>	1.066	-0.130

a: Significant at 1% significance level; b: significant at 5% significance level; c: significant at 10% significance level; d: significant at 15% level

Table 4**Post-Acquisition Financing (Rights Offering) Activities Summary for the Whole Sample Groups and the Subgroups**

Seasoned Equity Offerings are used as a proxy of post-acquisition financing activities. We define fin_t as the dummy variable that takes value 1 if seasoned equity offerings are implemented or proposed in year t and fin_t equals 0 otherwise ($t=1, 2, 3$). We report the frequencies for fin_t equaling 1, and the numbers in parentheses are total number of firms in each group examined.

Panel 1

	<i>Fin_1 = 1</i>	<i>Fin_2 = 1</i>	<i>Fin_3 = 1</i>	Total
Panel IA				
Whole Acquisition Sample	53 (162)	13 (162)	9 (162)	75 (162)
Combined Control Group	26 (162)	21 (162)	7 (162)	54 (162)
Panel IB				
Private Subgroup	39 (94)	6 (94)	6 (94)	51 (94)
Control Subgroup	15 (94)	11 (94)	5 (94)	31 (94)
Panel IC				
State-Owned Subgroup	14 (68)	7 (68)	3 (68)	24 (68)
Control Subgroup	11 (68)	10 (68)	2 (68)	23 (68)

Panel 2

Comparison of Financing Activities between (1) MA Group and the control Group and (2) Private Group and State Group

The t-statistics for the one-tailed t-test are reported in Panel A, and notations are consistent with those in Table 3. Furthermore, we define fin as the variable that represents combined frequencies of seasoned equity offerings during the three years after acquisition.

In Panel B, we use probit models to examine the effects of acquisitions and ownership attributes of acquirers on the frequencies of financing activities. Model 1 is specified as $fin_t = \alpha + \beta * MA + \gamma * control_variables + \varepsilon$, and model 2 is specified as $fin_t = \alpha + \beta_1 * MA + \beta_2 * (MA * Private) + \gamma * control_variables + \varepsilon$, where β and β_1 are coefficients of MA and β_2 is the coefficient of the interactive term $MA * Private$.

<i>Panel A: Seasoned Equity Offering Frequencies in the years following M&A</i>		
Rights Offering Year (SEO)	Treatment Group vs Control Group t-statistics	Private Subgroup vs State Subgroup t-statistics
fin_1	3.452 ^a	2.799 ^a
fin_2	-1.311	-0.654
fin_3	0.474	0.522
<i>Fin</i>	1.101	1.502 ^c
Rights Offering Year (SEO)	State Subgroup vs State Control Group t-statistics	Private Subgroup vs Private Control Group t-statistics
fin_1	0.620	3.907 ^a
fin_2	-0.807	-1.036
fin_3	0.436	0.273
<i>Fin</i>	-0.0551	1.472 ^c

Panel B: Coefficients on MA and MA*Private by probit models

Rights Offering	Model 1		Model 2
Year (SEO)	M&A	M&A	MA*Private
<i>fin_1</i>	0.596 ^a (3.69)	0.199 (0.215)	0.658 ^a (2.96)
<i>fin_2</i>	-0.260 (-1.37)	-0.149 (-0.62)	-0.203 (-0.72)
<i>fin_3</i>	0.0913 (0.39)	-0.0034 (0.01)	0.156 (0.47)
<i>Fin</i>	0.185 (1.16)	0.0090 (0.05)	0.343 ^c (1.89)

a: Significant at 1% significance level; b: significant at 5% significance level; c: significant at 10% significance level; d: significant at 15% level

Table 5 Event Study Around the Announcement of Acquisition

Win-Dow	Whole sample	State group	Private group	Financing group	Non-financing group	State financing group	State non financing group	Private financing group	Private non-finan group
0	.0012 ^b	0.0135 ^a	0.0108	0.000692	0.0186 ^b	-.00326	0.0186 ^a	0.00227	0.0185
(-1,1)	0.0209 ^b	0.0192 ^b	0.0224	0.00295	0.0314 ^b	.000665	0.0248 ^b	0.00386	0.0392
(-2,2)	0.0230 ^b	0.0283 ^c	0.0188 ^d	0.0195 ^d	0.0251 ^c	0.00522	0.0354 ^b	0.0251 ^d	0.0130
(-3,3)	0.0345 ^a	0.0343 ^c	0.0346 ^c	0.0266 ^d	0.0391 ^b	0.00594	0.0430 ^b	0.0348 ^c	0.0344
(-4,4)	0.0439 ^b	0.0320	0.0536 ^c	0.0367 ^c	0.0481	0.0109	0.0385	0.0470 ^c	0.0596
(-5,5)	0.0558 ^c	0.0358	0.0720 ^d	0.0411 ^b	0.0644	0.0195	0.0409	0.0498 ^b	0.0922
(-6,6)	0.0489 ^c	0.0338	0.0611 ^c	0.0382 ^c	0.0552	0.00296	0.0433	0.0523 ^c	0.0692
(-7,7)	0.0480 ^c	0.0347	0.0587 ^d	0.0283	0.0594	-.00973	0.0484	0.0435	0.0725
(-8,8)	0.0505 ^c	0.0361	0.0621 ^d	0.0324	0.0610	-0.0105	0.0505	0.0496 ^d	0.0735
(-9,9)	0.0533 ^c	0.0364	0.0670 ^d	0.0368	0.0629	-0.0101	0.0507	0.0556 ^d	0.0773
(-10,10)	0.0567 ^d	0.0341	0.0749	0.0127	0.0823	-0.0137	0.0488	0.0233	0.122
(-10,20)	0.0662 ^c	0.0445	0.0838	0.0303	0.0871	-0.0271	0.0665	0.0533	0.111
(-10,30)	0.0567	0.0415	0.0690	0.0307	0.0719	-0.0368	0.0656	0.0576	0.0794
(-10,60)	0.0246	0.00248	0.0425	-0.0161	0.0483	-0.0516	0.0191	-0.00184	0.0828
(-10,90)	-0.0108	-0.0123	-0.00956	-0.0792	0.0292	-0.101	0.0151	-0.0704	0.0458
(-10,120)	-0.149	-0.153	-0.146	-0.365 ^c	-0.0230	-0.454	-0.0606	-0.330	0.0216

Cumulative abnormal returns are reported. The t-statistics of the two-tailed t-tests are conducted. a: Significant at 1% significance level; b: significant at 5% significance level; c: significant at 10% significance level; d: significant at 15% level.

Table 6**Comparison of post-acquisition control-group adjusted performance between firms that conducted rights offerings and firms that do not**

In panel A, we report the comparison tests on the whole acquisition group. In panels B and C we further examine the comparison on the subgroups that are acquired by private or state entities. ROA is calculated relative to the total assets of period -1. The t-statistics of one-tailed t-tests are reported.

Periods	t-statistics	t-statistics
Panel A	MA_Fin1	MA_Nonfin
(-1, 0)	0.9731	1.317
(-1,1)	1.692 ^b	2.423 ^a
(-1,2)	0.145	3.265 ^a
(-1,3)	0.392	1.125
(0,1)	1.268	2.232 ^a
(0,2)	-0.261	2.974 ^a
(0,3)	0.153	0.834
(1,2)	-1.652 ^c	1.529 ^c
(1,3)	-0.673	-0.887
(2,3)	0.345	-1.845 ^b
Panel B	Private_Fin1	Private_nonfin
(-1, 0)	0.3344	0.381
(-1,1)	1.615 ^c	1.478 ^c
(-1,2)	0.480	2.665 ^a
(-1,3)	0.670	0.217
(0,1)	1.491 ^c	1.396 ^c
(0,2)	0.387	2.143 ^c
(0,3)	0.583	-0.0479
(1,2)	-1.080	0.989
(1,3)	-0.402	-1.258
(2,3)	0.328	-3.197 ^a
Panel C	State_Fin1	State_nonfin
(-1, 0)	1.280	1.340 ^c
(-1,1)	0.502	1.911 ^b
(-1,2)	-0.852	2.221 ^b
(-1,3)	-0.477	1.245 ^d
(0,1)	-0.897	1.735 ^b
(0,2)	-2.201 ^b	2.053 ^b
(0,3)	-0.977	1.187 ^d
(1,2)	-2.101 ^b	1.220 ^d
(1,3)	-0.788	0.062
(2,3)	0.103	-0.179
Panel D	Control-adjusted ROA MA Financing vs. MA Nonfinancing	Control-adjusted ROA Private Financing vs. Private Nonfin

Year 0	0.526	0.0805
Year 1	-0.1876	0.162
Year 2	-1.7477 ^b	-1.147
Year 3	-0.3529	0.511

Panel E	Control-adjusted ROA	
	State Financing vs. State Nonfinancing	Private Financing vs. State Financing
Year 0	1.027	-1.995 ^b
Year 1	-0.357	0.366
Year 2	-1.200 ^d	1.188 ^d
Year 3	-1.117 ^d	2.246 ^b

Panel F	Control-adjusted ROA	
	Private Nonfinancing vs. State Nonfinancing	
Year 0	-0.376	
Year 1	-0.505	
Year 2	-0.444	
Year 3	-1.697 ^b	

a: significant at the 1% level; b: significant at the 5% level; c: significant at the 10% level; d: significant at the 15% level.

Table 7
Hypothesis testing of financing activities' effects on operating performance

In Panel A, Column (a) reports the estimated coefficients of the financing dummies (we use the dummy for the first year after acquisition as there are financing clustering in that year) from the regression on the combined treatment and control groups. Column (b) reports the estimated coefficients from the following regression on the combined treatment group and control group.

$$ROA_{t} - ROA_{-1} = \alpha + \beta_1 * M\&A + \beta_2 * M\&A_fin1 + \beta_3 * control + \mu \quad (1)$$

Column (c) reports the estimated coefficients from the following model specifications to distinguish the ownership attributes effects:

$$ROA_{t} - ROA_{-1} = \alpha + \beta_1 * Private_M\&A + \beta_2 * State_M\&A + \beta_3 * Private_M\&A_fin1 + \beta_4 * State_M\&A_fin1 + \beta_5 * control\ variables + \mu \quad (2)$$

where M&A is a dummy indicating that the company has been acquired; M&A_fin1 is a dummy indicating that acquired company has conducted rights offerings; Private_M&A is a dummy variable showing that the company has been acquired by a private investor; State_M&A is a dummy variable indicating that the company has been acquired by a state investor; Private_M&A_fin1 is a dummy variable that takes value 1 if the acquirer is private enterprises *and* financing activities are reported in 1 year after acquisition, State_M&A_fin1 is defined for the state-owned acquirers, and μ is the error term. The control variables include the logarithm of sales, the province dummies, the industry dummies and the year dummies; their estimated coefficients are not reported.

In Panel B, we also include the restructuring activities variables to better distinguish the financing effects. However, since we are focusing on the coefficients of financing activities, we do not report the coefficients of restructuring variables as they are included simply for better control of other effects.

Panel A: Specification (1)

	(a)		(b)			(c)	
	fin1	M&A	M&A_fin1	P_M&A	S_M&A	P_MA_fin1	S_MA_fin1
ROA ₃ - ROA ₋₁	-0.0233 (-0.86)	0.0516 ^c (1.67)	-0.0267 (-0.80)	0.0456 (1.35)	0.0587 (1.18)	0.00123 (0.03)	-0.0915 ^d (-1.60)
ROA ₂ - ROA ₋₁	-0.0133 (-0.70)	0.0792 ^a (3.49)	-0.054 ^b (-2.02)	0.0710 ^a (2.62)	0.0861 ^b (2.56)	-0.0350 (-0.96)	-0.0852 ^b (-2.36)
ROA ₁ - ROA ₋₁	0.00159 (0.10)	0.0542 (0.0196)	-0.0190 (-0.80)	0.0407 ^c (1.69)	0.0670 ^b (2.33)	0.00194 (0.06)	-0.0483 ^c (-1.74)

Panel B:
Specification
(2)

	(a)		(b)			(c)	
	fin1	M&A	M&A_fin1	P_M&A	S_M&A	P_MA_fin1	S_MA_fin1
ROA ₃ - ROA ₋₁	-0.0456 ^c (-1.75)	0.0531 ^d (1.54)	-0.0468 (-1.37)	0.0483 (1.29)	0.0615 (1.22)	-0.0230 (-0.56)	-0.101 ^c (-1.72)
ROA ₂ - ROA ₋₁	-0.0258 (-1.30)	0.0754 ^a (2.98)	-0.0601 ^b (-2.27)	0.0668 ^b (2.19)	0.0828 ^b (2.40)	-0.0430 (-1.21)	-0.0868 ^b (-2.36)

ROA ₁ – ROA ₋₁	-0.00309 (-0.19)	0.0638 (3.10)	-0.0230 (-0.98)	0.0567 ^b (2.27)	0.0693 ^b (2.48)	0.000503 (0.02)	-0.0628 ^b (-2.25)
No. of obs.	322		322				322

Notes: The numbers in parentheses are *t*-statistics.

a: significant at the 1% level; b: significant at the 5% level; c: significant at the 10% level, d: significant at the 15% level.

Table 8 Testing of the Effects of Financing Activities on Operating Performance among Target Companies

In Panel A, Column (a) reports the estimated coefficients of the financing dummies (we use the dummy for the first year after acquisition as there are financing clustering in that year) from the regression on the combined treatment and control groups.

Column (b) reports the estimated coefficients from the following model specifications to distinguish the ownership attributes effects:

$$ROA_t - ROA_{t-1} = \alpha + \beta_1 Private_M\&A_fin1 + \beta_2 * State_M\&A_fin1 + \beta_3 * control\ variables + \mu$$

where Private_M&A_fin1 is a dummy variable that takes value one if the acquirer is a private enterprise *and* financing activities are reported in 1 year after acquisition; State_M&A_fin1 is defined for the state-owned acquirers, and μ is the error term. The control variables include the logarithm of sales, the province dummies, the industry dummies and the year dummies; their estimated coefficients are not reported.

In Panel B, we also include the restructuring activities variables to better distinguish the financing effects. However, since we are focusing on the coefficients of financing activities, we do not report the coefficients of restructuring variables as they are included simply for better control of other effects.

Panel A:	Specification (1)		
	(a)	(b)	
	fin1	Private_fin1	State_fin1
Adj. ROA ₃ – Adj. ROA ₋₁	-0.0333 (-0.61)	0.00500 (0.08)	-0.171 ^c (-1.75)
Adj. ROA ₂ – Adj. ROA ₋₁	-0.0438 (-1.02)	-0.0459 (-1.09)	-0.0818 ^d (-1.60)
Adj. ROA ₁ – Adj. ROA ₋₁	-0.00529 (-0.15)	-0.00544 (-0.12)	-0.00498 (-0.14)
Panel B:	Specification (2)		
	(a)	(b)	
	fin1	Private_fin1	State_fin1
Adj. ROA ₃ – Adj. ROA ₋₁	-0.0494 ^d (-1.51)	-0.0330 (-0.50)	-0.140 (-1.33)
Adj. ROA ₂ – Adj. ROA ₋₁	-0.0485 ^c (-1.70)	-0.051 (-1.08)	-0.0501 (-0.86)
Adj. ROA ₁ – Adj. ROA ₋₁	-0.0102 (-0.26)	-0.0053 (-0.12)	-0.0207 (-0.44)
No. of obs.	161	161	161

Table 9 Fund Occupation by the Controlling Shareholder

This table examines the incidences of fund occupation by the largest shareholder in listed companies. It reports the mean ratio of occupied funds to total assets in each group that experienced fund occupation by the controlling shareholder. The t-statistics of one-tailed t-test of the comparison of the mean of two samples are reported.

	Mean occupied funds/total assets		t-statistics
	Former group	Latter group	
M&A group vs. Control group	0.0420	0.0216	1.582 ^c
M&A group with financing vs. Control group with financing	0.0547	0.0358	0.685
M&A group without financing vs. Control group without financing	0.0309	0.0144	1.454 ^c
State M&A group v. State control group	0.0239	0.0162	0.617
Private M&A group vs. Private control group	0.0550	0.0256	1.458 ^c
MA group with financing vs. MA group without financing	0.0547	0.0309	1.067 ^d
Private MA group with financing vs. Private MA group without financing	0.0762	0.0293	1.318 ^c
State MA group with financing vs. State MA group without financing	0.0807	0.0326	2.491 ^a
Private MA group with financing vs. Private control group with financing	0.0762	0.0407	0.842
State MA group with financing vs. State control group with financing	0.0807	0.0291	2.533 ^a
Private MA group without financing vs. Private control group without financing	0.0293	0.0180	0.689
State MA group without financing vs. State control group without financing	0.0326	0.00944	1.464 ^c
Private M&A group vs. State M&A group	0.0549	0.0178	1.380 ^c
Private M&A group with financing vs. State M&A group with financing	0.0762	0.0807	-0.103
Private M&A group without financing vs. State M&A group without financing	0.0293	0.0326	-0.159

Table 10**Clustering Phenomenon**

CSRC, the securities regulatory authority, changed policies regarding SEOs in 1999 and 2001. Before 1999, firms must have ROE over 10% for 3 consecutive years to qualify for SEO approvals. The standards were lowered to 10% on average for 3 years and not lower than 6% in any year in 1999. The authority further loosened the line to 6% on average for 3 years in 2001.

We observe the acquired firms clustered the reported ROE just above the policy line to qualify for the SEOs. This might suggest that the acquisition event itself does not play as important a role as SEO does.

SEO Yr	Obvs.	Mean ROE	Median ROE	Freq of 6%-10%	Freq of 10%-12%	Freq of over 12%
1997	5	14.9	13.3	0	0.4	0.6
1998	10	12.5	11.07	0	0.7	0.3
1999	19	16.6	11.9	0.105	0.478	0.417
2000	14	11.2	10.93	0.143	0.571	0.286
2001	5	6.65	6.449	1	0	0