State Ownership and Market Liberalization: Evidence from China's Domestic M&A Market

Ming Ma

Beijing Institute of Technology

School of Management & Economics,

5 South Zhongguancun Street,

Beijing, China 100081

E-mail: maming@bit.edu.cn

Xian Sun*

Johns Hopkins University

100 N. Charles Street

Baltimore, MD, 21201

E-mail: xian.sun@jhu.edu

Maya Waisman

Fordham University

113 W 60th St.

New York, NY 10023

E-mail: waisman@fordha.edu

* Corresponding author

consistent with the conventional belief that NSOEs make more efficient and profitable usage of target assets than SOE acquirers.

However, when comparing the change in long-term market and accounting performance, measured as the difference between post- and pre-merger asset productivity, profitability and market and size adjusted buy-and-hold returns, we find that SOE acquirers experience a significantly larger long-term performance improvement compared to their non-state counterparts. When partitioning the sample period into acquisitions made prior to and following China's 2005 split-share reform in which non-tradable shares were converted into tradable status, we find that the larger post-merger performance improvement of SOE acquirers is concentrated among M&As conducted shortly before the reform.

Until the year 2005, both SOE and NSOE shares held by Chinese domestic investors were split into tradable and non-tradable categories, with non-tradable shares representing more than two-thirds of China's corporate sto1(at)o1(at)oNSOo mda2.3 Td a 0 Tc 0. Tc 0.058 Tw Td [

inefficient corporate governance system associated with mismanagement and even fraud.[3] By early 2005 it was clear that the split-share structure created an illiquid stock market, with the better Chinese companies choosing to list abroad. Later that year, cognizant of these challenges, central planners put in place the split-share reform.[4]

Our results of a stronger post-merger performance improvement of SOE acquirers compared to NSOEs following China's split-share reform are consistent with the interpretation that reform-induced increase in stock liquidity was particularly beneficial to SOEs that were historically suffering from weak corporate governance (Deng et al., 2007; Jian and Wong, 2010). To the extent that enhanced market liquidity results in market prices that respond more quickly to illicit activities by corporate managers, we would expect a decline in those activities following the reform, and therefore an improvement in post-merger performance of SOEs compared to the premerger period. Increased liquidity might also influence managerial incentives and better align controlling shareholders' interests to those of minority shareholders, as stock values become more strongly tied to firm performance. Indeed Campello, Ribas and Wang (2014) report a positive effect of the reform on firm performance and efficiency particularly for SOEs, with some evidence of a decline in related party transactions and intercompany loans. Thus reform-induced improved corporate governance, combined with SOEs' political and business connections, privileged access to bank financing and government influence in competing for the right target, could explain the stronger M&A performance improvement of SOE acquirers compared to their NSOE counterparts.

---

[3] Deng et al. (2007) report that 90% of the SOEs that went public between 1997-2000 were later involved in "disadvantageous transactions with their parent firms". These transactions were fairly large and represented, on average, more than 13% of the listed firms' assets.

[4] We describe the reform in more detail in section 2 of the paper.

Our study contributes to the literature in several ways. First, this is the first study to examine how state ownership and stock market liberalization affect M&As in China. Given that the Chinese economy is growing in such a fast pace, it is essential to understand how government intervention and capital market liberalization can alter merger outcomes. Second, China is one of the largest world economies, but we still know very little about how its unique institutional setting affects local industries and businesses. In this study, we provide evidence that M&A outcomes, especially SOE related deals, are significantly affected by government intervention. Consistent with Frye and Shlefler's (1997) 'helping hand model' and with the evidence in Calomiris et al. (2010), our findings support the interpretation that government intervention, possibly in the form of political connections, and capital market reform are helping SOE acquirers in the M&A market and outweigh the inefficiency cost of state ownership in China.

Finally, a number of recent studies look at the economic consequences of equity market liberalization, and our results have clear connections with their findings (see, e.g., Levine and Zervos, 1998; Bekaert et al., 2005; Gupta, 2005; [illegible]

The remainder of the paper is organized as following. Section 2 introduces the institutional background of China's M&A market, describes the split-share reform, and discusses its potential implications for M&A performance for state owned firms. Section 3 describes the data, methodology and variables and provides summary statistics. Section 4 presents the main results and Section 5 concludes.

2. State ownership, market liberalization and China's M&A market

2.1. The institutional nature of China's M&A market

The volume of China's M&A market has reached a record high of 268 billion US dollars embarked on a coal mine reconstruction scheme that was aimed at significantly reducing the number of coal mines. Almost all private coal mine companies were forced to accept the merger offers of SOEs, with the government providing deal valuations that were not based on market or negotiated prices (Zhou et al., 2011)

The move towards market liberalization in China is seen by many observers as a post-fix to the unsuccessful reform of SOEs initiated in 1979. Since that reform, the profitability of SOEs relatively more freedom than state shareholders in deciding how to allocate profits and formulate and implement firm strategy (Delios and Wu, 2005).[6]

The direct result of this dual share ownership structure was that SOEs remained under the tight control of non-tradable, government or government affiliated shareholders, and NSOEs were controlled by non-tradable, legal person (institutional) shareholders. Consequently, 98% of all domestic, publically listed companies in China (A-share firms) had anywhere from 20-80% of their shares under the non-tradable structure at the end of 2004 (Campello et al., 2014).

The Chinese split-share structure has long been criticized for causing agency conflicts between non-tradable controlling shareholders and minority tradable shareholders. In fact, the interests of tradable and non-tradable shareholders diverged significantly because these two classes of shares had different prices but the same voting and cash flow rights. Unlike tradable shares, non-tradable share prices were based on the book value of firm assets rather than on the stock's market performance. As a result, controlling shareholders had weaker incentives to monitor executives to maximize enterprise value.

The misalignment of interests between controlling and minority shareholders was particularly pronounced in state firms, where the top management and board of directors were appointed by the state, and political career concerns and entrenchment led to inefficient corporate governance systems associated with mismanagement and even fraud (Deng et al., 2008).

To address the agency conflict between non-tradable controlling shareholders and tradable minority shareholders, particularly in SOEs, China launched the split-share structure

A second, long-term, stock performance measure we use in the analysis is the three-year buy-and-hold return (BHAR). We calculate an acquirer's market and size adjusted BHARs with the acquisition announcement month as the purchase month. To calculate BHARs, we follow Mitchell and Stafford (2000) and measure the three-year buy-and hold abnormal return for each acquirer as the difference between the three-year buy-and-hold return of the acquirer and the three-year buy-and-hold return of an appropriate size and book-to-market portfolio. Both value-weighted and equal-weighted averages of BHARs are computed across acquirers.

We also use two additional, accounting based, long-term performance measures, which are an acquirer's total asset productivity, TAT, measured as the ratio of sales to the market value of total asset(s)19 niTc -

assets. We define operating cash flows as sales, minus cost of goods sold and selling and administrative expenses, plus depreciation and goodwill expenses. This measure is deflated by the market value of assets to provide a return metric that is comparable across firms.[10] As reported by Healy, Palepu and Ruback (1992), this measure excludes the effect of depreciation, goodwill, interest expense and income, and taxes, and is therefore unaffected by the method of accounting for the merger (purchase or pooling accounting) and the method of financing (cash, debt, or equity). As with our other accounting performance measures, we calculate the change in OCF/TA by subtracting the acquirer's average, industry adjusted OCF/TA in the three years prior to the M&A announcement from the merged firm three-year, industry adjusted average OCF/TA following the M&A announcement year.

Throughout the analysis, we also use acquirer and deal specific characteristics. Our acquirer related measures include the market value, four weeks prior to the announcement (Market Value 4 wks Prior), measured as the sum of the market value of equity, long-term debt, debt in current liabilities, and the liquidating value of preferred stock; the value of total assets one year prior to the acquisition announcement (Total Assets); the market value of the acquirer relative to other listed companies that year that are also in the same quartile (Size); the market-to-book ratio (MtB), measured one year prior to the acquisition announcement; leverage (Leverage), calculated as long-term debt to total assets one year prior to the announcement; and the percentage of tradable shares held by the acquiring firm (%Tradable);

Deal characteristics include transaction size (Transaction Value), which is defined by SDC as the total value of consideration paid by the acquirer, excluding fees and expenses; and Relative Size measured as the ratio of the transaction value to the acquirer's market value 4

[10] We thank the referee for making this suggestion.

weeks before the announcement). We include the percentage of target shares owned by the acquirers prior to the focal M&A announcement (Toehold); a dummy variable to denote high-tech industry affiliation for the target firm (Hi-tech); a dummy variable to denote whether the acquirer's two-digit SIC code is the same as the target's (10(en)-()]TJ /

about 42% (unreported). Consistent with the interpretation that SOE government ownership is highly concentrated, Chen et al. (2009) also report that the second largest SOE blockholder holds, on average, only 5% of the firm's shares. In addition, Zhou et al. (2010) report that there is only a small chance that a non-state firm (NSOE), in which the second or third largest shareholder could be a government stakeholder, has the same strong political connections and privileges as SOEs. The difference in ownership structure between SOEs and NSOEs is therefore strongly distinguishable and associated with stronger political connections for SOEs.

Note also that during our sample per6.79 0 T0C,[(as)-15(3)-4( )]TJ 0 Tc 0 Tw [(s)-4 6he .5 0 c

[Insert Table 1 Here]

Table 2 presents summary statistics of the acquirers in our sample by state ownership affiliation. Our sample includes only completed deals where the acquirer holds at least 50% of the target's shares outstanding. Not surprisingly, state-owned acquirers are significantly larger with an average asset size (market value) of $643.7 million ($927.8 million) compared to $298.7 million ($585.9 million) for non-state-owned acquirers. We also measure the acquirer's average relative ranking in the market in the year prior to the acquisition (Size) and find similar results, where SOE acquirers are significantly larger than their NSOE acquiring counterparts in the same fiscal year.

[Insert Table 2 Here]

Consistent with the fact that SOEs cluster in traditional industries, SOE acquirers also have a significantly lower market-to-book ratio (MtB), suggesting a lower growth potential, compared to their non-state-owned counterparts. Table 2 also shows that NSOEs are more likely to acquire high-tech targets and have more tradable shares than their SOE counterparts.

The summary statistics of deal characteristics shows that the average transaction size of SOEs is $175 million, significantly larger than the $81.9 million by the non-state acquirers. Compared to NSOEs, SOEs also have significantly higher percentage of toehold ownership in target firms, are more likely to take over public targets and targets in related industries, and more likely to conduct friendly M&As.

Lastly, Table 2 shows the summary statistics of acquirers' performance in the year prior to a focal M&A, measured by total asset turnover (TAT), calculated as the ratio of sales to total assets; pre-tax operating cash flows to total assets (OCF/TA), measured as sales, minus cost of goods sold and selling and administrative expenses, plus depreciation and goodwill expenses over total assets, and return on assets (ROA), calculated as net income divided by total assets. The results show that SOEs enjoy somewhat higher total asset turnover than NSOEs one year prior to the acquisition announcement, however, operating cash flows scaled by assets and return on assets are not significantly different between the two acquirer groups. These comparative performance results could suggest that while SOEs may enjoy some preferential treatment in selling their products, which results in a higher total asset turnover ratio, they are not more profitable than their NSOE counterparts.

4. The Effect of State Ownership on Post-M&A Performance

In this section we examine the effect of state ownership affiliation on the difference between post- and pre-merger performance of Chinese acquirers. We use short and long-term stock performance measures, as well as long-term accounting performance measures, to estimate whether state affiliation is beneficial or detrimental for state owned performance measure is represented by the three-day cumulative abnormal returns (CARs) around the announcement day (-1,+1).

The long-term, stock based performance measure is the three-year buy-and-hold return (BHAR). We calculate an acquirer’s market and size-adjusted BHARs with the acquisition announcement month as the purchase month. The results for CARs and BHARs are reported in Table 3.

[Insert Table 3 Here]

The results in Panel A show that the average CARs of all acquirers with completed deals in our sample are 1.1% (significant at the 1% level), suggesting that the market reacts positively to those M&As. This positive announcement effects, however, is particularly significant for non-state acquirers but insignificant for SOE acquirers. The insignificant announcement effect for SOEs and the positive and significant announcement effect for NSOEs is consistent with the conventional belief that NSOEs make more efficient and profitable usage of target assets as

- as3is

4.2. Accounting Performance

In this section, we examine the effect of state ownership on the change in M&A performance around the acquisition announcement by using long-term accounting measures. We measure the industry adjusted change in M&A performance as the difference between the average value of the industry adjusted performance measure three years after the deal (t+1, t+3) and three years prior to the deal (-t

To examine the source of the long-term

The summary of performance changes for these subgroups are presented in Table 5, where Panel A presents the results of completed deals with control rights transfer and Panel B replicates the same tests for a subgroup of incomplete acquisitions.

[Insert Table 5 Here]

In Panel A, we compare the performance changes around the acquisition event for state owned acquirers and non-state acquirers. The results show that the performance change differential between SOEs and NSOEs is driven by M&As conducted shortly before the passage of the reform (“Pre-Reform Negotiators” and “Pre-Reform Non-Negotiators”), and is particularly pronounced and statistically significant among the group of “Pre-Reform Negotiators”. These results suggest that the reform was playing an important role in improving the post-merger performance of SOEs, and in particular, the post-merger performance of SOEs in which non-tradable shareholders were negotiating with tradable shareholders for trading rights.

The finding that trading-rights-negotiating SOEs were able to improve their post-merger performance more than other acquirers in the sample is consistent with a recent paper by Li, Wang, Cheung and Jiang (2011), who find that more profitable firms, or firms in which performance was improving were able to convert their non-tradable shares to tradable status on better terms (by paying lower compensation to minority shareholders for trading rights). Thus to the extent that corporate managers and controlling shareholders knew they had to comply with the reform by negotiating with minority shareholders and converting their shares into tradable status, they had a stronger incentive to improve firm performance not only because they knew that their wealth will be more strongly tied to firm performance once their shares are tradable, but also because better firm performance could allow them to pay less to minority shareholders for the right to trade their shares.

To identify whether the improvement in profitability is caused by M&A synergy or just by the share reform, we also replicate the results by looking at a sample of incomplete deals in Panel B. The results, however, show that there is no significant difference in performance changes between SOEs and NSOEs that are involved in unsuccessful acquisitions.

To summarize, the results in Table 5 suggest that the significantly larger performance improvement of state-owned acquirers is driven by SOEs that were subject to the share reform shortly after the acquisition. Combined with the results of the incomplete deals sample, this suggests that the synergy value of China's M&As depends on two factors: the privilege of SOEs in the process of reorganizing their assets through M&As and the improvement in efficiency, especially profitability following the M&A through the share reform. The results also suggest that nonstate firms, though usually characterized by higher efficiency, cannot achieve the synergy through M&As, probably due to their disadvantages in competing for the best assets with their state-owned counterparts.

Table 6 presents the summary statistics of BHARs by the four subgroups of SOEs, as defined above. Consistent with the results in Table 5, the significant and positive BHARs for SOEs are particularly large for the group of SOEs that experienced the share reform shortly after the acquisition and negotiated for converting their non-tradable shares into tradable status shortly after.

4.4. Regression Analysis

In this section, we conduct regression analysis to verify that the univariate results are not driven by deal, acquirer or target characteristics. The results are reported in Table 7. The dependent variables are ΔTAT, $\Delta OCF/TA$ and ΔROA, respectively. State affiliation is denoted in the year prior to the deal ($StateOwned_{t-1}$) and the share reform variables are measured in the three years following the deal. Our four reform related sub groups of acquirers are defined as in Tables 5 and 6, where our first subgroup includes acquirers that were subject to the government’s share reform within less than three years after the acquisition, and also negotiated to convert their non-tradable shares into tradable status within two years after the reform (“Pre-Reform Negotiators”); our second subgroup includes acquirers that were subject to the reform prior to the deal but were

We also identify whether some non-state acquirers become state-owned following an M&A. To capture any effect of this reverse ownership change, we include a dummy variable, Non-State to State$_{(t+1,\ t+3)}$. All models include year and industry dummies.

Model 1 presents the results for the changes in total asset turnover. After controlling for firm characteristics, state ownership does not explain the changes in asset turnover significantly, suggesting that controlling for everything else, asset turnover is impacted by factors other than ownership structure. More importantly however, Models 2 - 3 confirm the results for changes in operating cash flows and profitability around the acquisition event. Specifically, Models 2 and 3 show that state-owned acquirers are associated with significantly higher improvement in

BHARs. After controlling for firm and deal specific factors, the results show that positive arranged or assisted by the government (central or local) or its state-owned parent companies. And third, China went through an important dual-share status reform in 2005, in which owners of non-tradable shares had to convert their shares into tradable status.

In our analyses, we therefore test the hypothesis that state ownership matters in M&A performance by comparing the change in long-term market and accounting performance, measured as the difference between post- and pre-merger asset productivity, profitability and buy-and-hold returns for SOEs and NSOEs. While we find that the market has generally more confidence in NSOE acquirers in the short-run, we also find that SOE acquirers experience a significantly larger long-term post-merger performance improvement compared to their non-state counterparts. When partitioning the sample period into acquisitions made prior to and following China's 2005 split-share reform, we find that the larger post-merger performance improvement of SOE acquirers is concentrate among M&As conducted shortly before the announcement of the reform.

These findings highlight the important role of the government and its agents in China's capital markets, particularly in the asset restructuring process. The synergy value and with other papers that show that SOE acquirers benefit from government intervention through privileged access to state-owned bank funding and political connections. As such, this paper is the first step to better understanding the role of state ownership and financial market liberalization in shaping M&A outcomes in the corporate sector.

References

Allen, Franklin, Jun Qian, and Meijun Qian, 2005. “Law, Finance, and Economic Growth in China,” Journal of Financial Economics 77 (1), 57-116.

Bai, Chong-

Golubov, A., Yawson, A., and Zhang, H., 2015. Extraodinary Acquirers. Journal of Financial Economics 116, 314-330.

Gupta, Nandini, 2005, Partial Privatization and Firm Performance, Journal of Finance 60 (2): 987-1015.

Gao, X., Ritter, J.R., and Zhu, Z., 2013. Where Have All the IPOs Gone? Journal of Financial Quantitative Analysis 48, 1663-1692.

Guay, W., 1999. The sensitivity of CEO wealth to equity risk: an analysis of the magnitude and determinants. Journal of Financial Economics 53, 43–71.

Gupta, N., 2005. Partial privatization and firm performance. Journal of Finance 2005 987-1015

Harrison, J. S., Hitt, M. A., Hoskisson, R. E., and Ireland, R. D. 1991. Synergies and post-acquisition performance: Differences versus similarities in resource allocations. Journal of Management, 17: 173-190.

Healy, P., K. Palepu, and R. Ruback. 1992. Do mergers improve corporate performance? Journal of Financial Economics 3 1 : 135-175.

Jensen, M.C., and Murphy, K.J., 1990. Performance Pay and Top Management Incentives. Journalof Political Economy 98, 225-264.

Jian, M., and T. J. Wong, 2010. Propping through related party transactions. Review of Accounting Studies, 15, pp. 70-105.

Jiang, B. B., Laurenceson, J.& Tang, K. K., 2008. Share reform and the performance of China's listed companies. China Economic Review, 19, 489 – 501.

Jiang, G., Lee, C., Yue, H., 2010. Tunneling in China: The Remarkable Case of Inter-Corporate Loans. Journal of Financial Economics 98, 1-20.

Jian, M. and T.J. Wong. 2010. Propping through related party transactions. Review of Accounting Studies15, 70-105.

Jin, L., 2002. CEO compensation, diversification, and incentives. Journal of Financial Economics 66, 29–63.

Kole, S., Lehn, K., 1997. Deregulation, the Evolution of Corporate Governance Structure, and Survival. American Economic Review 87, 421-425.

Larsson R., Finkelstein, S., 1999. Integrating strategic, organizational, and human resource perspectives on mergers and acquisitions: A case survey of synergy realization. Organizational Science 10, 1-26.

Levine, Ross, Sara Zervos, 1998, ìStock markets, banks, and economic growth,îAmerican Economic Review 88 (3): 537-558.

Li, K., Wang, T., Cheung, Y.-L., Jiang, P., 2011. Privatization and risk sharing: evidence from the Split Share Structure Reform in China. Review of Financial Studies 24, 2499–2525.

Liao. L, Liu.B, Wang.H, 2014. China¾s secondary privatization: Perspectives from the SplitShare Structure Reform. Journal of Financial Economics Volume 113, Issue 3, Pages 500– 518.

Megginson, William L. and Jeffry M. Netter (2001), From state to market: A survey of empirical studies on privatization, Journal of Economic Literature 39, 321-389.

Mello, A. S., Parsons, J. E., 1998. Going public and the ownership structure of the firm. Journal of Financial Economics 49, 79–109.

Mitchell, Mark L. and Erik Stafford. 2000. "Managerial Decisions and Long Term Stock Price Performance." Journal of Business. 73, pp. 287-329.

Moeller, S.B., Schlingemann, F.P., Stulz, R.M., 2004. Firm size and the gains from acquisition. Journal of Financial Economics 73, 201–228.

Qi, W., Wu and H. Zhang, 2000. Shareholding structure and corporate performance of partially privatized firms: Evidence from listed Chinese companies. Pacific-Basin Finance Journal, 8 (5), pp. 587-610.

Ramaswamy, K., 1997. The Performance Impact of Strategic Similarity in Horizontal Mergers: Evidence from the U.S. Banking Industry. The Academy of Management Journal 40, 697-715.

Singh, H., & Montgomery, C. A. 1987. Corporate acquisition strategies and economic performance. Strategic Management Journal 8, 377-386.

Stoughton, N. M., Zechner, J., 1998. IPO-mechanisms, monitoring and ownership structure. Journal of Financial Economics 49, 45–77.

Sun, Q., Tong, W.H.S., Tong, J., 2002. How does government ownership affect firm performance? Evidence from China's privatization experience. J. Business Finance Account. 29, 1–27.

Sun, Q., Tong, Wilson H.S., 2003. China share issue privatization: the extent of its success. Journal of Financial Economics 70, 183-222.

Szamosszegi , A., and C. Kyle. 2011. An Analysis of State-owned Enterprises and State Capitalism in China, US-China Economic and Security Review Commission.

Tseng T. Y.,

Table 1

Aggregate Transaction Value by Industry and by State Ownership: Top 15 Industries

This table includes all transactions that are not self-tender (where the acquirers and the targets have the same ticker symbols or have the same names if the target is private) and are not between related parties (where they share the same controlling parent). We also exclude deals where the acquiring firms are in bankruptcy and where the acquiring firms' operations have been suspended due to poor financial performance or policy changes. State-Owned Acquirers are defined as firms in which the controlling shareholder (largest shareholder) is a state-owned enterprise or a government agency. Non-State Acquirers include all other acquirers.

Rank	State-Owned Acquirers (N=201)					Non-State Acquirers (N=163)			
	Name	Transaction ($ mil.)	Percentage	Accumulative Percentage		Name	Transaction ($ mil.)	Percentage	Accumulative Percentage
1	Chemicals and Allied Products	10,670	27.463%	27.463%		Chemicals and Allied Products	3,428	16.363%	16.363%
2	Primary Metal	5,088	13.096%	40.559%		Business Services	3,298	15.744%	32.106%
3	Transportation Equip.	3,380	8.700%	49.259%		Ind. and Commercial Machinery and Computer Equip.	2,324	11.090%	43.197%
4	Electric Gas and Sanitary Services	2,996	7.710%	56.969%		Electronic	2,061	9.835%	53.032%
5	Heavy Construction Contractor	2,448	6.300%	63.269%		Food	1,531	7.306%	60.338%
6	Oil and Gas Extraction	1,808	4.652%	67.922%		Petroleum Refining	1,486	7.093%	67.430%
7	Electronic	1,805	4.645%	72.567%		Communications	1,421	6.780%	74.211%
8	Business Services	1,412	3.635%	76.202%		Electric Gas and Sanitary Services	949	4.527%	78.738%
9	Local Passenger Transport	1,374	3.537%	79.739%		[redacted]			

Table 3 The Announcement Effect of State and Non-State Acquisitions

This table shows how state affiliation affects an acquirer's CARs and BHAR. The short-term performance measure is the three-day cumulative abnormal return (CAR) on the day of the announcement. We use the standard event-study approach, excluding deals with transaction values that are less than 1% of the acquirer's market value four weeks prior to the acquisition announcement. We also require that all the acquirers in the sample have stock information for 300 days before the announcement date so as to have a 255 estimation window ending 46 days prior to the announcement with the minimum requirement of the estimation window length is 100 days. The long-term performance measure is the three-year buy-and-hold return (BHAR). We calculate an acquirer's market- and size-adjusted BHAR with the acquisition announcement month as the purchase month. The symbols *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels

	All (N=364)	Stateowned (N=201)	Non-State (N=163)	Diff.
Completed and Acquired more than 50%				
CARs (-1, 1)	0.011***	0.007	0.017***	-0.010*

Market-

Table 4 Changes in Operating Performance

This table presents the summary of the changes in performance by ownership structure. We measure the change in performance as the industry adjusted change in the average value of the performance measure between the three years after the deal (t+1, t+3) and the three years prior to the deal (t-3, t-1), where t is the year of transaction. Total asset turnover (TAT) is measured as the ratio of sales to the market value of total assets; Return on assets (ROA), measured as net income over the market value of total assets, and pretax operating cash flows to assets (OCF/TA) are measured as sales minus cost of goods sold and selling and administrative expenses, plus depreciation and goodwill expenses, scaled by the market value of total assets. The symbols *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels.

Table 6Long-Term MarketM&A Performance Changes of SOEs and NSOEs around the SSplit Reform

This tableshows howlong term stock performance isaffected by state ownership and by thelit share reform.Pre-Reform Negotiatorsare asubgroup of acquirers that were subject to the government’s share reform within less tha lnterove cc

cT 600 . r a

Table 7 Regression Analysis–Accounting Performance

This table presents the results of a regression analysis VRI WKH DFFRXQWLQJ SHUIRUPDQFH FKDQJHV ¨TAT, ¨OCF/TA, DQG ¨ROA, WKH GHSHQG respectively. The ownership state variables are measured in the year prior to the deal and the reform related variables are measured in the three years after the deal. The ownership variables prior to the deal are dummy variables that include StateOwned t-1 (denotes whether the acquirer is state-owned), (Stateowned) *(Pre Reform Negotiators) (t+1, t+3) (denotes whether the acquirer is state-owned and has shares floated already before the M&A), Foreign Ownership $_{t-1}$ (denotes whether the acquirer has foreign ownership), and Mgmt Ownership $_{t-1}$ (denotes whether the acquirer has management ownership). Year and industry dummies are included for all models. The symbols *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels. The reported p-values in the parentheses reflect White's heteroskedasticity correction. Constants, year and industry dummies are included but not reported for brevity.

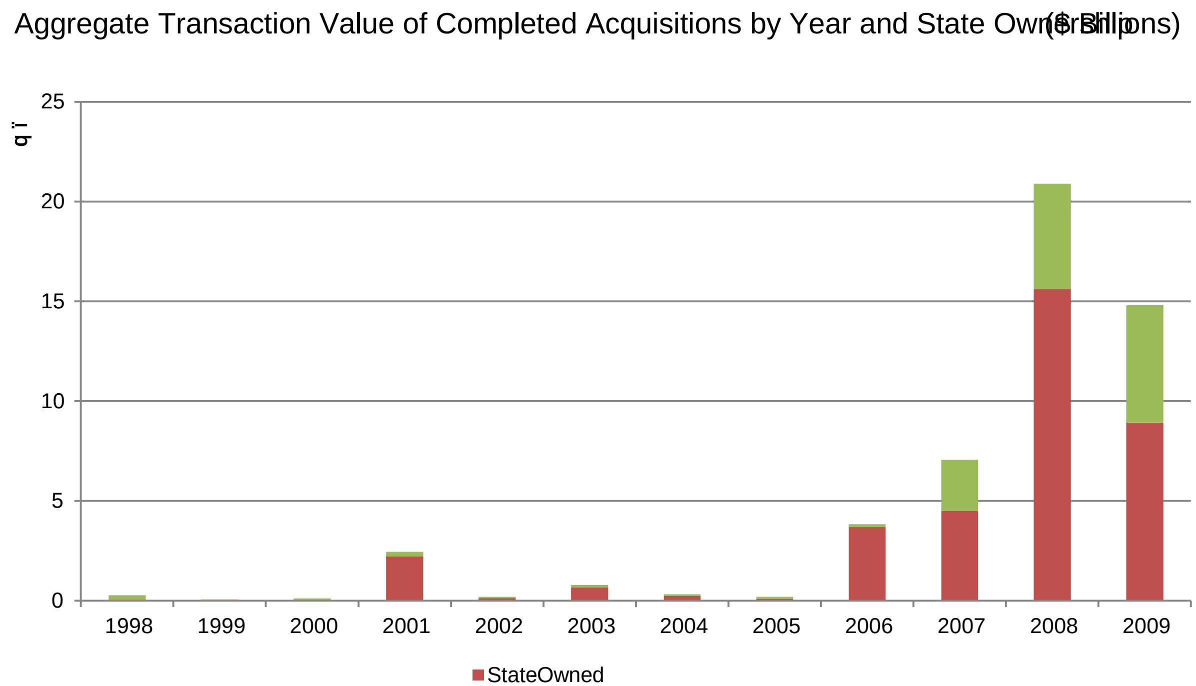
	Model 1 ¨TAT	Model 2 ¨OCF/TA	Model 3 ¨ROA
Pre Reform Negotiators $_{(t+1, t+3)}$	-0.060 (0.315)	0.015*** (0.012)	0.016* (0.097)
Post Reform Negotiators $_{(t+1, t+3)}$	0.031 (0.504)	-0.001 (0.828)	0.002 (0.684)
Pre Reform Non Negotiators $_{(t+1, t+3)}$	0.052 (0.292)	0.007 (0.382)	0.008 (0.310)
(Stateowned) *(Pre Reform Negotiators) $_{(t+1, t+3)}$	0.019 (0.704)	0.010 (0.169)	0.017** (0.019)
(StateOwned)*(PreReform Non Negotiators) $_{t-1}$	0.017 (798)	-0.005 (0.556)	-0.014* (0.098)
Non-State to State $_{(t+1, t+3)}$	0.008 (0.894)	-0.003 (0.791)	-0.003 (0.864)
Foreign Ownership $_{t-1}$	0.131 (0.370)	-0.003 (0.889)	0.001 (0.959)
Mgmt Ownership $_{t-1}$	0.080 (0.705)	-0.003 (0.767)	0.005 (0.724)
¨Leverage	-0.056 (0.539)	-0.083*** (0.000)	-0.088*** (0.000)
LnTA $_{t-1}$	-0.030* (0.093)	-0.011*** (0.000)	-0.008*** (0.001)
MtB	0.006 (0.107)	-0.001 (0.522)	-0.001 (0.925)
RelativeSize	-0.039* (0.060)	-0.001 (0.776)	-0.001 (0.890)
Related	0.027 (0.365)	-0.009* (0.043)	-0.010** (0.026)
Toehold	-0.065 (0.401)	-0.005 (0.573)	-0.005 (0.509)
TgtHitecq7			

Table 8 Regression Analysis: Long-Term Stock Performance

This table presents the results of the regression analyses of the long-term market value changes around M&As. The dependent variable is the market and size adjusted BHAR. Year and industry dummies are included for all models. Control variables are defined in Tables 6 and 7. The symbols *, **, and *** denote statistical significance at the 10%, 5%, and 1% levels. The reported p-values in the parentheses reflect White's heteroskedasticity correction. Constants, year and industry dummies are included but not reported for brevity.

	Adjusted BHAR	
	Model 3	Model 4
StateOwned$_{t-1}$	0.224** (0.013)	
(State Owned)*(Pre Reform Negotiators$_{(t+1,\ t+3)}$)		0.337* (0.077)
Post Reform Negotiators$_{(t+1,\ t+3)}$		0.211 (0.101)
Pre Reform Non Negotiators$_{(t+1,\ t+3)}$		0.261 (0.253)
Unaffected $_{(t+1,\ t+3)}$		

Figure 1



Aggregate Transaction Value of Completed Acquisitions by Year and State Ownership ($ Billions)
25
20
15
10
5
0
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
StateOwned