

Evidence on the existence and impact of corruption in state asset sales in China¹

Raymond Fisman
Columbia Business School
rf250@columbia.edu

Yongxiang Wang
University of Southern California
yongxiang.wang@marshall.usc.edu

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Abstract

We document evidence of corruption in Chinese state asset sales. These sales involved stakes in partially privatized firms, providing a benchmark – the price of publicly traded shares – to measure under-pricing. We document under-pricing of more than 70 percent, which is correlated with deal attributes associated with misgovernance and corruption. Sales by “disguised” owners that misrepresenting their state ownership to elude regulatory scrutiny are discounted 5-10 percentage points more than sales by other owners; related party transactions are similarly discounted. Post-transfer profitability is higher, though uncorrelated with under-pricing, suggesting that ownership transfer improved efficiency, even when the transfers themselves were corrupted.

Keywords: Partial privatization; corruption; state ownership; misgovernance

JEL Codes: D73; G30; L33

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1. Introduction

Governments around the world have sold state assets over the past few decades with the twin rationales of improving efficiency and raising revenues. The broad consensus among economists is that the net effect has been positive – post-privatization, companies increase sales, invest more, and earn higher profits (see Megginson and Netter, 2001, for the most recent survey).

Yet privatization's history is hardly unblemished. Most notably, corruption in Russian voucher privatizations led to the theft of state assets on a very large scale (Shleifer and Treisman, 2005), undermining in large part the revenue generation rationale for shedding state assets and resulting in increased ownership concentration. On the one hand, Shleifer and Treisman argue that these redistributive consequences of under-priced privatizations were outweighed by the gains from getting productive assets into the hands of those who would use them efficiently. Yet these efficiency gains are not self-evident. The shift to private ownership trades one set of principle-agent and efficiency problems for another – in the Russian context, a partially privatized gas and oil company, Gazprom, had a market valuation of \$0.05 per barrel of hydrocarbon reserves (Exxon Mobile's value was \$13.68 per barrel), implying an astronomical rate of inefficiency and/or misgovernance (MacMillan and Twiss, 2002).

We study these questions of the distributive and efficiency consequences of privatization by analyzing state asset sales in China. The ownership structure of publicly traded Chinese companies affords us a unique opportunity to measure the extent of under-pricing in the sales of government stakes. With this measure in hand, we may then assess whether firms associated with markers for corrupt transfers differ in their post-sale performance, allowing us to examine the Shleifer and Treisman (2005) hypothesis more directly than the prior literature on the impact of state asset sales.

Many Chinese companies were partially privatized in the early 1990s through share issue privatizations, yet the government maintained very substantial (usually majority) holdings in most firms. For the most part, government shares of these publicly listed firms were non-tradable, and could only change hands through privately negotiated sales subject to regulatory approval. Since shares with the same cash flow rights as these government holdings were freely traded in parallel, we have a ready and credible benchmark to assess the extent of under-pricing. We find that negotiated transfers of non-traded shares occur at very steep discounts – on average more than 70 percent – relative to the benchmark of the publicly traded share price. We argue that much of this discount is likely explained by a standard principal-agent problem where insiders at the selling firm – often a state company – do not bear the cost of transferring shares at a discount, and may potentially do so in exchange for a side payment or benefits to friends and family.

Of course, discounted transfers may occur for many reasons. Prior research has also documented discounted asset transfers by government sellers (though the magnitudes of the discounts we observe may argue in and of themselves against alternative explanations as dominant factors).² For example, governments may choose to sell their holdings quickly and cheaply because of immediate revenue needs or to signal commitment to market reforms. In our case non-tradable shares may also be discounted as a result of a liquidity discount.

We therefore provide evidence on the correlates of under-pricing that have no obvious connection to either liquidity or government objectives, by distinguishing sellers that we identify as likely engaging in under-priced sales as a means of transferring value. We focus on sellers where the underlying owner is a municipal or provincial government but has chosen to identify itself as a private company in transfer disclosure documents – referred to hereafter as “disguised” transfers. Since sales by government firms face greater regulatory scrutiny, misrepresentation of

² See, for example, Morgan Stanley (1997), for evidence on underpriced transfers in Europe.

ownership is a means of avoiding regulators' attention. We thus argue that insiders wishing to put through under-priced sales "on the sly" would naturally choose to mis-declare ownership in this way. In regressions without year fixed effects, we find that these disguised transfers are associated with an incremental 10 percentage point discount relative to the tradable share benchmark. This remains true even after controlling for firm fixed-effects, and also time-varying measures of liquidity considerations, profitability, and other factors.

We also find that disguised transfers are concentrated in the early years of our sample, before regulatory reforms in 2002 that increased disclosure requirements for transfers. Reflecting the fact that disguised sales are concentrated in the pre-2002 period, the inclusion of year fixed effects reduces the point estimate of the effect of disguised ownership to 4.5 percentage points, since the time effects absorb the differential composition of deal type in different time periods. (We find that a full set of quarter-year fixed effects has relatively little impact on the disguised coefficient after the inclusion of a few indicator variables to account for the timing of these reforms, consistent with the important role of these reforms in the timing of disguised sales.)

Also consistent with ownership misrepresentation as a means of eluding regulatory oversight, disguised transfers are smaller than other government sales – as we explain below, larger transfer size triggers greater regulatory scrutiny. We also report a parallel set of results for private sellers of non-traded shares³ where we show that the transfer discount for related party transactions – a well-documented source of misgovernance in many developing countries⁴ – is 3.7 percentage points higher without year fixed effects and 1.9 percentage points higher when time effects are included (though no longer statistically significant).

³ These private non-tradable shares originate through two channels: (1) in a privately controlled firm, the stake of a majority shareholder also cannot trade; (2) some private buyers obtained shares earlier from state sellers through private negotiations.

⁴ See Jian and Wong (2003) for an example in the Chinese context.

We also assess the impact of these negotiated transfers on subsequent firm performance. The Shleifer and Treisman view holds that the new (mostly private) owners may have stronger profit motives than state sellers, so performance may improve. Yet our opening discussion highlights some of the pitfalls of private ownership in the presence of weak private sector governance – investors that are willing and able to pay off officials in state-run companies in exchange for share price discounts may also have means and inclination to tunnel value out of companies.

Empirically, we find significant profit improvements following negotiated share transfers, both as measured by post-transfer return on assets, and also based on transfer announcement returns. We observe little difference across deal types in announcement returns, indicating that investors welcome these ownership changes even in the face of corrupted transfers.

We also document significant post-transfer employment reductions, suggesting that profit improvements result at least in part from shedding workers. We find no evidence of changes in other operational characteristics, including leverage, investment, or firm size.

We make a number of contributions to the literature on privatization and governance in emerging markets. First, we provide relatively clear evidence of value transfer – likely linked to side payments – in Chinese asset sales. Further, we present evidence on firms' post-transfer performance, and the source of these improvements. Our results are broadly consistent with the Shleifer and Treisman view – on average, profits increase as a result of state asset sales. This is true even for asset transfers with markers for self-dealing, namely disguised transfers and related party transactions.

This paper relates most directly to earlier work on state asset sales, which has focused primarily on the governance improvements (and accompanying increases in firm value) that have

often come with increased private ownership (see, for example, Gupta (2005) and La Porta and Lopes-de-Silanes (1999) for prominent examples of such work; for studies focused on China, see Allen et al (2005), Cull and Xu (2005), Deng et al (2005), Fan et.al. (2007), Sun et.al. (2002), Sun and Tong (2003), and Tian (2000)). In contrast to earlier work, we assess both the corruptibility of asset sales and also its relationship to post-sale performance. Our work also relates to the ever-expanding literature on measuring corruption and assessing its causes. Our work is closest to research that looks at corruption and firm valuation in the context of publicly traded companies (e.g., Fisman (2001); Goldman, Rocholl, and So (2009)).

Our work also contributes to a pair of research streams focused on Chinese capital markets. The block transfers we consider in this paper were used by Chen et.al. (2008) and Huang and Xu (2009), though for the very different purpose of estimating block control premia. . . Our paper also complements the literature that exams financial fraud in Chinese capital markets (See Chen at.al (2006), Chen et.al (2010), Cheung at.al. (2006), Fan et.al (2010), Jiang et.al. (2010), Liu and Lu (2007) and Qian et.al. (2010) among many others for references), though none of this earlier work addresses the presence or effects of corruption in privatization.

The rest of this paper is organized as follows: In Section 2 we provide background on relevant Chinese capital market attributes and institutions; Section 3 provides a description and overview of the data; Section 4 presents our results, and Section 5 concludes.

2. Background

State asset sales in China began in the early 1990's, with the partial privatization of some state-owned enterprises through Share Issue Privatization (henceforth SIP), creating many publicly traded firms where governments – both national and provincial –continued to hold substantial

stakes. In addition, millions of former state-owned firms were gradually sold to the private sector, again with governments keeping substantial stakes. These sales reached a peak during 1998-2002 as a result of the central government's widely noted policy of *Guo Tui, Min Jin* ("state-owned firms out and private-owned firms in").⁵

The government wished nonetheless to maintain levers of control in the firms privatized through SIP. As a result, more than two thirds of outstanding shares were not allowed to trade in the stock market; these are referred to as non-tradable shares. Non-tradable shares had three types of owners. First, some were held by state-owned firms that were themselves owned by provincial or city governments; we refer to their holdings as *state owned enterprise shares*, or *SOE shares*. Second, non-tradable shares were directly held by the central government through its State-owned Asset Supervision and Administration Commission of the State Council (henceforth SASAC), or directly by local governments; we refer to these holdings as *state shares*.⁶ Finally, some non-tradable shares were held by (generally well-connected) private firms; their holdings are referred to as *private shares*.

While these shares did not trade on an exchange, ownership could be transferred through private negotiation. In the case of state and SOE shares, a sale required approval by government regulators.⁷ Note that when a transfer was made, the shares' classification changed according to the identity of its new owner. For example, if a provincial SOE sold a block of shares to a private company, the shares' classification shifted from SOE to private.

These "negotiated transfers" created the potential for rent-seeking: The managers of state-owned enterprises, which possessed large non-tradable holdings in many publicly traded

⁵ Data on this latter set of government asset sales is very sparse. In any event, since no tradable shares exist for companies without a SIP, we do not have a benchmark value to compare the price set for asset transfers.

⁶ Shares held by central government SOEs (*Zhongyang Qiye*) like SINOPEC are also defined as "state shares".

⁷ See <http://preview.fec2.mofcom.gov.cn/aarticle/laws/200512/20051201243609.html> for details on regulatory statutes.

firms, were responsible for negotiating the prices of share transfers, while the firm (i.e., not the manager) suffered the resultant cost of a low price. This created an obvious potential for prospective buyers to bribe managers to set low transfer prices in exchange for a private payments.

This principal-agent problem is a function of the extent of monitoring and oversight of negotiated transfer deals. As already noted, sales by state and SOE sellers faced greater scrutiny than those made by private sellers because of the need for government approval. However, many SOE sellers were able to avoid greater oversight by registering their shareholdings in transfer deal documents as private shares, thus misrepresenting their true ownership. As a result, the seller identity simply showed up as a private entity in the deal documents. We refer to these companies – state-owned entities with holdings registered as private shares – as “disguised” firms. This misrepresentation of corporate ownership is documented in Shao (2007) and Zuo (2006), among others. We contrast these companies with those truthfully revealing their SOE status, which we refer to as “face-value SOE” firms.

While it is possible to disentangle the ultimate ownership of disguised shares (obviously we have done so for the purposes of this paper), regulators may choose to avoid delving too deeply into such matters – many CEOs of state-owned firms are former local government officials, and may have close ties to regulators or their political bosses. (See Fan, Wong and Zhang (2007) for one description of the political ties of CEOs in listed firms in China and .) They may also receive side payments themselves in exchange for turning a blind eye (see, for example, Zuo, 2006).

Disguising government ownership is thus a channel for eluding oversight that provides an “ask me no questions and I’ll tell you no lies” absolution to regulators.⁸

Rules governing negotiated transfers

All state and SOE sales had to be reported to government regulators. In addition, deals above certain size cutoffs were reported publicly. These public reporting requirements applied equally to government and private sellers; our data are derived from these public disclosures.

According to Rule 47 in the *Temporary rules on stock issuance and trading administration* (henceforth *Trading Rules*) issued by the State Council of the People’s Republic of China in May, 1993, once a non-tradable shareholder directly or indirectly holds 5 percent of outstanding shares of a listed firm, it must disclose this holding information publicly within three working days. Once this 5 percent threshold has been reached, the owner of the shares must also disclose its holdings whenever it directly or indirectly buys or sells 2 percent of shares outstanding of the listed firm.⁹

Thus, some deals by either owners with relatively small stakes or transfers of a relatively modest size will not appear in our data. For example, if a firm held 4 percent of outstanding shares as non-tradable shares and sold any proportion of its holdings through private negotiation, no public disclosure would have been required; instead it needed only to register this deal at the appropriate stock exchange. If the owner held more than 5 percent of a listed firm, but sold only 1.99 percent, again no public disclosure would be necessary.

⁸ An obvious question that comes up in this regard is why buyers and sellers do not mislead regulators on other attributes, most obviously price or quantity of shares. This turns out to be much more difficult, since the transfer occurs through the stock exchange itself, which directly observes price and quantity of shares sold.

⁹ On December 29, 1998, the 2 percent cutoff was increased to 5 percent. This regulatory change took effect on July 1st, 1999.

State and SOE sellers faced an additional layer of scrutiny. On May 15, 1996, the government issued a “notification on standardizing the administration of state-owned shares in limited liability companies.” This put in place a requirement that any transfer of SOE shares obtain approval from local government agencies; when the transfer involved state shares, central government approval was required in addition to the approval of provincial regulatory agencies. In the latter case, stricter oversight and disclosure requirements prevented companies from eluding regulation,¹⁰ which may account for the fact that we observe no disguised deals for state sellers.

The extent of oversight increased over the course of our sample period. In particular, on December 6, 2001, the CSRC (the Chinese SEC-equivalent) circulated a discussion draft on improving the “administrative method on information disclosure of shareholder changes in listed firms.”¹¹ This evolved into a final set of guidelines enacted on Dec 1, 2002. According to the new rules, for each negotiated transfer both seller and buyer would be required to disclose the ownership chain tracing back to the ultimate owner. While this does not rule out possible ownership misrepresentation – again, due to weaker enforcement, political connections and widespread corruption mentioned above –it arguably made it riskier for the parties involved (Li, 2002).

In an overlapping time period, the potential conversion of non-tradable shares was being explored. On June 14, 2001, the Chinese State Council disclosed a temporary act, “Interim Measures of the State Council on the Management of Reducing Held State Shares and Raising Social Security Funds,” enabling the sale of non-tradable state-owned equities into the stock

¹⁰ While China is gradually selling off firms held by local governments, it is simultaneously strengthening its control over firms owned by the central government. The latter are generally very large business groups, which may account for the very strict oversight.

¹¹ <http://finance.sina.com.cn/y/20011207/152075.html>

market – a de facto conversion to tradable shares. According to Article 15 of this act, all negotiated transfers of state-owned non-tradable shares were required to obtain Ministry of Finance approval. In practice, the Ministry of Finance and the CSRC simply forbade all negotiated transfers until June 23, 2002 when the government cancelled its plans for the sale of government-owned shares (and hence the large-scale conversion to tradable shares).

For our purposes, there are thus five time periods we wish to control for: the “pre” period before any of the announcements described above; expectation of possible non-tradable share conversion, but no expected change in oversight (June 14, 2001 – December 5, 2001); expectation of share conversion and expectation of strengthened oversight (December 6, 2001 – June 22, 2002); no expectation of share conversion but expected strengthened oversight (June 23 – November 30, 2002); and the “post” period following December 1, 2002 where there was greater oversight but no expectation of share conversion.

3. Data sources and summary statistics

The original deal-level data are from the “Negotiated transfer dataset” obtained through CCERDATA, a data provider affiliated with the China Center for Economic Research (CCER) at Peking University. This dataset covers all announced negotiated transfer deals from Feb 8, 1995 to Sep 26, 2007. For each deal, the data include the date when the transaction was first announced; the names of the buyer and seller; the stock code and name of the company whose shares were to be transferred; the price per share; and the total number of shares transferred.

Based on the transfer price, we construct our key dependent variable *value loss*, which is defined as 1 minus the ratio of the transfer price to the average price of the corresponding tradable shares during the month prior to the announcement date. Intuitively, this reflects the

extent of under-pricing relative to the benchmark of the tradable share price. As a measure of deal size we define the ratio of transferred shares over total shares (tradable and non-tradable) as *fraction transferred*.

For each transaction, we obtain annual data on financials such as stock turnover, sales revenues, and other balance sheet information, and data on the ownership structure of the listed firm from CSMAR, a database on Chinese capital markets. (Much of this database is now also available through Wharton Research Data Services.) Where necessary, this is supplemented with more detailed data from Resset (www.resset.cn), a widely used database provided and maintained by Tsinghua University. These yearly data are then matched up to each deal (where there may be multiple deals in a year for a given firm). We also obtain the pre-deal monthly stock trading information from CSMAR. These data are used to construct control variables, including *turnover* (the average daily trading volume over total shares in the year preceding a deal); $\log(\text{Sales})$; *ROA* (ratio of earnings after interest and taxes to book value of assets), $\log(1+\text{Tobin's } Q)$ (calculated as the ratio of market value of equity to the book value of assets), and *dividends* (total dividends divided by mean price in the year prior to the deal).

The CSMAR data are used to calculate abnormal returns for dates around each sale. We calculate returns for a range of windows up to one month prior to the transfer announcement to allow for the effects of pre-announcement information leakage about impending transfers – since the deal is the result of buyer-seller negotiation, at least some leaks are likely to occur. This is particularly likely in the case of government sales, since regulators must give approval before the transfer is announced. As we will see in the next section, there is clear evidence of pre-event information leakage in the data.

Finally, these data are also used in our later examination of post-deal operating performance. For these analyses, we focus on growth in *assets* (book value of assets), profitability (*ROA*), *investment* (ratio of investment to book value of physical assets), *leverage* (total borrowing divided by total assets of the listed firm), *wages* (total wage bill), and *employment* (total number of employees).

We delete all deals that involve the reallocation of state assets within a state enterprise (*Xingzheng Huabo* in Chinese). These are cases where the state simply reshuffles its assets within a business group with transfer price equal to zero. We keep transfers between different state-owned firms where the transfer price is not equal to zero. We also omit the 17 deals where we cannot obtain firm-level financial information.¹² This yields a final sample of 2121 deals involving 649 firms.

A critical covariate for our analysis is *disguised*, an indicator variable denoting whether the negotiated transfer seller is a SOE that has registered its holdings in deal documents as private. To construct *disguised*, we manually recorded the registered identities of sellers' transferred shares using the original deal disclosure documents, which can be found in the China Financial Newspapers Database (henceforth CFND), provided by the Shenzhen-based Juling Information Company. In each case, the disclosure documents list the company name and also whether the shares are declared as SOE-owned, state-owned or privately held.

For each transfer, to determine whether the seller had identified itself truthfully, we begin by looking at the listed company's IPO documents and annual reports that pre-date the transfer.¹³

¹² Some newly listed firms may not have traded for an entire year. As a result we cannot calculate turnover or Tobin's Q; also some firms failed to report their total sales – these are likely to be financially stressed firms, which are called "ST" (Special Treatment) firms in China.

¹³ Another concern is that the originally state-owned firm itself may have been privatized before the negotiated transfer date. However, this would itself show up as a change in ownership and reported to the stock exchange, and hence observed by us.

At these earlier dates, there was no incentive for misrepresentation, so we expect honest revelation. In cases where the seller is not listed in IPO reports or earlier annual reports, we search the “Business Information System database” (henceforth BISD), which provides a list of large Chinese firms by city of incorporation, along with their subsidiary companies’ ownership status (private or state). Again, we are able to identify firms where there exists a mismatch in state versus private ownership declarations. Finally, for smaller firms not listed in BISD, we performed an internet search using the seller’s name and the keywords “Guoyou Qiye” or “Guoyou Konggu Qiye” (meaning state-owned or state-controlled).¹⁴

Based on the registered and “true” identities of sellers, we classify sellers into four categories: *state* sellers that registered their shares as owned by the central government; *face-value SOE* sellers that registered their holdings as state legal person shares; *private* sellers that registered their holdings as private, and where true ownership is determined to be private on the basis of earlier documents; and *disguised* sellers, where holdings are registered as private, but we determine that the ultimate owner is a state-owned entity. Note that both *face-value SOE* and *disguised* sellers are owned by SOEs, but in the case of *disguised* sellers, the firm has chosen to list ownership (incorrectly) as private in negotiated transfer deal documents.

On the buyer side, we do not observe any differences between registered ownership and true underlying ownership.¹⁵ We define *private buyer* to denote buyers with privately registered holdings.

¹⁴ For example, on some local governments’ homepages, firms controlled by the local government are listed. One example of a *disguised* firm thus uncovered is the China Beijing Corporation For International Economic Cooperation (CBCIEC) that registered itself as private when it sold 8,400,000 shares of Zhongyan Fangzhi (stock code: 600763) in July 17, 2001 to Xinjiang D-Long Group which is a privately-controlled business group held by the Tang Brothers. However, according to the Beijing city website (www.beijing.gov.cn), CBCIEC is a state-owned firm.

¹⁵ There is little incentive for such misrepresentation on the buyer side. If a state company has cash available for a stock purchase, it is likely easier for company officials to tunnel out the cash rather than converting it into

For private sellers, there may also be scope for transferring value through transfer deals. In particular, private sellers are for the most part firms that themselves have dispersed ownership. Thus, insiders in these selling firms may wish to transfer shares at a discount to other entities where they possess greater cash flow rights. Any transaction between related parties must be publicly disclosed,¹⁶ and we use this information to define an indicator variable, *RPT*, that denotes related party transactions, where such insider transactions could potentially occur.

When we examine post-transfer firm attributes, it is important to keep in mind that transfers result in a permanent shift in the firm's ownership composition and as a result, we wish to assess performance as a function of the *stock* of transfers that has occurred up to that point in time rather than the flow of yearly transfers. To account for the history of transfers for each firm, we calculate *Prior transfers* up to year *y* as

$$Prior\ transfers_y = \sum_{y_{fd} \leq y} Fraction\ transferred_{fdy}$$

where y_{fd} is the year of transfer d for firm f . We further generate a variable *Weighted Valueloss* up to year y that measures cumulative size-weighted value loss as:

$$Weighted\ Valueloss_y = \sum_{y_{fd} \leq y} \frac{Fraction\ transferred * value\ loss}{Prior\ transfers_y}$$

This variable reflects the cumulative extent of corruption in transfers.

overpriced share purchases in exchange for kickbacks or favors. As noted, in practice we found no such transactions in our data.

¹⁶ Paralleling our discussion around the *disguised* classification, there may be concerns that some sellers choose not to reveal that the buyer is a related party. If this is the case, we are likely underestimating the discount of related party transactions.

Finally, to control for regulatory regimes, we define a set of event indicator variables, E_t to denote the five time periods described in Section 3. We will also include quarter X year fixed effects in some specifications.

Summary statistics

Before proceeding to our econometric analyses, we present an overview and summary of the broad patterns in our data.

In Panel A of Table 1, we present the summary statistics for the full sample of negotiated transfers. Of particular note, the mean of *value loss* (1 minus the ratio of the negotiated transfer price of non-tradable shares to the average stock price of corresponding tradable shares in the month prior to the deal) is 0.73. The full distribution of *value loss* is shown in Figure 1A. While there are many reasons that governments sell ownership stakes at a lower price, in many cases the discount is extreme: for more than 10 percent of transfers, *value loss* exceeds 0.9, and as shown in the table, the maximum is 0.99. More importantly, we show that *value loss* is strongly related to deal attributes that serve as markers for self-dealing.

The mean of *fraction transferred* is 0.13; while this is a sizeable fraction of shares outstanding, there are relatively few control deals – only 22 percent of negotiated transfers result in a change in the controlling shareholder. This is indicative of the very high level of ownership concentration in publicly traded Chinese firms.

Private buyer has a mean value of 0.69, i.e., in nearly 70 percent of transfers the purchaser is a private company. By contrast, *private seller* has a mean of 0.32, so nearly 70 percent of transfers involve some form of state entity as the seller. Overall, it is thus the case that state sellers and private buyers dominate the share transfer market. *Disguised* sellers account for

23 percent of all sales, or a third of all state-seller deals, while *face-value SOE* deals account for 32 percent of transactions.

Finally, we observe that the mean of *dividend* is only 0.4 percent. It will be important to control for this payout rate as well as share turnover, given that one could potentially account for some of the transfer discount based on the difference in liquidity between tradable and non-tradable shares.

In Panel B of Table 1, we present summary statistics to contrast the attributes of *disguised* and *face-value SOE* transactions. Recall that the underlying ownership in both cases is a state-owned enterprise, but in the case of *disguised* sellers, ownership is mis-declared as private in deal documents. The mean value of *value loss* for *disguised* sales is 0.80, versus 0.73 for *face-value SOE* sales. In Figure 1B, we present the frequency distribution of *value loss* for the two seller types. The graph illustrates the extent of under-pricing is consistently greater for *disguised* sellers, as its *value loss* distribution is clearly shifted to the right, relative to *face-value SOE*.

Further, *disguised* transactions are smaller (*fraction transferred* = 0.10, versus 0.16 for *face-value SOE* sellers), consistent with *disguised* sellers executing transactions that avoid greater scrutiny by regulators, which may be triggered for larger transactions. In Panel C, we present summary statistics for the firm-level panel data we will employ in analyzing the impact of transfers on subsequent firm performance.

In Figure 2 we show the [-6,+6] moving average for deals per month; we boldface *disguised* and *face-value SOE* observations for ease of viewing. Interestingly, the two deal types follow similar patterns until the end of 2001, when the number of *disguised* transfers falls dramatically (coinciding with the announcement of strengthened disclosure requirements). The number of *disguised* transfers remains well below the number of *face-value SOE* transfers until

the end of 2004, at which point the CSRC announced a conversion plan for non-tradable shares (Haveman and Wang, 2010), putting a damper on the negotiated transfer market.

In Figure 3, we show the [-6,+6] moving average of *value loss*, with *disguised* and *face-value SOE* transfers boldfaced. While the level of *value loss* declines over time, average *value loss* for disguised firms is almost everywhere above that of all other seller types (and in particular above *face-value SOE* transfers). The pattern parallels that of Figure 2 – value loss is generally higher for *disguised* sellers, but with a steady decline for both types of sellers that sets in at the end of 2001. Again, the timing is consistent with the increased regulatory oversight discussed in the preceding section.

4. Results

We begin by assessing the cross-sectional correlates of *Value loss*. Our main specifications are of the form:

$$\begin{aligned}
 Value\ loss_{fd} = & \beta_1 Disguised_{fd} + \beta_2 Face\text{-}value\ SOE_{fd} + \beta_3 State_{fd} + \beta_4 State\ buyer_{fd} \\
 & + \beta_5 \log(Sales_{fy}) + \beta_6 Turnover_{fy} + \beta_7 Dividend_{fy} \\
 & + \beta_8 Fraction\ transferred_{fdy} + Fixed\ effects + \varepsilon_{fd}
 \end{aligned} \tag{1}$$

for negotiated transfer d of the shares of firm f in year y (note that in many cases there are multiple transfers for a single firm in a given year). For seller ownership, the omitted variable is *private*. In all cases, we use robust standard errors clustered at the level of the listed firm. We report these results in Table 2. In the first column, we include only the ownership variables, *disguised*, *state*, *face-value SOE*, and *private buyer*. The coefficient on *disguised* is 0.102,

significant at the 1 percent level. *Face-value SOE* is also significant at the 5 percent level in this largely unconditional regression, with a coefficient of 0.031. When we add year fixed effects in column (2), the coefficient on *disguised* drops to 0.045, significant at the 1 percent level; the coefficient on *face-value SOE* is now negative, though not significant. None of the other seller or buyer ownership coefficients is significant at conventional levels.

The impact of including year dummies is not surprising, given the patterns observed in Figures 1 and 2 – disguised transfers are concentrated in the earlier years of our sample, when transfer discounts were also highest. Adding the year effects absorbs these compositional differences in the timing of deals. If it is the case that disguised deals took place in the earlier part of the sample period precisely *because* oversight was lax and hence under-pricing opportunities the greatest, then controlling for time period may understate the impact of disguised ownership on *value loss*. Consistent with this view, further analysis – presented below – shows that the impact of controlling for time is largely the result of regulatory shifts during 2001-2002 that imposed greater scrutiny on transfers that simultaneously reduced *value loss* and also the number of *disguised* deals.

In column (3) we add controls, including $\log(\text{sales})$, *turnover*, *dividends*, and *fraction transferred*. The coefficient on *disguised* is largely unaffected (as are the coefficients on other ownership variables), increasing slightly in significance and magnitude. In column (4) we add 2-digit SIC industry fixed effects; again, the results are largely unchanged. We add firm fixed effects in column (5), and the point estimate on *disguised* is again unchanged. Finally, in column (6) we limit the sample to state sellers (i.e. omitting private sellers); again, the results are largely unchanged.

In Appendix Table A1, we provide results that further examine the impact of regulatory shifts during 2001-2002. In the first column, we use four event fixed effects – based on the time periods defined at the end of Section 2 – to control for regulatory regime. There is a modest increase in the coefficient on *disguised* relative to the year effects specification – 0.051 versus 0.048 – for specifications with firm fixed effects. Thus, it appears that adding these four timing dummies largely controls for the effect of time, consistent with the primary explanation for the impact of year effects coming from a shift in regulation. In the second column, we include quarter X year fixed effects; these results are virtually identical to those with year effects only.

In assessing the magnitude of the *disguised* coefficient, its value, 0.045, represents a relatively small fraction of the mean level of *value loss* (0.73). However, there are several important qualifications to be added. First, as explained above, the time effects included in most specifications may be over-controlling for the choice to make a disguised transfer during the earlier period of weaker oversight. Additionally, it is important to keep in mind that some fraction of the negotiated transfer discount is due to fundamentals like liquidity. Given the relative coefficients and standard deviations of *turnover* and *disguised*, their implied magnitudes are comparable; if time effects are omitted, the implied effect of *disguised* is much larger.

We have argued that disguised transactions are likely a means of regulatory evasion to transfer value through under-priced asset sales. In this case, the under-pricing is the result of principal-agent problems in state (and to a lesser extent, also private) firms. That is, insiders do not bear the cost of selling at a discount, but may benefit from side payments or kickbacks in exchange for such discounts. A related mismatch of incentives may exist for private sellers – an insider at a selling firm may wish to transfer shares at a discount to a separate entity where he holds greater cash flow rights. We therefore look at the impact of related party transactions (*RPT*)

on *value loss* in Table 3 (see, for example, Bertrand et al (2002), for a discussion on the tunneling incentives among related parties). The first five columns parallel those of Table 2, but with *RPT* included as a regressor. Consistent with negotiated transfers as a means of tunneling value by private firms, *RPT* takes on a positive coefficient, and in most specifications its magnitude is comparable to that of *disguised*, though *RPT* is no longer significant in the firm fixed effects specification, likely because of the relative rarity of *RPT* transactions (there were only 71 such transfers among private sellers). As with our *disguised* regressions, year fixed effects have a large impact on the *RPT* coefficient. The evidence is consistent with related party transactions occurring primarily in the earlier (less regulated) part of the sample; we also find that simply controlling for regulatory shifts has the same effect on the *RPT* coefficient as including a full set of year dummies (results omitted in the interests of space). Finally, in column (6), we limit the sample to private firms, where related party transactions would be an effective means of tunneling value. The coefficient in this specification increases to 0.069; by contrast, for the sample of state sellers the coefficient on *RPT* is only 0.02 (see column (7)), and is statistically indistinguishable from zero.

The hypothesis that *disguised* sellers are under-pricing their transfers, and hence wish to elude scrutiny, has several subsidiary predictions for the data. As noted in Section 2, larger transfers trigger greater public disclosure. More importantly, larger transfers increase the likelihood of regulatory scrutiny, given the attention that such deals attract in the media. Thus, we expect *disguised* transactions – to the extent that this is a marker for more under-priced transactions – to be smaller relative, in particular, to *face-value SOE* transactions. We examine these additional predictions in Table 4, using specifications that parallel that of equation (1), but with *fraction transferred* as the outcome variables.

In columns (1) and (2), the coefficient on *disguised* is indistinguishable from zero, implying that disguised sales are of comparable size on average to private sales. By contrast, for other SOE sellers, we find that the coefficient on *face-value SOE* is positive, large in magnitude, and significant at the 1 percent level. In column (3) we add firm fixed effects; once again the coefficient on *face-value SOE* is positive and significant, while the *disguised* coefficient is close to zero.

To summarize thus far, we have documented a higher discount for transfers by disguised sellers, and that such sales are smaller in size (relative to sales by face-value SOE sellers). We argue that this set of patterns is consistent with disguised sales as a means of transferring value out of state sellers.

We now assess whether under-priced transfers (and disguised sales in particular) had any impact on firm performance. As we explain in the introduction, the impact is theoretically ambiguous – there exist potential improvements in incentives and governance, though these may be offset by an increase in tunneling and other value destruction by insiders. We assess the effect of ownership transfers by examining announcement returns and also post-transfer operating performance.

In Figure 4, Panel A, we graph the median cumulative abnormal returns for transfer announcement dates over a one month pre-event window $[-d,1]$, for $d = \{1,2,3,\dots,30\}$. Median returns are positive, implying investor expectations of increased post-transfer profitability. There is also striking evidence of pre-transfer information leakage – excess returns begin to dissipate about two weeks before the transfer announcement, and are close to zero on the actual announcement date.

In Figure 4, Panel B, we present median CARs for the sample disaggregated by seller type. For ease of comparing different types of *SOE* transfers, we highlight the lines for *disguised* and *face-value SOE* sellers. For all seller types, pre-event returns are positive. Further, for sufficiently long windows (to remove the effect of information leakage), the median returns are comparable for the various seller types.

In the first column of Table 5, we list the mean value of $CAR[-d,1]$ for a range of windows ($d = -1, -5, -10, -15, -20, -25, -30$); for anything longer than the short two day $[-1,1]$ window, average returns are positive and significant at least at the 5 percent level. (As Figure 3 suggests, there is a very high rate of information leakage.) In the second column, we provide a Wilcoxon signed-rank test based on the fraction of transfer announcements where returns are positive. Again, for any window longer than two days, we find that significantly more than half of transfer announcements are associated with positive returns (above 55 percent of announcements for any window).

In Table 6 we look at the determinants of event returns using a regression framework to assess whether there are different investor responses as a function of seller type. In all regressions, we include year and 2-digit industry effects, as well as controls for $\log(\text{Sales})$ and *fraction transferred*. The coefficient on *disguised* is negative over shorter windows, indicating lower returns than *private* sellers. However, in no specification is the coefficient on *disguised* significantly different from that of *face-value SOE* (i.e., other SOE sales). Further, Figure 4B is suggestive of different rates of information leakage for different seller types, and for the two longer windows, there is no significant difference in returns as a function of seller ownership for any ownership type (though this could also result from greater noise over the longer event window).

In summary, we find that investors respond positively to transfers, under-pricing notwithstanding. There is little evidence that investors respond differently to sales as a function of ownership type. It is worth noting that we cannot use *value loss* as an independent variable in these specifications since *value loss* and *CARs* are mechanically correlated due to the appearance of stock price in both variables.

We next turn to assessing whether investor beliefs in profit improvements are validated based on post-transfer earnings, and attempt to trace out the sources of higher profitability, looking at total prior transfers as well as the weighted average of *value loss* as measures of the extent and corruption of transfers respectively.

To account for the cumulative impact of transfers – ownership changes are permanent and hence we expect that the “stock” of ownership matters rather than the flow of ownership changes – we use the accumulated share transfers up to year y , *prior transfers_y*; our proxy for the corruption of prior transfers is *Weighted Value loss*, the weighted average of *value loss* from all prior transfers. Our regressions take the following form:

$$\log(Assets_{fy+1}) = \beta_1 \text{Prior transfers}_{fy} + \beta_2 \text{Weighted Value loss}_{fy} + \text{Controls} + \text{Firm and year fixed effects} + \varepsilon_{fy} \quad (2)$$

In Table 7, we report results for $\log(Assets)$, *ROA*, *investment rate*, and *leverage* as outcome variables. There is evidence of higher profitability as indicated by the positive coefficient on *Prior transfers* in the *ROA* regression, significant at the 5 percent level; however, *Weighted Value loss*, our proxy for extent of corruption during privatization, has no impact on financial performance after controlling for cumulative ownership change. This is consistent with the positive announcement returns reported in Tables 5, and the view that shifting ownership to

private entities is generally better for shareholders. Further, it is broadly consistent with the event study findings that transfers prone to corruption (e.g., disguised transfers, and generally those made at high discount) have very little impact on future performance. The coefficient on *prior transfers* is not significant in predicting any other operating measures (investment, leverage, sales).¹⁷

In our final set of analyses, we examine the channels of improved profitability. We focus, in particular, on employment changes as a function of prior transfers. We look at three separate measures of labor force impact – (the logarithm of) the total wage bill; log(employment); and log[(total wage bill)/employment]. We present these results in columns (5) – (7) of Table 7. The coefficient on *prior transfers* is large in magnitude, implying a 13 percent ownership transfer (the median transfer size) results in a 4.4 percent decline in the wage bill, while *Weighted ValueLoss* again has no significant impact on these variables. The subsequent two columns shows that this effect comes entirely from workforce reductions rather than lower salaries – the impact on average wages is actually positive, though not statistically significant. There is no significant effect on cost of goods sold or administrative overhead broadly defined (omitted in the interests of space). In results not reported here, we find that these employment effects are largest for SOE sellers – both *disguised* and *face-value*, implying that such transfers allow for greatest cost-cutting through shedding labor. In summary, although corruption during privatization leads to a wealth loss for the state owners, there is a benefit, on average, in operating performance which seems largely invariant to the extent of underpricing in the asset sales.

¹⁷ When we disaggregate *prior transfers* into the cumulative transfers made by each seller type (*disguised, face-value SOE, state, private*), the results are broadly consistent with the market reaction findings – there is a positive impact of transfers on profitability for non-disguised firms, with relatively weak profit improvements for *disguised* sellers. However, given the large standard errors, we cannot reject that all seller ownership coefficients are equal in magnitude. (These results are omitted in the interests of space, but available from the authors on request.)

5. Conclusion

In this paper, we document the correlates of under-pricing of state asset sales in China, in particular, the higher discounts in transfers by “disguised” sellers and in related party transactions. We argue that these patterns are consistent with under-pricing in asset sales as a means of value transfer. Despite the apparent self-dealing in these transactions, we document a positive response from investors – market reaction to announced asset sales is positive, a response that is validated by subsequent improvements in profitability. These profit improvements may be attributed in part to workforce reductions.

Our results are broadly consistent with the view that privatization may improve performance, at least as measured by firm profitability, even when the process is corrupted. Performance improvements are observed even for those transfers with deal attributes suggestive of self-dealing (i.e. disguised transfers and related party transactions). While we study China here, weak private sector governance is prevalent in many economies, and our results are suggestive of potential benefits from privatizations even in such environments.

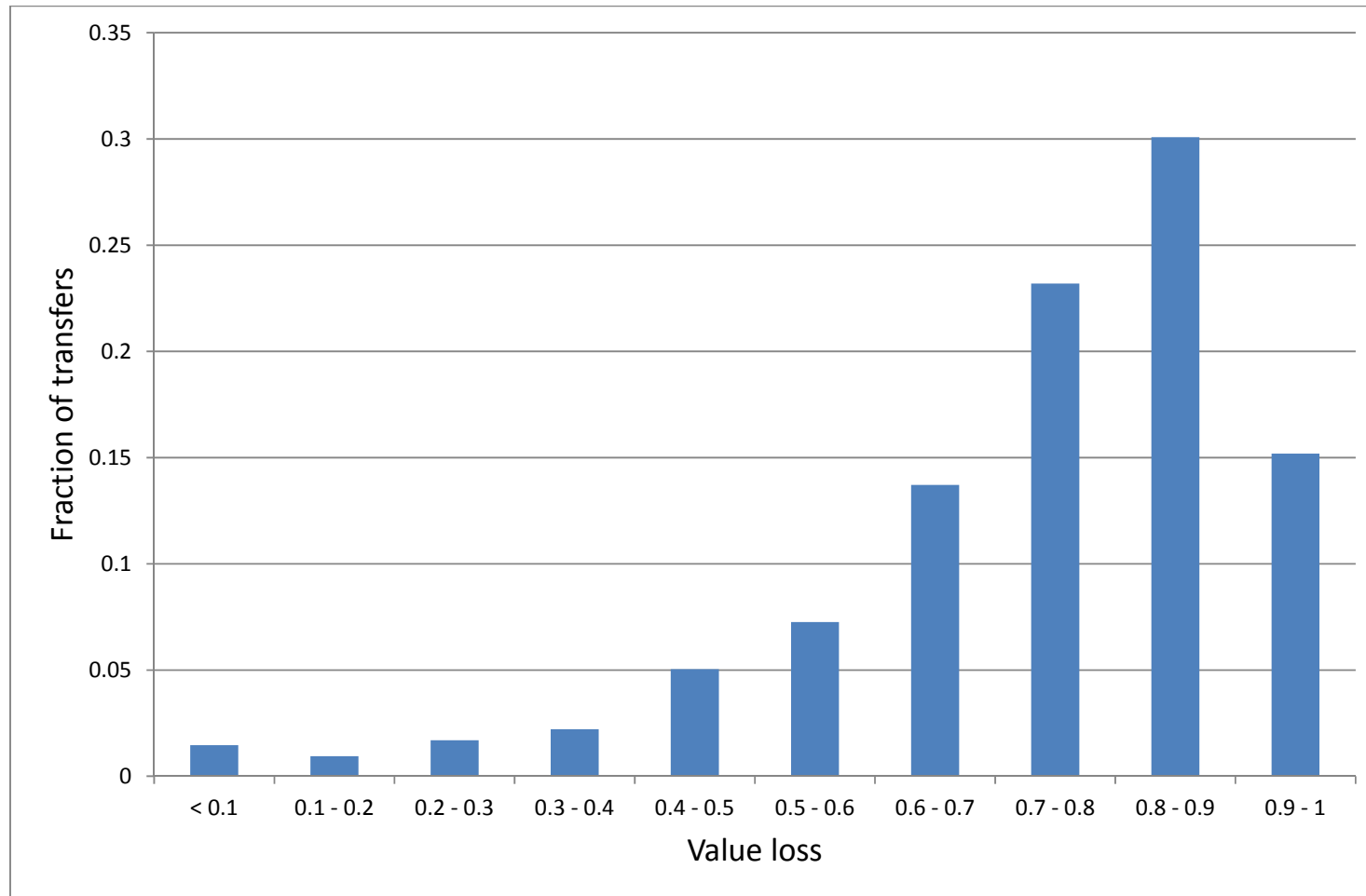
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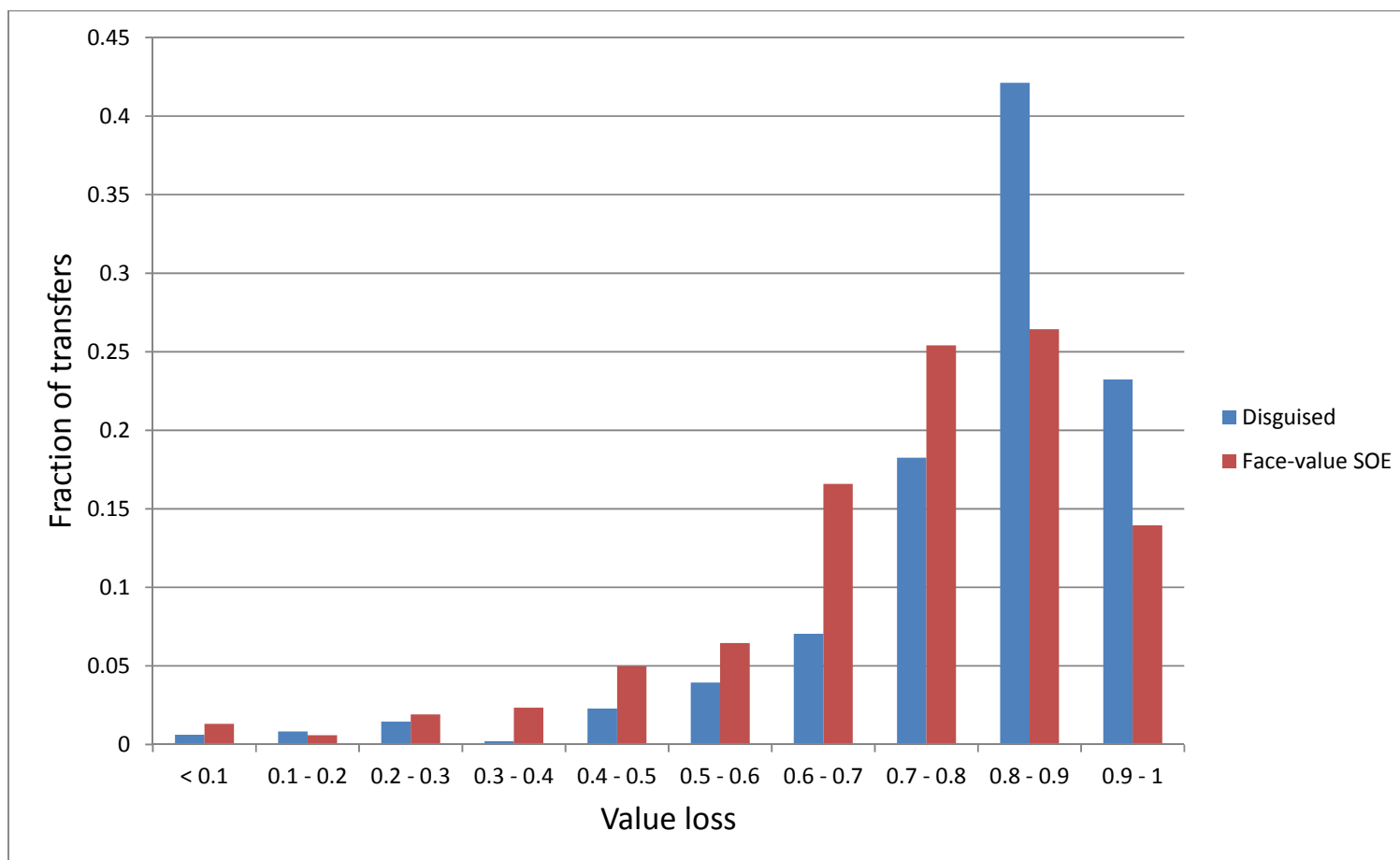
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Figure 1A – Distribution of Value Loss



Note: *Value loss* is equal to 1 minus the ratio of the negotiated transfer price of non-tradable shares to the average stock price of corresponding tradable shares in the month prior to the deal. The graph shows the distribution of *value loss* for 2121 negotiated transfer deals during 1995 – 1997.

Figure 1B – Distribution of value loss by seller ownership



Note: *Value loss* is equal to 1 minus the ratio of the negotiated transfer price of non-tradable shares to the average stock price of corresponding tradable shares in the month prior to the deal. *Disguised* sellers are state-owned entities selling shares where the holdings are registered as private in deal documents; *Face-value SOE* sellers are state-owned entities that honestly represented their ownership in deal documents. The graph shows the distribution of *value loss* for these transfer deals during 1995 – 1997.

Figure 2: Number of negotiated transfer deals by type of seller, [-6,+6] month moving average



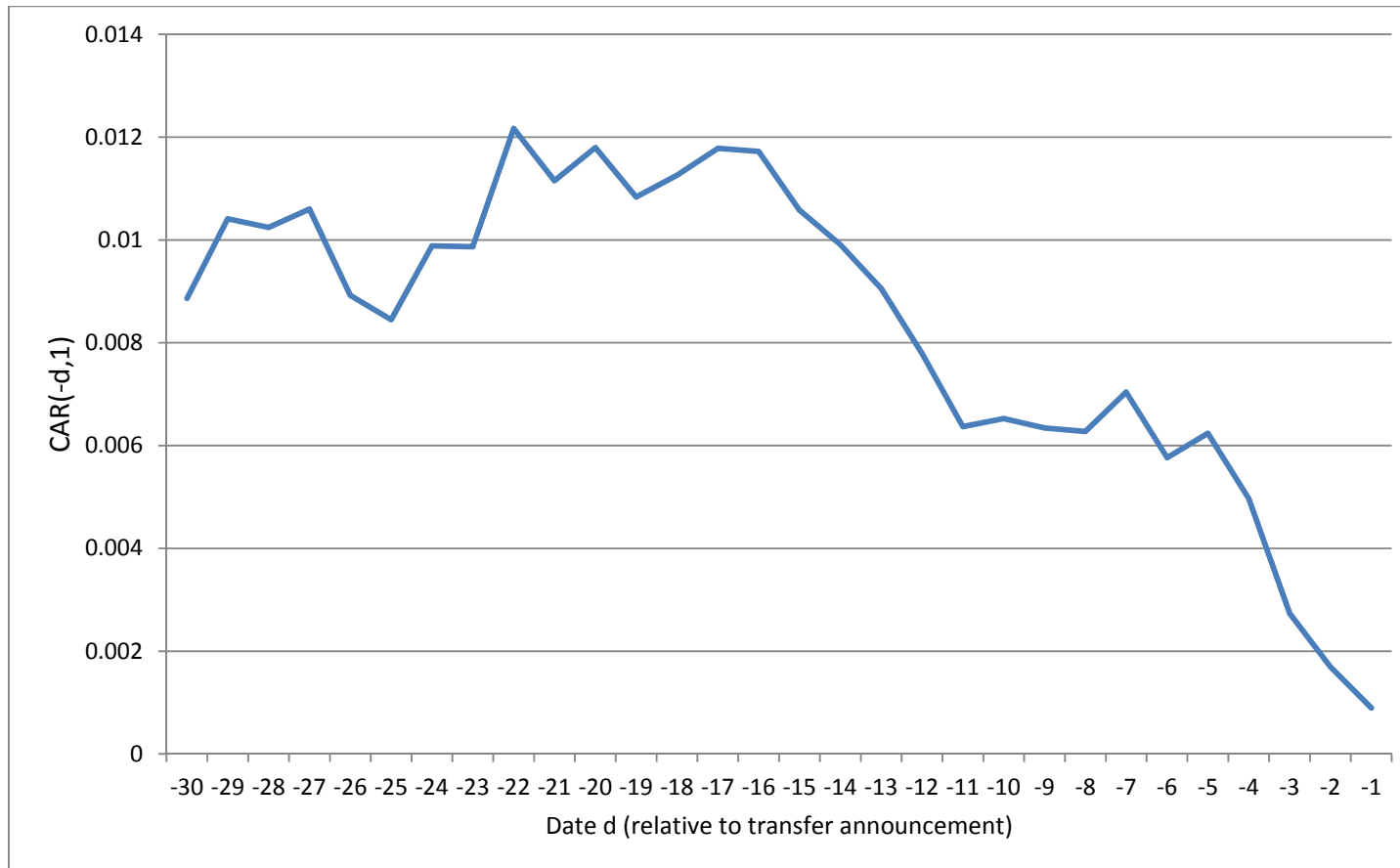
Notes: The graph shows the (weighted average) distribution of negotiated transfer deals during 1997 – 1997. *Disguised* sellers are state-owned entities selling shares where the holdings are registered as private in deal documents; *State* sellers are state entity; *Face-value SOE* sellers are state-owned entities that have honestly represented their ownership in deal documents; *Private* sellers are private firms.

Figure 3: Mean Value loss of negotiated transfers, by seller type, [-6,+6] month moving average



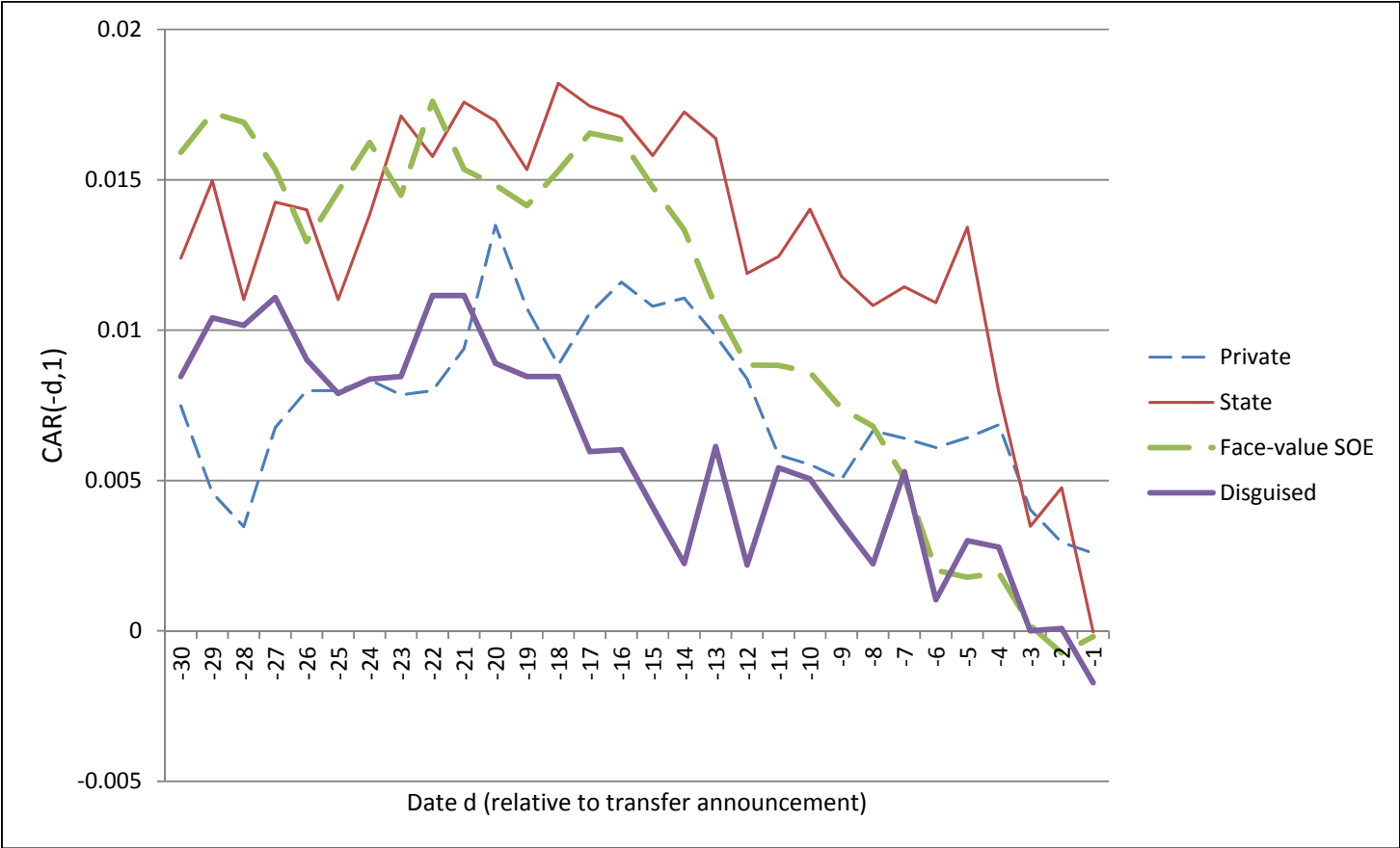
Notes: *Value loss* is equal to 1 minus the ratio of the negotiated transfer price of non-tradable shares to the average stock price of corresponding tradable shares in the month prior to the deal. The graph shows the (weighted average) distribution of negotiated transfer deals during 1997 – 1997. *Disguised* sellers are state-owned entities selling shares where the holdings are registered as private in deal documents; *State* sellers are state entity; *Face-value SOE* sellers are state-owned entities that have honestly represented their ownership in deal documents; *Private* sellers are private firms.

Figure 4A: Median cumulative abnormal returns for transfer announcements for windows [-30,1] to [-1,1]



Notes: CAR[-d,1] is the cumulative event returns over window [-d,1] around the first announcement of each negotiated transfer.

Figure 4B: Median CARS by seller type for transfer announcements for windows [-30,1] to [-1,1]



Notes: CAR[-d,1] is the cumulative event returns over window [-d,1] around the first announcement of each negotiated transfer. *Disguised* sellers are state-owned entities selling shares where the holdings are registered as private in deal documents; *State* sellers are state entity; *Face-value SOE* sellers are state-owned entities that have honestly represented their ownership in deal documents; *Private* sellers are private firms.

Table 1 - Summary Statistics

Panel A - Full sample of negotiated transfer data

	Mean	Std Dev	Min	Max	Observations
Value Loss	0.73	0.21	-2.17	0.99	2121
Fraction Transferred	0.13	0.12	0.00	0.75	2121
log(Sales)	19.35	1.35	11.67	24.42	2121
Dividend Ratio (*100)	0.40	0.85	0.00	8.24	2121
Turnover	4.18	2.56	0.39	17.77	2121
Private Seller	0.32	0.47	0.00	1.00	2121
Face-value SOE	0.32	0.47	0.00	1.00	2121
Private	0.69	0.46	0.00	1.00	2121
State	0.14	0.34	0.00	1.00	2121
Disguised	0.23	0.42	0.00	1.00	2121
RPT	0.08	0.27	0.00	1.00	2121

Notes: *Value loss* is equal to 1 minus the ratio of the negotiated transfer price of non-tradable shares to the average stock price of corresponding tradable shares in the month prior to the deal; *Fraction Transferred* is the ratio of shares transferred in this deal to all outstanding shares; *Log(sales)* is the log value of total sales of the listed firm in the last year; *Dividend Ratio* is the ratio of dividends over price in the year prior to the deal; *Turnover* is average daily turnover in the past year; *Disguised* is a dummy variable denoting a state-owned entity selling shares where the holdings are registered as private in deal documents; *State* is a dummy denoting the seller is a state entity; *Face-value SOE* is a dummy variable indicating a SOE seller that has honestly represented its ownership in deal documents; *Private* is a dummy variable indicating whether the seller is a private firm; *Private Buyer* is a dummy indicating the buyer is a private firm; *RPT* is a dummy variable indicating whether the seller and the buyer are related parties according to China accounting rules.

Panel B - Summary statistics of Face-value SOE firms and Disguised firms

	Face-value SOE =1	Disguised=1
Value Loss	0.730	0.801
Fraction Transferred	0.156	0.099
log(Sales)	19.494	19.191
Dividend Ratio (*100)	0.398	0.314
Turnover	4.149	4.554
Observations	674	480

Notes: *Value loss* is equal to 1 minus the ratio of the negotiated transfer price of non-tradable shares to the average stock price of corresponding tradable shares in the month prior to the deal; *Fraction Transferred* is the ratio of shares transferred in this deal to all outstanding shares; *Log(sales)* is the log value of total sales of the listed firm in the last year; *Dividend Ratio* is the ratio of dividends over price in the year prior to the deal; *Turnover* is average daily turnover in the past year; *Disguised* is a dummy variable denoting a state-owned entity selling shares where the holdings are registered as private in deal documents; *Face-value SOE* is a dummy variable indicating a SOE seller that has honestly represented its ownership in deal documents.

Panel C - Summary statistics for firm-year panel data, 1995-2007

	Mean	Std Dev	Min	Max	Observations
Log(Assets)	20.96	0.97	17.12	26.98	9368
ROA	0.02	0.19	-8.67	0.52	9192
Investment Ratio	0.06	0.07	-0.04	0.75	7987
Leverage	0.24	0.25	0.00	13.26	9364
log(Wage Bill)	17.51	1.21	10.96	23.65	7976
log(Employees)	7.30	1.30	1.79	12.95	6767
log(Average Wage)	10.30	0.97	5.02	17.05	6628
Weighted Valueloss	0.22	0.35	0	0.98	10709
Prior Transfers	0.10	0.22	0.00	1.93	10709
log(Sales)	20.09	1.33	7.95	27.41	10511
Log(1+Tobin's Q)	1.20	0.37	0.33	5.38	10458
KZ-index	0.92	2.49	-116.61	122.67	10458

Note: *Log(Assets)* is the log value of total assets in year t+1; *ROA* is the ratio of net profits to total assets in year t+1; *Investment Ratio* is the ratio of investment to total assets in year t+1; *Leverage* is the ratio of total borrowings to total assets of the listed firm in year t+1; *Wage Bill* is the total wage paid to workers in year t+1; *Employees* is the total number of employees in year t+1; *Average Wage* is the ratio of total wage bill to the number of employees in year t+1; *Weighted Valueloss* is the cumulative weighted *value loss* up to year t; *Prior Transfer* is the cumulative transferred ownership up to year t; *Log(Sales)* is the log value of total sales in year t; *Tobin's Q* is the ratio of market value to book value in year t; *KZ-Index* is calculated using Kaplan-Zingales (1997) coefficients for each listed firm in year t.

Table 2 – Effect of seller type on value loss

	(1)	(2)	(3)	(4)	(5)	(6)
Disguised	0.102*** (0.016)	0.045*** (0.012)	0.047*** (0.011)	0.043*** (0.012)	0.048*** (0.012)	0.044*** (0.011)
State	0.002 (0.019)	-0.023 (0.015)	-0.014 (0.015)	-0.008 (0.015)	-0.007 (0.022)	-0.003 (0.014)
Face-value SOE	0.031** (0.015)	-0.009 (0.012)	-0.002 (0.011)	-0.003 (0.011)	0.015 (0.013)	
Private Buyer	0.002 (0.013)	0.004 (0.010)	-0.001 (0.010)	-0.001 (0.011)	-0.015 (0.016)	-0.003 (0.012)
Dividend Ratio			-1.110 (0.730)	-1.245* (0.745)	-1.407 (1.190)	-2.31*** (0.790)
Turnover			0.009*** (0.002)	0.008*** (0.002)	0.000 (0.003)	0.007*** (0.002)
log(Sales)			0.019*** (0.006)	0.020*** (0.007)	0.003 (0.020)	0.029*** (0.005)
Fraction Transferred			-0.027 (0.036)	-0.037 (0.038)	-0.086* (0.052)	-0.024 (0.038)
Sample	Full	Full	Full	Full	Full	State sellers
Fixed Effects	No	Year	Year	Ind & Year	Firm & Year	Ind & Year
Observations	2121	2121	2121	2121	2121	1439
R-squared	0.04	0.35	0.38	0.42	0.77	0.47

Notes: The dependent variable in all specifications is *Value Loss*, equal to 1 minus the ratio of the negotiated transfer price of non-tradable shares to the average stock price of corresponding tradable shares in the month prior to the deal; *Disguised* is a dummy variable denoting a state-owned entity selling shares where the holdings are registered as private in deal documents; *State* is a dummy denoting the seller is a state entity; *Face-value SOE* is a dummy variable indicating a SOE seller that has honestly represented its ownership in deal documents; *Private* (the omitted category of seller type) is a dummy variable indicating whether the seller is a private firm; *Private Buyer* is a dummy indicating the buyer is a private firm; Dividend Ratio is the ratio of dividends over price in the year prior to the deal; *Turnover* is average daily turnover in the past year; *Log(sales)* is the log value of total sales of the listed firm in the last year; *Fraction Transferred* is the ratio of shares transferred in this deal to all outstanding shares. In all cases, the columns report the results of a linear regression with standard errors clustered at the firm level included in parentheses. In specifications with industry fixed effects, the industry is defined at the 2-digit SIC level. * significant at 10%; ** significant at 5%; *** significant at 1%

Table 3 - Effect of related party transactions (RPT) on value loss

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Disguised	0.103*** (0.016)	0.045*** (0.012)	0.048*** (0.011)	0.044*** (0.012)	0.049*** (0.012)		0.043*** (0.011)
State	0.005 (0.019)	-0.022 (0.015)	-0.011 (0.015)	-0.004 (0.015)	-0.005 (0.022)		-0.002 (0.014)
Face-value SOE	0.033** (0.015)	-0.008 (0.012)	0.000 (0.011)	0.000 (0.011)	0.016 (0.013)		
Private Buyer	0.001 (0.013)	0.004 (0.010)	-0.002 (0.010)	-0.002 (0.011)	-0.016 (0.015)	0.004 (0.023)	-0.002 (0.011)
Dividend Ratio			-1.172 (0.713)	-1.331* (0.733)	-1.327 (1.205)	0.092 (1.227)	-2.32*** (0.794)
Turnover			0.009*** (0.002)	0.008*** (0.002)	0.000 (0.003)	0.008 (0.006)	0.007*** (0.002)
log(Sales)			-0.020*** (0.006)	-0.022*** (0.007)	0.002 (0.020)	-0.007 (0.019)	-0.029*** (0.005)
Fraction Transferred			-0.033 (0.037)	-0.045 (0.038)	-0.088* (0.052)	-0.090 (0.111)	-0.027 (0.039)
RPT	0.037* (0.020)	0.019 (0.020)	0.039** (0.019)	0.045** (0.019)	0.028 (0.020)	0.069** (0.027)	0.020 (0.026)
Sample	Full	Full	Full	Full	Full	Private Seller	State Seller
Fixed Effects	No	Year	Year	Ind & Year	Firm & Year	Ind & Year	Ind & Year
Observations	2121	2121	2121	2121	2121	682	1439
R-squared	0.04	0.36	0.39	0.42	0.77	0.43	0.47

Notes: The dependent variable in all specifications is *Value Loss*, equal to 1 minus the ratio of the negotiated transfer price of non-tradable shares to the average stock price of corresponding tradable shares in the month prior to the deal; *RPT* is a dummy variable indicating whether the seller and the buyer are related parties according to China accounting rules; *Disguised* is a dummy variable denoting a state-owned entity selling shares where the holdings are registered as private in deal documents; *State* is a dummy denoting the seller is a state entity; *Face-value SOE* is a dummy variable indicating a SOE seller that has honestly represented its ownership in deal documents; *Private* (the omitted category of seller type) is a dummy variable indicating whether the seller is a private firm; *Private Buyer* is a dummy indicating the buyer is a private firm; *Log(sales)* is the log value of total sales of the listed firm in the last year; *Fraction Transferred* is the ratio of shares transferred in this deal to all outstanding shares. In all cases, the columns report the results of a linear regression with standard errors clustered at the firm level included in parentheses. In specifications with industry fixed effects, the industry is defined at the 2-digit SIC level. * significant at 10%; ** significant at 5%; *** significant at 1%

Table 4: –The determinants of transfer size

	(1)	(2)	(3)
Disguised	0.004 (0.007)	0.004 (0.007)	0.002 (0.008)
State	0.103*** (0.010)	0.099*** (0.010)	0.073*** (0.014)
Face-value SOE	0.056*** (0.007)	0.051*** (0.007)	0.020** (0.008)
Private Buyer	-0.020*** (0.007)	-0.017** (0.007)	-0.003 (0.008)
Dividend Ratio		-0.604 (0.405)	-1.301** (0.641)
Turnover		0.001 (0.002)	-0.001 (0.002)
log(Sales)		-0.004 (0.003)	-0.002 (0.005)
Fixed Effects	Year	Ind & Year	Firm&Year
Observations	2121	2121	2121
R-squared	0.11	0.19	0.67

Notes: The dependent variable in column (1),(2) and (3) is *Fraction Transferred*, the ratio of shares transferred in this deal to all outstanding shares. *Disguised* is a dummy variable denoting a state-owned entity selling shares where the holdings are registered as private in deal documents; *State* is a dummy denoting the seller is a state entity; *Face-value SOE* is a dummy variable indicating a SOE seller that has honestly represented its ownership in deal documents; *Private* (the omitted category of seller type) is a dummy variable indicating whether the seller is a private firm; *Private Buyer* is a dummy indicating the buyer is a private firm; *Turnover* is average daily turnover in the past year; *Log(sales)* is the log value of total sales of the listed firm in the last year; In all cases, the columns report the results of a linear regression with standard errors clustered at the firm level included in parentheses. In specifications with industry fixed effects, the industry is defined at the 2-digit SIC level. * significant at 10%; ** significant at 5%; *** significant at 1%

Table 5 - Event Studies: Summary Statistics and Wilcoxon signed-rank test

	Mean Value	Positive returns (%)	Wilcoxon signed-rank Test	
			Z-value	Prob > z
CAR[-1,1]	0.004	51.3	2.258	0.024
CAR[-5,1]	0.011	56.7	6.493	0.000
CAR[-10,1]	0.015	55.7	6.328	0.000
CAR[-15,1]	0.018	58.3	7.146	0.000
CAR[-20,1]	0.021	57.3	7.084	0.000
CAR[-25,1]	0.022	56.1	6.467	0.000
CAR[-30,1]	0.022	55.2	5.886	0.000

Notes: CAR[-d,1] is the cumulative event returns over window [-d,1] (d=1, 5, 10, 15, 20, 25, 30, respectively) around the first announcement of negotiated transfers; Data are collapsed at the level of the listed firm X announcement date since some listed firms announced multiple transfers in one day.

Table 6 - Relationship between cumulative abnormal event returns and Disguised: Full Sample

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	CAR[-1,1]	CAR[-5,1]	CAR[-10,1]	CAR[-15,1]	CAR[-20,1]	CAR[-25,1]	CAR[-30,1]
Disguised	-0.006*	-0.007*	-0.011**	-0.017***	-0.016**	-0.013	-0.010
	(0.003)	(0.004)	(0.005)	(0.006)	(0.007)	(0.008)	(0.008)
Face-value SOE	-0.009***	-0.009**	-0.004	-0.009	-0.006	-0.003	-0.003
	(0.003)	(0.004)	(0.005)	(0.006)	(0.007)	(0.007)	(0.008)
State	-0.008**	0.001	-0.000	-0.003	-0.004	-0.001	-0.002
	(0.004)	(0.005)	(0.006)	(0.007)	(0.008)	(0.008)	(0.009)
log(Sales)	-0.001	-0.003**	-0.006***	-0.004**	-0.003	-0.003	-0.004*
	(0.001)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Fraction Transferred	0.037***	0.048***	0.051***	0.073***	0.083***	0.101***	0.111***
	(0.010)	(0.012)	(0.017)	(0.020)	(0.022)	(0.025)	(0.025)
Private Buyer	-0.000	0.001	-0.002	-0.004	-0.003	0.003	-0.003
	(0.003)	(0.004)	(0.005)	(0.005)	(0.006)	(0.006)	(0.007)
Fixed Effects	Industry & Year						
Observations	1984	2032	2043	2062	2068	2070	2073
R-squared	0.11	0.11	0.10	0.11	0.11	0.11	0.11

Notes: The dependent variables are cumulative event returns over [-d,1] window around the announcement of transfers where d=1, 5, 10, 15, 20, 25, 30, respectively. *Disguised* is a dummy variable denoting a state-owned entity selling shares where the holdings are registered as private in deal documents; *State* is a dummy denoting the seller is a state entity; *Face-value SOE* is a dummy variable indicating a SOE seller that has honestly represented its ownership in deal documents; *Private* (the omitted category of seller type) is a dummy variable indicating whether the seller is a private firm; *Private Buyer* is a dummy indicating the buyer is a private firm; *Log(sales)* is the log value of total sales of the listed firm in the last year; *Log(sales)* is the log value of total sales of the listed firm in the last year; *Fraction Transferred* is the ratio of shares transferred in this deal to all outstanding shares. In all cases, the columns report the results of a linear regression with standard errors clustered at the firm level included in parentheses. In specifications with industry fixed effects, the industry is defined at the 2-digit SIC level. * significant at 10%; ** significant at 5%; *** significant at 1%

Table 7 - Relationship among listed firm level financials, Weighted Valueloss and Prior Transfers

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Dependent Variable	Log(Assets)	ROA	Inv Ratio	Leverage	Wage Bill	Employees	Avg Wage
Weighted Valueloss	0.105** (0.042)	-0.002 (0.006)	-0.005 (0.005)	0.041*** (0.011)	0.050 (0.053)	0.048 (0.075)	0.016 (0.067)
Prior Transfers	-0.075 (0.077)	0.020** (0.010)	0.012 (0.008)	-0.031 (0.023)	-0.383*** (0.114)	-0.565*** (0.164)	0.144 (0.133)
log(Sales)		0.008*** (0.002)	0.004** (0.002)	0.003 (0.003)	0.378*** (0.030)	0.269*** (0.043)	0.077*** (0.025)
Log(1+Tobin's Q)	-0.694*** (0.044)	0.058*** (0.005)	0.028*** (0.004)	-0.069*** (0.008)	-0.264*** (0.044)	-0.203*** (0.065)	-0.027 (0.053)
Kaplan-Zingales Index			-0.001** (0.000)				
Fixed Effects	Firm & Year						
Observations	9085	8633	7455	8840	7600	6410	6299
R-squared	0.88	0.42	0.51	0.66	0.90	0.89	0.82

Notes: The dependent variables are log value of total assets, *ROA* which is defined as the ratio of net profits (after tax) to total assets; the ratio of investment to total assets, the ratio of total borrowings to total assets of the listed firm, total wage bills, total number of employees and average wage which is defined as total wage bill divided by total number of employees, respectively. *Kaplan-Zingales Index* is calculated using Kaplan-Zingales (1997) coefficients for each listed firm in our sample; *Prior Transfers* are cumulative transfers in this listed firm; *Weighted Valueloss* is the size-weighted valueloss up to year t; Other variables are self-explained. In all cases, the columns report the results of a linear regression with standard errors clustered at the firm level included in parentheses. * Significant at 10%; ** significant at 5%; *** significant at 1%.

Table A1- Effect of ownership on value loss, further time controls

	(1)	(2)
Disguised	0.051*** (0.014)	0.045*** (0.011)
State	0.019 (0.024)	-0.006 (0.022)
Face-value SOE	0.033** (0.015)	0.012 (0.013)
Private Buyer	-0.019 (0.018)	-0.014 (0.015)
Dividend Ratio	-2.887** (1.208)	-1.456 (1.184)
Turnover	-0.007** (0.004)	0.000 (0.003)
log(Sales)	-0.002 (0.020)	0.004 (0.020)
Fraction Transferred	-0.122** (0.060)	-0.073 (0.051)
Fixed Effects	Regulatory regime & firm	quarter*year & firm
Observations	2121	2121
R-squared	0.73	0.79

Notes: The dependent variable in all specifications is *Value Loss*, equal to 1 minus the ratio of the negotiated transfer price of non-tradable shares to the average stock price of corresponding tradable shares in the month prior to the deal; *Disguised* is a dummy variable denoting a state-owned entity selling shares where the holdings are registered as private in deal documents; *State* is a dummy denoting the seller is a state entity; *Face-value SOE* is a dummy variable indicating a SOE seller that has honestly represented its ownership in deal documents; *Private* (the omitted category of seller type) is a dummy variable indicating whether the seller is a private firm; *Private Buyer* is a dummy indicating the buyer is a private firm; *Log(sales)* is the log value of total sales of the listed firm in the last year; Dividend Ratio is the ratio of dividends over price in the year prior to the deal; *Turnover* is average daily turnover in the past year; *Log(sales)* is the log value of total sales of the listed firm in the last year; *Fraction Transferred* is the ratio of shares transferred in this deal to all outstanding shares. In all cases, the columns report the results of a linear regression with standard errors clustered at the firm level included in parentheses. In specifications with industry fixed effects, the industry is defined at the 2-digit SIC level. * significant at 10%; ** significant at 5%; *** significant at 1%