



A pecking order of shareholder structure☆



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ABSTRACT

We develop and test an ownership structure pecking order. Our ownership pecking order sorts out which structures are likely to have relatively fewer agency costs versus higher agency costs. At the top of the pecking order are firms with a single controlling shareholder, they have the lowest agency costs when that shareholder is not the government. Next is the presence of multiple large shareholders. They are even more effective when the large shareholders are of the same type. The structure with the highest agency costs consists of a single large non-controlling shareholder. Our empirical tests confirm this pecking order.

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1. Introduction

The classic agency literature contends that having large shareholders may be potentially useful when ownership is diffuse, as large shareholders have both the incentive and the power to effectively monitor managers (Shleifer and Vishny, 1986, 1997; Demsetz, 1983, 1986; Demsetz and Lehn, 1985). But, we now also know that large shareholders may be associated with high agency costs, as they could align themselves with managers and use their power to expropriate wealth from minority shareholders (LaPorta et al., 1999). Considering these competing views, a recent literature has emerged proposing that an optimal compromise is to have multiple large shareholders (for example, Attig et al., 2008; Bennedsen and Wolfenzon, 2000; Faccio et al., 2001; Laeven and Levine, 2008; and Lehmann and Weigand, 2000).¹ In general, the basic potential benefit of having multiple large shareholders is simple—when there are multiple large shareholders, they monitor (1) the managers and also (2) each other. This balances both agency problems. We examine the institutional details of large ownership in China sort out which structures are likely to have relatively fewer agency costs versus higher agency costs.

Meanwhile, some papers argue that multiple large shareholders might cause high agency costs because, (1) large shareholders might collude to expropriate from small shareholders (Zwiebel, 1995; Bennedsen and Wolfenzon, 2000), and (2) coordination and bargaining costs between large shareholders may be high (Gomes and Novaes, 2006). In the empirical literature, some papers find that multiple large shareholders have a negative effect (e.g., Konijn et al., 2011), while other papers find a positive effect (Lehmann and Weigand, 2000; Faccio et al., 2001; Volpin, 2002; and Laeven and Levine, 2008).² However, a major shortcoming

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¹ Also see Attig et al. (2009), Attig et al. (2013), Maury and Pajuste (2005), and Pagano and Roell (1998).

² Also see Gutiérrez and Tribó (2004), Maury and Pajuste (2005), Jara-Bertin et al. (2008), Attig et al. (2008), and Attig et al. (2009).

of the existing empirical literature that contrasts firms with a single large shareholder to firms with multiple large shareholders is that it treats all firms with a single large shareholder as the same (and thus as a single subsample). However, a large shareholder can cause either high agency costs or low agency costs. The former may occur if the large shareholder aligns with management, is entrenched, and decides to pursue private benefits of control (i.e., the entrenchment effect), while the latter may occur if large shareholder's interests are aligned with minority shareholders' interests (i.e., the alignment-of-interest effect). A failure to differentiate between these two aspects of the separation of ownership and control may be one reason why the existing literature yields mixed results.

If a large shareholder can either enhance or destroy agency costs, how do we identify them *ex ante*? It has been argued (e.g., Jensen and Meckling, 1976; Stulz, 1988) and empirically shown (e.g., Morck et al., 1988; McConnell and Servaes, 1990; Claessens et al., 2002) that the entrenchment effect (alignment-of-interest effect) occurs when the large shareholder has a low (high) level of ownership. That is, a large shareholder who owns, for example, 10% of the firm may have an incentive to align with management and use the control to expropriate wealth from minority shareholders. A large shareholder who owns, for example, 60% of the firm, gains the most from reducing agency costs. Therefore, in our paper, for firms with a single large shareholder, we differentiate those with a larger ownership stake from those with a smaller ownership stake. Note that we aggregate all the ownership from family and other affiliated shareholders. Thus, when we examine "a single large shareholder" with or without a controlling interest, the single shareholder may be the combination of related parties. For firms with a single large shareholder who holds a large share of the firm, the firms may not benefit much from having additional large shareholders because the single large shareholder's interest is already aligned with other shareholders. In contrast, for firms with a large shareholder who does not hold a large share of the firm, they may benefit from having multiple unrelated large shareholders that monitor each other to moderate the entrenchment effect. Thus, we identify a pecking order for large shareholder ownership structure. At the top of the pecking order is the single large shareholder that owns a majority, because incentives are aligned. The next level of ownership structure includes multiple large shareholders that can monitor management and each other. The least efficient structure is to have one large shareholder that does not own a majority of the shares. To examine this shareholder pecking order, we identify three groups of firms: (1) those with a single large shareholder who owns a large share of the firm, (2) those with multiple large shareholders, and (3) those with a single large shareholder who does not own a large share of the firm.

To conduct our study, we use a sample of Chinese listed-firms. Most listed-firms in China have high ownership concentrations (Jiang and Kim, 2015). A high ownership concentration means that it should be easy to obtain a sufficient sample size for each of our three groups of firms, which all require the presence of large shareholders. Another reason to study Chinese firms is that large shareholders in China have already been found to expropriate wealth from minority shareholders (Peng et al., 2011; Liu and Tian, 2012; and Wang and Xiao, 2011) and managers have been linked to widespread corporate fraud (Hass et al., 2016; Chen et al., 2016). Considering this, regulators in China believe that a partial solution to this problem is for firms to have multiple large shareholders (Jiang and Kim, 2015). Also useful is that China provides detailed data on ownership structure, including the top ten shareholders' identities, which are usually not available in other countries. More importantly, in contrast to other ownership studies focusing on other markets, large ownership concentration and ownership structure in China are not very sticky across time, that is, there is relatively high time-series variations in China, thus facilitating firm fixed-effects tests to address endogeneity concerns and difference-in-difference tests to identify a causal relation. Therefore, for both practical reasons and for policy-oriented reasons, China represents an ideal setting to contrast firms with both types of single large shareholder to firms and with multiple large shareholders.

Overall, our results are consistent with the ownership structure pecking order. Specifically, we find that firms with a single large controlling shareholder enjoy better firm performance than firms with multiple large shareholders. But firms with multiple large shareholders enjoy better firm performance than firms with a large single non-controlling shareholder. These results hold through a battery of econometric and various robustness tests. We begin our analysis in the next section by presenting our data and ownership structures. The analysis is conducted in the third section. This analysis also includes exploring agency costs and shareholder types (government, foreign, and institution). Lastly, we importantly explore related party transactions (RPTs). RPTs can be used to enhance value or destroy it. We find that the way RPTs are used is consistent with our ownership pecking order. We present our conclusions in the last section.

2. Data

2.1. Sample

We collect data on ownership structure from the China Securities Market and Accounting Research (CSMAR) database, which provides the top 10 largest shareholders' ownership data for the listed companies on an annual basis. Per the People's Republic of China's Company Law, there must be at least five founders to set up a corporation, unless it is a state-owned enterprise.³ Thus, some of the top 10 largest shareholders of a listed company could belong to related parties (for example, relatives or associated companies) of one ultimate controlling shareholder. Knowing this, the CSRC requires Chinese listed companies to disclose the relation among the top 10 largest shareholders in their financial statements. We hand-collect this information, based on the financial statement disclosures on related parties, and manually reclassify the related large shareholders into one ultimate controlling shareholder by adding their shareholdings together.

³ That was the requirement of the 1993 corporate law. After a few amendments in 1999, 2004, 2005, and 2013, the current number of founders of a corporation is between 2 and 200.

To construct our sample, we start with all non-financial A-share listed companies between 2000 and 2014 from the China Securities Market and Accounting Research (CSMAR) database. The initial sample consists of 23,642 firm-year observations. Since the focus of our paper is on the role of blockholders, we exclude 204 observations that do not have any large shareholder with at least 10% of firms' outstanding shares. In addition, there are too few observations to capture any “no” large shareholder effect. We also exclude 899 observations that have at least two shareholders but the largest shareholder holds >50% of shares. That is, because under controlling shareholder's absolute control over the firm, it is impossible for the other large shareholders to monitor the controlling shareholder. We further exclude 1446 observations due to missing information for the main variables. Our final sample includes 21,093 observations representing 2099 unique firms. We winsorize the continuous variables at the 1% and 99% levels to mitigate the effects of outliers.

2.2. Ownership structure distribution

Following previous studies (Maury and Pajuste, 2005; Laeven and Levine, 2008; Attig et al., 2008; Attig et al., 2009), we define a large shareholder as any shareholder who holds 10% or more of the firms' outstanding shares. We define *Single* as an indicator variable that equals 1 if a listed company in a year has only one large shareholders ($\geq 10\%$ shareholdings), and 0 otherwise. Accordingly, we define *Multiple* as an indicator variable that equals 1 if a listed company in a year has two or more large shareholders ($\geq 10\%$ and $\leq 50\%$ shareholdings), and 0 otherwise. We further divide the *Single* sample into *Single_control* ($>50\%$ shareholdings) and *Single_noncontrol* ($\leq 50\%$ shareholdings).

Our final sample includes 15,870 observations (75.24% of the sample) that have only one large shareholder and 5223 observations (24.76%) have more than two large shareholders. In addition, there are 9269 *Single_noncontrol* observations (43.94%) and 6601 *Single_control* observations (31.29%). Note that in China, there are very few firms without a least one large shareholder. Thus, we cannot examine Burkart et al.'s (1997) assertion that a diffuse ownership of the firm can lead to greater managerial initiative that can benefit the shareholders, ex ante.

2.3. Firm performance measures

Within our agency framework, we seek to measure agency costs through the classic cash flow perspective. We proxy for scaled case flow with firm financial performance. High (low) performance is associated with low (high) agency costs. Our two primary measures of firm performance (Liu et al., 2014) are the net income scaled by the book value of total assets (ROA), and the earnings before interest and taxes divided by the book value of total assets (EBIT).

2.4. Summary statistics

Panel A of Table 1 presents means, medians, and standard deviations for the main variables in our analyses. The mean ROA of the sample is 3.9% (median, 3.5%) and the standard deviation is 8.0%. The mean EBIT scaled by the book value of assets is 0.063

Table 1
Summary statistics.

Panel A: firm characteristics				
	Mean	Median	Std	
Single_control	0.313	0	0.464	
Multiple	0.248	0	0.432	
Single_noncontrol	0.439	0	0.496	
ROA	0.039	0.035	0.080	
EBIT	0.063	0.056	0.087	
Size	20.87	20.85	1.502	
LongDebt	0.073	0.026	0.101	
Tang	0.273	0.243	0.180	
Duality	0.160	0	0.366	
Independent	2.963	3	1.102	
Panel B: comparison of performance				
	ROA		EBIT	
	Mean	Median	Mean	Median
Single_control	0.054	0.045	0.078	0.064
Multiple	0.035	0.034	0.060	0.056
Difference	0.019***	0.011***	0.018***	0.008***
Single_control	0.054	0.045	0.078	0.064
Single_noncontrol	0.030	0.029	0.055	0.051
Difference	0.024***	0.016***	0.023***	0.013***
Multiple	0.035	0.034	0.060	0.056
Single_noncontrol	0.030	0.029	0.055	0.051
Difference	0.004***	0.005***	0.005***	0.005***

Note that *, **, *** denote significance at the 10%, 5%, and 1% level respectively. $N = 21,093$.

(median, 0.056) and the standard deviation is 0.087. Besides the ownership structure and performance variables, we identify other firm-specific characteristics that might explain firm performance to use as controls. Firm size (*Size*) is log of the firm's total sales. The financial leverage ratio (*LongDebt*) is the ratio of long term debt to total assets, while operating leverage (*Tangible*) is the ratio of fixed assets to total assets. It is also possible that firm performance is related to a variety of corporate governance mechanisms (see Kim et al., 2007), so additional control variables include the number of independent directors (*Independent*), and a dummy variable to indicate when a firm's CEO and board chair are the same person (*Duality*). Note that on average, there are nearly 3 independent directors and 16% of the CEOs are also the board chair.

Panel B of Table 1 reports the first test of our pecking order of ownership structure by comparing performance among the three different ownership structure groups. The table also reports *t*-statistics and Wilcoxon *z*-statistics for difference in means and medians tests, respectively, for each performance variable across the different ownership structure firms. Firms with a single, controlling shareholder have an average ROA of 5.4% (median, 4.5%) over the sample. That is significantly higher than the 3.5% average ROA (median, 3.4%) of firms with multiple large shareholders. The results are similar for the EBIT scaled by book value. The firms with a single, controlling shareholder have a mean EBIT of 0.78, which is significantly larger than the mean 0.060 EBIT of firms with multiple large shareholders. While the firm performance for the firms with a single controlling shareholder are higher than the multiple large shareholder firms, the multiple large shareholder firms performed better than the firms with a single, but non-controlling shareholder. Specifically, the mean 0.035 ROA of the multiple large shareholder firms is significantly higher than the mean 0.030 ROA of the single large shareholder non-controlling firms. This is also true for the EBIT scaled by book value of assets and for median measures. In summary, the performance of sample firms shows that firms with a single controlling shareholder perform the best, followed by firms with multiple large shareholders, and lastly, firms with a single non-controlling shareholder.

This relationship appears to hold over time. Fig. 1 shows the mean ROA of the firms from the three different ownership structures. Note that the performance of the firms with a single controlling shareholder is higher than the other groups in every year. The multiple large shareholder firms seem to have a higher or equal performance in each year compared to the firms with a non-controlling single shareholder. The dominance of the multiple large shareholder firms appears to occur in the last half of our sample, potentially timed for the Split Share Structure Reform. We will explore this issue later.

3. Empirical results

3.1. Main regression results

We previously discussed that the literature has had mixed results in distinguishing between a single large shareholder and whether they are associated with low agency costs (alignment-of-interest effect) or high agency costs (entrenchment effect). In the spirit of those studies, we first regress the performance measures on the *Single* dummy variable and the control variables. Note that *Single* indicates when the firm has a single large shareholder of any holding size. Because the dummy variables of *Single* and *Multiple* completely cover our sample, we cannot include both. Thus, the *Single* coefficient will be relative to the multiple large shareholder impacts in these regressions. Results are reported in Table 2. Column (1) shows the estimates using ROA as the measure of performance. The *Single* coefficient is negative and significant at the 10% significance level. This result suggests that having a single large shareholder is value destroying. However, the significance is low and may not be convincing. In addition, it is negative relative to having multiple large shareholders. The results for the EBIT regression shown in column (3) are similar. The *Single* coefficient is weakly negative.

However, we argue that the level of ownership for a single large shareholder matters. Therefore, we replace the *Single* variable with the *Single_control* and *Single_noncontrol* variables. The results are reported in column (2) for ROA and column (4) for EBIT. The coefficients for the presence of a single controlling shareholder is positive in both regressions and significant at the 1% level in column (2) and 5% in column (4). Therefore, single controlling shareholders are associated with low agency costs relative to having multiple large shareholders. The coefficients for the single large shareholders without control are significantly negative at the 1% level in both regressions. This suggests that having a non-controlling single large shareholder is associated with high agency

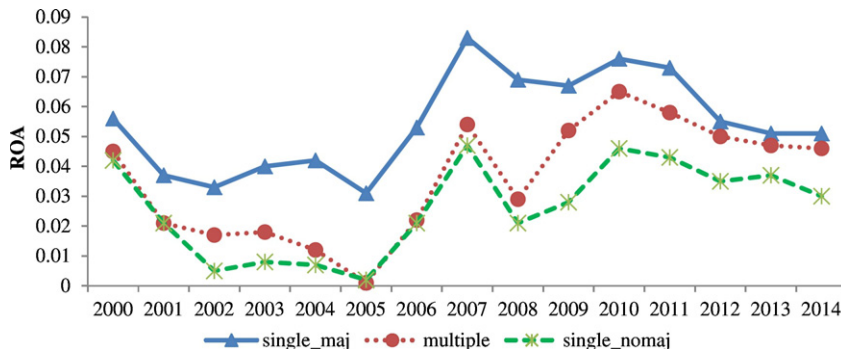


Fig. 1. Firm performance over time.

Table 2
Ownership structure and firm performance.

	ROA		EBIT	
	(1)	(2)	(3)	(4)
Single	−0.004* (−1.71)		−0.004* (−1.80)	
Single_control		0.008*** (3.33)		0.006** (2.45)
Single_noncontrol		−0.011*** (−4.94)		−0.011*** (−4.80)
Size	0.015*** (20.81)	0.015*** (19.75)	0.016*** (20.47)	0.016*** (19.71)
LongDebt	−0.090*** (−10.27)	−0.087*** (−10.16)	−0.060*** (−6.41)	−0.058*** (−6.21)
Tang	−0.055*** (−9.13)	−0.055*** (−9.23)	−0.051*** (−7.88)	−0.050*** (−7.72)
Duality	0.004* (1.84)	0.005** (2.40)	0.005** (2.16)	0.005** (2.35)
Independent	−0.005*** (−6.30)	−0.002 (−1.46)	−0.003** (−2.26)	−0.003** (−2.08)
Year	YES	YES	YES	YES
Industry	YES	YES	YES	YES
Constant	−0.258*** (−16.82)	−0.231*** (−15.33)	−0.250*** (−15.34)	−0.236*** (−14.71)
# of obs.	21,093	21,093	21,093	21,093
Adj. R ²	0.128	0.140	0.124	0.131

Firm level clustered standard errors are in the parenthesis. *, **, *** denote significance at the 10%, 5%, and 1% level respectively.

costs relative to having multiple large shareholders. These results are consistent with our pecking order of ownership structure in that a single controlling shareholder is the best, followed by multiple shareholders, and then a single non-controlling shareholder. Lastly, these results show that single large shareholders can be associated with either low or high agency costs depending on whether they have a controlling interest or not.

Note that the coefficients of the control variables generally have the expected signs. Large firms perform better. Large firms generally enjoy the benefits of scale and scope economies, so firm size may positively affect its performance (Kim and Gao, 2013). Long term debt is negatively related to firm performance because high levels of long-term debt may increase the risk of financial distress and bankruptcy (Maury and Pajuste, 2005). Firms with lower asset tangibility have a higher proportion of intangible assets (such as human capital) that are generating cash flows, so such firms tend to have higher performance (Maury and Pajuste, 2005; Laeven and Levine, 2008). We also find that CEO duality is good for performance due to the unity of command it presents (Peng et al., 2007). We find overall that board independence has a slight negative impact on firm performance.

3.2. Endogeneity concerns and other robustness tests

In this section, we address three endogeneity concerns. First, the relation between ownership structure and performance may be driven by the observable differences in firm attributes between different ownership structures. To mitigate this concern, we employ a propensity score matching method and compare firm performance between different ownership structures. Second, our findings may be driven by constant omitted firm-specific variables that correlate with ownership structure and firm performance. To alleviate this concern, we run panel regressions with firm fixed effects using a sample of firms experiencing ownership structure transitions. Third, our reported relation between ownership structure and performance may be driven by a reverse causality. To address this concern, we apply a difference-in-differences method to establish a causal effect of ownership structure on firm performance. In addition, we show that our results are robust to various alternative test specifications.

3.2.1. Propensity-score-matching approach

Our first robustness test uses propensity score matching to determine whether the relation between ownership structure and performance may be driven by the observable differences in firm attributes between different ownership structures. We desire to match firms that have the same firm characteristics, but different ownership structure. To be thorough, we will use three different matching methods. Our first step is to estimate a logit regression of an ownership structure dummy variable (equal to one if the ownership structure is *Multiple*, and zero if the ownership structure is *Single_control*) on the same control variables to the main regression model. We then use the propensity scores from this logit estimation and perform nearest-neighbor,⁴ kernel, and radius⁵ matching methods with replacement to form the control group, respectively. This method is also used to compare firm

⁴ For the nearest-neighbor method, we use a one-to-three propensity score matching method.

⁵ For the radius method, we use 0.001 as the matching radius.

Table 3

Propensity score matching estimators.

	ROA					
	Multiple less Single_control		Multiple less Single_noncontrol		Single_control less Single_noncontrol	
	ATT	T value	ATT	T value	ATT	T value
Nearest-neighbor	−0.0095	−4.99***	0.0102	5.92***	0.0206	15.36***
Kernel	−0.0092	−5.33***	0.0110	7.11***	0.0174	14.37***
Radius	−0.0096	−5.60***	0.0107	6.98***	0.0198	16.68***
	EBIT					
	Multiple less Single_control		Multiple less Single_noncontrol		Single_control less Single_noncontrol	
	ATT	T value	ATT	T value	ATT	T value
	Nearest-neighbor	−0.0083	−3.89***	0.0104	5.70***	0.0190
Kernel	−0.0084	−4.39***	0.0109	6.62***	0.0184	14.03***
Radius	−0.0078	−4.04***	0.0112	6.73***	0.0154	11.60***

*, **, *** denote significance at the 10%, 5%, and 1% level respectively.

performance between firms with *Multiple* and *Single_noncontrol* shareholder ownership structures, and between firms with *Single_control* and *Single_noncontrol* structures.

The results shown in Table 3 are all significant at the 1% level. For ROA, firms with multiple large shareholders perform worse than firms with a single controlling shareholder, as shown in all three matching methods in the first column. The middle column shows that firms with multiple large shareholders perform better than firms with a single non-controlling shareholder. Therefore, it is not surprising that firms with a single controlling shareholder outperform those with a non-controlling shareholder. The results using the scaled EBIT as the measure of firm performance are consistent with the ROA results. Overall, our pecking order for ownership structure is robust to propensity matching methods.

3.2.2. Firm-fixed effect test

To make sure that our results are not driven by an omitted variable bias, we run panel regressions with firm fixed effects, which controls for time-invariant firm-specific characteristics that may be correlated with omitted explanatory variables. The inclusion of firm fixed effects in the regression models controls for time-invariant unobservable firm-level characteristics and removes any purely cross-sectional correlation between ownership structure and firm performance reducing the risk of omitted variables bias.

Specifically, in columns (1) and (3) of Table 4, we use a sample of firms experiencing at least one transition among the ownership structures. That is, at some time during our sample, the firm moves from one of the structures (*Single_control*,

Table 4

Ownership structure and firm performance: firm fixed effect results.

	ROA		EBIT	
	(1)	(2)	(3)	(4)
	≥1 change	≥2 changes	≥1 change	≥2 changes
Single_control	0.014*** (5.79)	0.014*** (2.64)	0.015*** (5.71)	0.014** (2.40)
Single_noncontrol	−0.009*** (−4.65)	−0.022*** (−4.37)	−0.011*** (−4.86)	−0.025*** (−4.42)
Size	0.021*** (22.96)	0.016*** (7.49)	0.024*** (23.24)	0.017*** (7.41)
LongDebt	−0.080*** (−8.75)	−0.091*** (−3.88)	−0.065*** (−6.47)	−0.074*** (−2.83)
Tang	−0.090*** (−13.75)	−0.145*** (−8.86)	−0.083*** (−11.53)	−0.147*** (−8.05)
Duality	0.002 (0.98)	−0.007 (−1.14)	0.003 (1.16)	−0.009 (−1.28)
Independent	−0.001 (−0.72)	−0.011*** (−3.34)	−0.002 (−1.23)	−0.014*** (−3.80)
Firm	YES	YES	YES	YES
Year	YES	YES	YES	YES
Industry	YES	YES	YES	YES
Constant	−0.328*** (−15.15)	−0.170*** (−3.46)	−0.367*** (−15.40)	−0.184*** (−3.36)
# of obs.	13,209	2387	13,209	2387
R ² _Within	0.125	0.189	0.122	0.175

*, **, *** denote significance at the 10%, 5%, and 1% level respectively.

Single_noncontrol, or *Multiple*) to another. Then for this smaller sample, we run the estimation conducted in column (2) of Table 2 for ROA and column (4) of Table 2 for EBIT. In columns (2) and (4) of Table 4, we use a sample of firms experiencing two transitions among the ownership structure.

The results are similar to those in Table 2. The ROA model estimated coefficients for the presence of a single controlling shareholder is positive in both regressions and significant at the 1% level in columns (1) and (2). Robust to fixed effects, single controlling shareholders are value enhancing relative to having multiple large shareholders. The coefficients for the single large shareholders without control variables are significantly negative at the 1% level in both regressions. Again, this suggests that having a non-controlling single large shareholder is associated with high agency costs relative to having multiple large shareholders. The results for the EBIT regressions are also consistent with these observations. Our pecking order of ownership structure findings are robust to firm fixed effects.

3.2.3. Causality: difference-in-difference test

We next explore ownership structure and performance causality. To better establish a causal relation between ownership structure and firm performance, we follow previous studies (Slaughter, 2001; Chen et al., 2012) and employ a difference-in-difference specification (DID) by comparing the changes in firm performance surrounding the firms' transitions from one type of ownership structure to another. The following model is estimated:

$$\text{Performance} = \alpha_0 + r_i + \alpha_1 \text{Transition} + \beta \text{Controls} + \varepsilon \quad (1)$$

Transition is an indicator variable that equals one if a firm has a transition from one type of ownership structure to another ownership structure. Table 5 reports when the transition is from each of the two single large shareholder structures to the multiple large shareholder structure and also changes going the other direction. r_i is the firm-fixed effects dummy, which controls for time-invariant unobservable firm-level characteristics. Again, we use ROA and EBIT as performance variables.

Columns (1) and (5) are for the subset of firms experiencing a transition from a single controlling large shareholder to multiple large shareholders. We compare the firm performance before transition (pre-succession period) with that of the same set of firms in the year of transition and years after transition (post-transition period). To minimize the possible impact of confounding events, we identify a control group of firms with a single controlling shareholder during the entire sample period. Both groups experience the same concurrent business environments, but differ in the transition. So, the differences in their performance provide an estimate of the effect of ownership structure. We follow a similar procedure for all the other transitions and associated regressions in Table 5.

The results of the DID analysis in Table 5 shows that when a firm transitions from a single controlling shareholder to multiple large shareholders, the ensuing ROA (column (1)) and EBIT (column (5)) suffers. That is, the agency costs increase when a firm's

Table 5
Ownership structure and firm performance: DID results.

	ROA				EBIT			
	From single to multiple		From multiple to single		From single to multiple		From multiple to single	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Single_control to Multiple	-0.013**				-0.010*			
	(-2.31)				(-1.70)			
Single_noncontrol to Multiple		0.022***				0.023***		
		(4.76)				(4.50)		
Multiple to Single_control			0.018**				0.028***	
			(2.09)				(2.74)	
Multiple to Single_noncontrol				-0.005*				-0.005*
				(-1.79)				(-1.72)
Size	0.005**	0.022***	0.024***	0.017***	0.006**	0.026***	0.026***	0.020***
	(2.05)	(12.35)	(9.85)	(13.80)	(2.00)	(13.47)	(8.93)	(14.70)
LongDebt	-0.137***	-0.055***	-0.110***	-0.082***	-0.132***	-0.041**	-0.096***	-0.070***
	(-7.76)	(-3.50)	(-4.39)	(-6.37)	(-7.13)	(-2.36)	(-3.21)	(-5.08)
Tang	-0.041***	-0.120***	-0.048***	-0.069***	-0.033***	-0.110***	-0.033	-0.065***
	(-4.04)	(-10.35)	(-2.87)	(-8.30)	(-3.02)	(-8.64)	(-1.64)	(-7.24)
Duality	-0.005***	-0.002	0.002	0.003	-0.004**	-0.001	0.005	0.004
	(-2.95)	(-0.48)	(0.30)	(1.12)	(-2.47)	(-0.23)	(0.56)	(1.19)
Independent	0.002	0.006***	-0.012***	-0.009***	0.004	0.007***	-0.014***	-0.010***
	(0.44)	(2.83)	(-3.25)	(-7.06)	(0.76)	(2.91)	(-3.32)	(-6.89)
Firm	YES	YES	YES	YES	YES	YES	YES	YES
Year	YES	YES	YES	YES	YES	YES	YES	YES
Industry	YES	YES	YES	YES	YES	YES	YES	YES
Constant	-0.075	-0.342***	-0.416***	-0.273***	-0.061	-0.411***	-0.446***	-0.306***
	(-1.14)	(-9.50)	(-7.41)	(-9.07)	(-0.89)	(-10.39)	(-6.68)	(-9.49)
# of obs.	5841	4047	2246	5401	5841	4047	2246	5401
R ² Within	0.047	0.144	0.205	0.102	0.047	0.142	0.191	0.106

*, **, *** denote significance at the 10%, 5%, and 1% level respectively.

ownership structure changes from the highest of the pecking order, large controlling shareholder, to the next lower level, the multiple large shareholders. The results in columns (4) and (8) shows that moving from multiple large shareholders down to then next lowest level, a single non-controlling shareholder, also results in lower firm performance. Note that the estimates for this subsample is our weakest result as they are only significant at the 10% level. Now we illustrate what happens to firm performance when the firm ownership structure moves up the agency pecking order. Columns (2) and (6) show when firms with the lowest level ownership structure, single non-controlling shareholders, move to the next level up the pecking order to multiple large shareholders—firm performance is enhanced. When multiple large shareholder firms change to single controlling owners, firm performance is enhanced, as shown in columns (3) and (7). Thus, the DID results show that firms with a change in their ownership structure experience a change in performance that is consistent with our pecking order of ownership structure.

3.2.4. Robustness tests of variable measurements

So far, we have examined our theory in relation to alternative econometric specifications. In this section, we check the robustness of our results from various aspects of the variables measured. That is, we vary our firm performance and blockholder definitions. First, to alleviate any potential impact of profit manipulation on the relation between ownership structure and firm performance, we restrict our firms to those that have not received an accounting violation and repeat the original ROA analysis in Table 2. This results in a sample of 18,587, which is 2506 fewer than the original sample. Note that the results remain unchanged, as shown in column (1) of Table 6. Also, Jiang et al. (2016) point out that firms with multiple large shareholders tend to conduct more earnings management than firms with a single controlling shareholder. Therefore, we substitute a performance measure that is relatively free of earnings manipulation. To strip away the impact of potential strategic choices concerning discretionary accruals, we utilize the augmented modified Jones model suggested by Kothari et al. (2005). Specifically, we use $(\text{Net Profit} - \text{Discretionary Accruals}) / \text{Assets}$ as the measure of unmanipulated firm performance. As the discretionary components of accruals are eliminated, variation in firm performance among different ownership structure reflects differences in true performance rather than the cosmetic effects of discretion in accounting treatment. Column (2) shows the results. Again, firms with single controlling shareholders have better performance relative to multiple large shareholder firms and single large non-controlling shareholder firms have lower performance. Our last robustness check on firm performance measurement adds the return on equity (ROE). Column (3) presents the results with ROE as the dependent variable. The coefficient on *Single_control* is significantly positive and the coefficient on *Single_noncontrol* is significantly negative. Both estimates are significant at the 1% level. We conclude that our pecking order of ownership structure is robust to these three different measures of firm performance.

In our baseline model, a large shareholder is defined as the shareholder who holds >10% of the firm's outstanding shares. To investigate the robustness of our findings, we redefine a large shareholder as the shareholders who holds >15% (column (4)) or 20% (column (5)) of the firm's outstanding shares. We repeat the original ROA analysis of Table 2, column 2, with these redefined definitions of large shareholders. Note that the coefficients for presence of a single controlling shareholder are still significantly positive and the estimates for a single non-controlling shareholder are still significantly negative. Overall, our results are robust to a variety of variable specifications.

Table 6
Ownership structure and firm performance: robust tests.

	(1)	(2)	(3)	(4)	(5)
	Exclude accounting violation	Exclude earning management	ROE	Blocker holder is 15%	Blocker holder is 20%
Single_control	0.007*** (2.91)	0.010*** (3.36)	0.015*** (3.03)	0.009*** (3.01)	0.009*** (2.58)
Single_noncontrol	-0.011*** (-4.97)	-0.007** (-2.54)	-0.014*** (-3.02)	-0.008*** (-2.80)	-0.006* (-1.76)
Size	0.013*** (17.65)	0.017*** (17.86)	0.039*** (24.03)	0.014*** (18.88)	0.013*** (17.52)
LongDebt	-0.089*** (-9.93)	-0.227*** (-16.96)	-0.084*** (-3.99)	-0.087*** (-10.08)	-0.085*** (-9.63)
Tang	-0.054*** (-8.95)	-0.091*** (-11.03)	-0.121*** (-8.67)	-0.054*** (-9.14)	-0.051*** (-8.68)
Duality	0.007*** (2.91)	0.001 (0.19)	0.010** (2.12)	0.006*** (2.85)	0.007*** (3.26)
Independent	-0.002 (-1.27)	0.001 (0.49)	-0.001 (-0.58)	-0.001 (-1.04)	-0.001 (-0.88)
Year	YES	YES	YES	YES	YES
Industry	YES	YES	YES	YES	YES
Constant	-0.202*** (-12.89)	-0.259*** (-13.49)	-0.693*** (-20.44)	-0.223*** (-14.59)	-0.201*** (-12.90)
# of obs.	18,587	20,229	21,093	20,782	19,712
Adj. R ²	0.133	0.081	0.111	0.138	0.133

*, **, *** denote significance at the 10%, 5%, and 1% level respectively.

3.3. Types of large shareholders

There is a great deal of literature suggesting that different shareholders have different incentives. [Chen et al. \(2007\)](#) argue that independent institutions with long-term investments will specialize in monitoring rather than trading. The presence of these types of institutional shareholders is associated with post-merger performance. In this section, we will discuss and test how the type of shareholder might fit into our ownership structure agency pecking order. Specifically, we examine government, foreign, and institutional shareholders. For example, a government's incentive may not be to maximize the value of the company, or even to expropriate wealth from minority shareholders, but to provide employment for citizens. When a government policy that seeks to maximize social stability and employment ([Fogel et al., 2008](#)) is implemented through a state-owned enterprise (SOE), that firm is likely to suffer significant agency costs. A single controlling shareholder would not be beneficial for the firm if that shareholder is a government owner.

As for other types of blockholders, [Frydman et al. \(1999\)](#) argue that foreign investors may have managerial know-how advantages that can lead to better firm performance. That is, their interests may align with minority shareholders and they have specialized knowledge and experience to help foster it. Also, foreign investors are often associated with better firm-level corporate governance ([Ferreira and Matos, 2008](#)). In addition, [Boubakri et al. \(2013\)](#) show that when ownership shifts from government control to foreign investor control, the incentive structure changes and firms increase risk-taking. While most large foreign investors are institutional investors, there are also some domestic institutional investors. [Aggarwal et al. \(2015\)](#) argue that independent Chinese institutions can serve as effective monitors to deter corporate fraud. They find support for the presence of mutual fund shareholders being associated with fewer incidences of fraud. Thus, in the next two subsections, we investigate the agency costs associated with government, foreign, and domestic institutional shareholders.

3.3.1. Government is the large single shareholder

Although there are different levels of government owners (i.e., central and local) that may have complicated incentives (see [Chen et al., 2009b](#); [Cheung et al., 2010](#)), we conduct our analysis at the investor type level and group all firms with a single large government shareholder as an SOE. Thus, the dummy variable STATE is equal to one when the government is the single large shareholder and zero otherwise. We explore the effect of having a government large owner in [Table 7](#). Like [Table 1](#),

Table 7

State as single large shareholder.

Panel A: SOE performance	ROA		EBIT	
	Mean	Median	Mean	Median
Single_control private	0.065	0.055	0.089	0.074
Single_control SOE	0.049	0.04	0.073	0.060
Difference	0.017***	0.015***	0.016***	0.014***
Single_noncontrol private	0.037	0.033	0.063	0.056
Single_noncontrol SOE	0.026	0.027	0.050	0.049
Difference	0.011***	0.006***	0.013***	0.007***
Panel B: regression analysis	ROA		EBIT	
	(1)	(2)	(3)	(4)
Single_control	0.022*** (6.51)	0.008*** (3.21)	0.022*** (5.92)	0.006** (2.30)
Single_control x STATE	-0.020*** (-6.01)		-0.022*** (-5.89)	
Single_noncontrol	-0.010*** (-4.65)	-0.001 (-0.36)	-0.011*** (-4.51)	0.001 (0.42)
Single_noncontrol x STATE		-0.016*** (-7.03)		-0.021*** (-8.18)
Size	0.015*** (20.31)	0.015*** (20.50)	0.016*** (20.31)	0.016*** (20.65)
LongDebt	-0.087*** (-10.22)	-0.086*** (-10.03)	-0.057*** (-6.25)	-0.056*** (-6.05)
Tang	-0.053*** (-8.94)	-0.054*** (-9.08)	-0.048*** (-7.42)	-0.049*** (-7.55)
Duality	0.004* (1.78)	0.004* (1.79)	0.004* (1.73)	0.004* (1.65)
Independent	-0.001 (-1.27)	-0.001 (-1.17)	-0.002* (-1.90)	-0.002* (-1.75)
Year	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes
Constant	-0.238*** (-15.89)	-0.241*** (-16.01)	-0.244*** (-15.31)	-0.249*** (-15.56)
# of obs.	21,093	21,093	21,093	21,093
Adj. R ²	0.143	0.144	0.135	0.137

Firm level clustered standard errors are in the parenthesis. *, **, *** denote significance at the 10%, 5%, and 1% level respectively.

Table 8
Large foreign and institutional shareholders and firm performance.

	ROA	EBIT	ROA	EBIT
Foreign	0.011** (2.21)	0.010* (1.75)		
Institution			-0.011* (-1.86)	-0.012* (-1.76)
Size	0.017*** (13.48)	0.019*** (13.57)	0.017*** (13.06)	0.018*** (13.22)
LongDebt	-0.102*** (-6.23)	-0.077*** (-4.29)	-0.105*** (-6.35)	-0.080*** (-4.42)
Tang	-0.060*** (-6.12)	-0.052*** (-4.95)	-0.048*** (-4.41)	-0.040*** (-3.49)
Duality	-0.000 (-0.01)	0.001 (0.20)	0.000 (0.08)	0.001 (0.28)
Independent	-0.006** (-2.45)	-0.008*** (-3.10)	-0.006** (-2.43)	-0.008*** (-3.08)
Year	Yes	Yes	Yes	Yes
Industry	Yes	Yes	Yes	Yes
Constant	-0.276*** (-10.15)	-0.292*** (-9.96)	-0.279*** (-10.15)	-0.295*** (-10.03)
N	5223	5223	5223	5223
Adj. R ²	0.171	0.164	0.163	0.159

Firm level clustered standard errors are in the parenthesis. *, **, *** denote significance at the 10%, 5%, and 1% level respectively.

Table 7 Panel A shows the means and medians of the firms' ROA and EBIT for the new groups of single controlling shareholder, private versus SOE, and single non-controlling shareholder, private versus SOE. The results show an economically important and statistically significant better firm performance for the private large single shareholders.

Panel B reports our baseline regression analysis similar to Table 2 in which we examine the impact of the government shareholder by interacting STATE with the two single shareholder variables. In column (1) for ROA, the coefficient for *Single_control* is still significantly positive, which indicates that single controlling shareholders are the best structure in general. However, the coefficient for the interacted STATE variable is significantly negative and nearly of equal magnitude. For the EBIT analysis, column (3) shows the same effect. This shows that there are significant agency costs associated with a single controlling government shareholder. The presence of a private controlling shareholder appears to be the best ownership structure. Columns (2) and (4) show results for interacting government non-controlling shareholders. The coefficient for *Single_noncontrol* has been significantly negative in our analysis so far. However, that coefficient becomes insignificant when we separate the government single non-controlling shareholder firms. The coefficients for the government owners are significantly negative. Thus, we conclude that a government large single shareholder is firm performance destroying, regardless of whether they have control of the firm or not.⁶

3.3.2. Large foreign and institutional shareholders and firm performance

In this section, we examine the contribution of foreign and institutional investors. However, Chinese firms have few foreign and institutional investors compared to other marketplaces, like the United States. For example, of all the firms with a single controlling shareholder, <2% of them are foreign shareholders. In addition, <1% of the single large non-controlling shareholders are foreign. Due to the small sample, we focus our analysis in this section on the sample of firms with multiple shareholders. We define *Foreign* as a dummy variable that takes the value of one when the firm has a large foreign shareholder, and zero otherwise. The literature suggests that foreign investors can add knowledge, experience, and governance. Therefore, they should be performance enhancing. We also define the dummy variable *Institution* to indicate when the firm has a large institutional shareholder. The literature for institutional investors in the United States suggests that there are a variety of incentive structures for the different types of institutions. Thus, we leave it as an empirical test to determine whether Chinese institutions may enhance or destroy firm performance. Table 8 shows the regressions in the sample of all firms with multiple large shareholders.

The first two regressions test the presence of foreign investors on ROA and EBIT performance, respectively. Both coefficients for *Foreign* are positive. For ROA, the estimate is significant at the 5% level, while it is significant at the 10% level for EBIT. The last two regression models are for testing institutional investors' contribution to firm performance. The coefficients for both ROA and EBIT are negative and significant at the 10% level. Overall, we find weak evidence that when a firm has multiple large shareholders, the presence of a foreign investor is performance enhancing while the presence of a domestic institution is performance destroying. However, because of the few large foreign and institutional investors in China, these results should be interpreted with caution.

⁶ Milhaupt and Zheng (2015) offer an alternative explanation. They suggest that the government has less control over a SOE than presumed. In their context, the higher agency costs of SOEs exhibited in our tests would be attributed to managerial excesses derived from the weaker monitoring.

3.3.3. Homogeneous and heterogeneous large shareholder types and firm performance

Our last investigation of firms having multiple large shareholders examines whether it is better or worse to have all the large shareholders of the same type, or of different types. When all the large shareholders of the firm are of the same type, then they have very similar incentives. Similar investors are more likely to be able to communicate and work together. Also, since they well understand each other's motivations and processes, they can be more effective at monitoring each other. Therefore, firms with similar large multiple shareholders may experience lower agency costs. We designate these firms as *Homogeneous* multiple large shareholder firms. Alternatively, the large investors in firms with different types of multiple large shareholders, denoted as *Heterogeneous* ownership firms, may have different incentives and agendas. This could reduce their desire to work together because they want different outcomes. In addition, management may be able to play their differences against them, lowering their ability to monitor management and each other. Thus, *Heterogeneous* firms experience higher agency costs. We examine this ownership structure in Table 9.

Panel A shows that there are 447 firms with multiple large shareholders for which at least one is a different type than the others. These firms provide 2691 observations. There are 479 firms for which all the multiple large shareholders are of the same type, providing 2532 observations. We first examine this hypothesis in Panel B, which reports the mean and median performance measures for these firms. The *Homogeneous* firms significantly outperform the *Heterogeneous* firms in both ROA and EBIT as measured by the mean and median.

Panel C reports results from a regression of our base model of performance and control variables. We conduct the analysis in the sample of multiple large shareholder firms and add the dummy variable, *Heterogeneous*, to indicate the firms with different types of large shareholders. The estimated coefficients for *Heterogeneous* are significantly negative at the 1% level for both the ROA and EBIT performance measures. Thus, we conclude from this analysis that having multiple large shareholders of the same type that can work together and effectively monitor each other and the management is associated with higher firm performance.

3.4. Related party transactions and ownership structure

Before concluding our paper, we conduct an important empirical test using related party transactions (RPTs). RPTs refer to transactions between the firm and its controlling shareholder. RPTs are widely used by the controlling shareholder for tunneling (Wang and Xiao, 2011; Liu and Tian, 2012). However, RPTs can also internalize market transactions to achieve economies of scale, facilitate the efficient allocation of resources within the group, enhance overall enterprise competitiveness, reduce the risk associated with external market transactions, reduce transaction time and costs, and even reduce the company's tax burden. So, if

Table 9
Performance of firms with heterogeneous vs homogeneous multiple shareholders.

Panel A: The sample of firms		Unique firms		Observations	
Multiple-heterogeneous		447		2691	
Multiple-homogeneous		479		2532	
Panel B: Mean and median performance		ROA		EBIT	
		Mean	Median	Mean	Median
Multiple-heterogeneous		0.032	0.033	0.057	0.055
Multiple-homogeneous		0.037	0.036	0.062	0.058
Difference		−0.005**	−0.003***	−0.005**	−0.003**
Panel C: Performance regressions		ROA		EBIT	
		(1)		(2)	
Heterogeneous		−0.009***		−0.009***	
		(−2.77)		(−2.70)	
Size		0.017***		0.019***	
		(13.39)		(13.52)	
LongDebt		−0.104***		−0.079***	
		(−6.44)		(−4.46)	
Tang		−0.048***		−0.040***	
		(−4.43)		(−3.49)	
Duality		0.000		0.001	
		(0.05)		(0.25)	
Independent		−0.005**		−0.008***	
		(−2.31)		(−2.96)	
Year		Yes		Yes	
Industry		Yes		Yes	
Constant		−0.279***		−0.295***	
		(−10.24)		(−10.10)	
# of obs.		5223		5223	
Adj. R ²		0.165		0.161	

Firm level clustered standard errors are in the parenthesis. *, **, *** denote significance at the 10%, 5%, and 1% level respectively.

Table 10
Ownership structure and related party transactions.

	ROA			EBIT		
	Single controlling	Multiple	Single non-control	Single controlling	Multiple	Single non-control
Ind_RPT	0.0007* (1.75)	-0.0029** (-2.42)	-0.0043*** (-5.24)	0.0012** (2.20)	-0.0021* (-1.81)	-0.0029*** (-3.10)
Size	0.0031*** (3.84)	0.0062*** (3.48)	0.0056*** (5.37)	0.0030* (1.76)	0.0067*** (3.61)	0.0055*** (4.90)
LongDebt	-0.0822*** (-7.54)	-0.0722*** (-4.38)	-0.0390*** (-4.84)	-0.0560*** (-3.28)	-0.0447** (-2.15)	-0.0254*** (-3.83)
Tang	-0.0155** (-2.57)	-0.0112 (-1.13)	-0.0269*** (-4.08)	-0.0064 (-0.62)	0.0033 (0.33)	-0.0194*** (-2.70)
Duality	0.0113*** (3.89)	-0.0009 (-0.22)	0.0013 (0.48)	0.0113** (2.31)	-0.0006 (-0.13)	0.0005 (0.19)
Independent	0.0024* (1.78)	-0.0017 (-0.72)	0.0007 (0.55)	0.0025 (1.15)	-0.0028 (-1.20)	0.0008 (0.55)
Year	YES	YES	YES	YES	YES	YES
Industry	YES	YES	YES	YES	YES	YES
Constant	-0.0103 (-0.59)	-0.0962** (-2.57)	-0.0842*** (-3.71)	0.0013 (0.04)	-0.1042*** (-2.71)	-0.0665*** (-2.73)
# of obs.	5907	4773	8942	5907	4773	8942
Adj. R ²	0.0920	0.0803	0.0676	0.0937	0.0744	0.0570

Firm level clustered standard errors are in the parenthesis. *, **, *** denote significance at the 10%, 5%, and 1% level respectively.

used in these ways, RPT can help a company to create value (Coase, 1937; Khanna and Palepu, 1997, 2000; Shin and Park, 1999; Bae et al., 2002; Claessens et al., 2006; Chen et al., 2009a; Peng et al., 2011). Whether RPT is value destroying or enhancing may depend on the ownership structure. So, we explore the impact of RPT on the operational performance of Chinese listed companies.

RPT data is from the CSMAR database. There are many types of RPTs between listed firms and their business groups, including commodity transactions, asset transactions, receiving or rendering of services, agency, commissioning, fund transactions, guarantees and pledges, leases, trust operating (management side), donations, non-monetary transactions, equity transactions, and debt transactions. We define RPT as the sum of the different types of RPTs divided by total sales. *Ind_RPT* is calculated as the difference between the firm-year's RPT and the industry-year's median RPT. The results are shown in Table 10.

We divide our sample into three subsamples based on the ownership structure of the firm, resulting in a sample of firms with single controlling shareholders, multiple large shareholders, and a single non-controlling shareholder. We then run regressions of firm performance on *Ind_RPT* and the control variables. The RPT coefficient will tell us whether RPT enhances or destroys financial performance in firms with that ownership structure. The coefficients are significant and positive for firms with a single controlling shareholder. Statistical significance is at the 10% level for ROA and 5% for EBIT. The coefficients in the sample of firms with multiple large shareholders are significantly negative, at the 5% level for ROA and 10% level for EBIT. Lastly, the *Ind_RPT* coefficient is strongly negative in the subsample of firms with a single non-controlling shareholder. In this sample, the estimates are significant at the 1% level and larger in magnitude than the negative estimates in the multiple shareholder subsample. Overall, we find that RPT can be used for performance enhancing activities, but this appears to mostly occur with a single controlling shareholder. Ownership structures further down the pecking order appear to use RPT for value destroying activities.

4. Conclusions

We use agency theory to construct a pecking order for ownership structure. What ownership structures have the lowest agency costs? Are single large shareholders better than multiple large shareholders? Does it matter if the single large shareholder has a controlling interest or not? We posit a theory that single large controlling shareholders are associated with the least agency costs. The next best structure of the pecking order is having multiple large shareholders where none have a controlling interest. Lastly, having a single large non-controlling shareholder is the least attractive because it is associated with the highest agency costs. Our empirical analysis supports this ownership structure pecking order. We conduct our study using Chinese listed-firms because they have high ownership concentrations, prior documented evidence of expropriation of wealth from minority shareholders, and provide detailed data on ownership structure which are usually not available in other countries.

An advantage of analyzing the ownership structure pecking order in Chinese firms is that they tend to have large ownership concentration with relatively high time-series variations. Often, ownership is divided among several family or other related parties. We aggregate these shares and consider them to be one single large shareholder. We exploit these characteristics to perform a series of robustness tests to address endogeneity concerns and identify the causal relation. Our findings are robust to firm fixed-effects, propensity score matching, difference-in-difference tests, and measurement variations of our primary variables.

Single large controlling shareholders own such a large portion (over 50%) of the firm that increases in value are more likely to provide far more wealth than any expropriation of minority shareholders could. Thus, they have an incentive to decrease agency costs, increase performance, and ultimately maximize shareholder value. However, we also find that not all types of controlling shareholders have the same incentives. Specifically, government shareholders tend to want to maximize societal economic

benefits and are likely to be less interested in maximizing firm performance. Thus, single controlling government shareholders are less desirable than non-government controlling shareholders.

The next best ownership structure is having multiple large shareholders (where none have a controlling interest). When there are multiple large shareholders, they monitor both managers and each other, solving both agency problems. We also find some interesting nuances for the multiple large shareholder structures. There is weak evidence that when a firm has multiple large shareholders, then the presence of a foreign investor is performance enhancing while the presence of a domestic institutional investor is performance destroying. This is consistent with Frydman et al. (1999), who argue that foreign investors may have specialized knowledge and experience advantages that can lead to better firm performance and with Ferreira and Matos (2008) who find that foreign investors are often associated with better firm-level corporate governance. However, our domestic institutional results are inconsistent with Aggarwal et al. (2015), who argue that independent Chinese institutions can serve as effective monitors to deter corporate fraud. We find that the presence of domestic institutions in China is associated with lower firm performance. Lastly, we explore the issue of whether having multiple types of large shareholders is associated with lower or higher agency costs compared to having different types of investors. We find that having the same types of shareholders is better. We conclude that similar investors have similar incentives and understand and communicate better. Thus, they can coordinate performance enhancing monitoring of management and each other.

The lowest level of the ownership structure pecking order is having a single non-controlling shareholder. This investor may benefit more from expropriating wealth from minority shareholders than maximizing shareholder value. We also find that the agency costs are particularly high when the single non-controlling shareholder is the government.

Finally, we explore the issue of agency costs and ownership structure within the context of related party transactions (RPTs). The literature notes that RPTs can be performance destroying (through tunneling) or enhancing (through achieving economies of scale and efficient resource allocation). We find that whether RPTs are performance destroying or enhancing depend on the firm's ownership structure. Our results suggest that single controlling shareholders can use RPTs for performance enhancing activities. But the ownership structures further down the pecking order appear to use RPTs for performance destroying activities.

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