OWNERSHIP CONCENTRATION IMPACT ON THE FIRM PERFORMANCE: EVIDENCE FROM THE MANUFACTURING AND SERVICES INDUSTRIAL SECTOR

Hamza Naim [*], Lata Rani [**], Ahmad Omair [**], Tariq Aziz [***], Gouher Ahmed [****], Aqila Rafiuddin [*****]

* Corresponding author, K. R. Mangalam University, Gurugram, India
Contact details: K. R. Mangalam University, Sohna — Gurgaon Rd, Sohna Rural, Gurugram, Haryana 122103, India
** Delhi Skill and Entrepreneurship University, Delhi, India
*** Department of Business Administration, Faculty of Management Studies and Research, Aligarh Muslim University, Aligarh, India
**** Skyline University College, Sharjah, UAE; Academy of Global Business Research and Practice, East Hanover, NJ, USA
***** Global Visiting Faculty, Tecnológico de Monterrey, Monterrey, Mexico

Abstract

The influence of the ownership concentration components of the manufacturing and service companies listed on the Indian National Stock Exchange (NSE) 500 Index is examined in this study. The utilization of stronger regression methods including the ordinary least square (OLS) regression and fixed effects model (FEM) along with the random effects model (REM) indicate that the shares held by the promoter corporate bodies and Indian and foreign promoters did not significantly affect the overall performance of the firm (as measured by Tobin's Q and return on assets (ROA)). However, the performance of the company as a whole is negatively impacted by the shares pledged by the promoter corporate bodies, as well as by the foreign and Indian promoters (as evaluated by Tobin's Q and ROA). These shareholdings are used as security by the promoters to reduce their costs and this has been reflected in the shareholdings of the promoters.

Keywords: Ownership Concentration, Firm Performance, Tobin's Q, ROA, India, Promoters

Authors' individual contribution: Conceptualization — H.N. and T.A.; Methodology — H.N.; Software — A.O.; Validation — L.R. and A.O.; Formal Analysis — L.R.; Investigation — H.N.; Data Curation — A.O.; Writing — Original Draft — H.N.; Writing — Review & Editing — T.A.; Visualization — T.A.; Supervision — G.A. and A.R.; Project Administration — G.A. and A.R.; Funding Acquisition — G.A. and A.R.

Declaration of conflicting interests: The Authors declare that there is no conflict of interest.

1. INTRODUCTION

The lack of development in human capital and financial markets in emerging nations like India is mostly to blame for the lax legal and regulatory framework that results from this. Furthermore, the growing impact of related party transactions (RPTs) on corporate groupings with concentrated ownership gives rise to opportunistic profit management, which in turn gives rise to fraudulent behaviours. There are ways to address the issue raised above. For example, as businesses expand internationally, foreign investors become increasingly important in observing managers and recommending tactical moves through collaboration with upper management, shareholder activism, and their extensive networks and explicit knowledge. All of these factors eventually drive up a company's stock price (Agnihotri & Bhattacharya, 2019). Additionally, foreign institutional investors, with their extensive knowledge of risk-return trade-offs in global cultures settings, could guide the family or business groups and enhance the performance of the companies through the outflow of foreign direct investment.

Likewise, in order to comply with the regulations set forth by the Chinese Securities Exchange Commission (CSRC), the corporate group will usually designate one of its larger companies and separate undesirable assets from it. Prior to disclosing RPTs in required disclosures, the firm conducts business with the other group firms as it goes public (Fisman & Wang, 2010). As a result, propping and tunnelling seem to rely on the needs of the company in reaction to RPTs and how they might be used and adjusted.

In many respects, the current study adds to the body of previous material. First off, such a broad categorization of ownership concentration was not covered in earlier research. Second, the panel data created for the ownership concentration components includes the year prior to 2013 as well as the period following the Companies Act of 2013's passage. In addition, sophisticated fixed effects model (FEM)/random effects model (REM) and ordinary least square (OLS) regression approaches have been applied to the data analysis to eliminate unobserved heterogeneity seen in the panel data. The findings imply that the business performance (as determined by Tobin's Q and return on assets (ROA)) is significantly impacted negatively by the shares pledged by both foreign and Indian promoters as well as by the promoter's corporate bodies while shares held by the promoters as well as by the promoter corporate bodies didn't have any significant impact on the firm performance.

The rest of the paper is divided into 5 sections. Section 2 covers the literature review for ownership concentration and its impact on the firm performance. Section 3 identifies the data and research methodology and subsequently Section 4 examines the empirical results of the study. Finally, Section 5 includes the discussion and Section 6 presents conclusions from the study.

2. LITERATURE REVIEW

The influence of ownership concentration on the success of the company is significant. RPTs have been found to have a negative, significant influence on internationalization in India, based on a sample of 367 manufacturing enterprises. Business group ownership amplifies this negative link, whereas foreign shareholding decreases it (Agnihotri & Bhattacharya, 2019). Similar circumstances are seen in Chinese corporate organizations with pyramidal organizational structures (Fisman & Wang, 2010). In order to comply with the CSRC standards, even in the absence of highly established financial markets, corporate groups usually identify one of their best enterprises and then spin off any problematic assets from that firm. The company usually keeps up its business relationships with other group companies as before after going public showing up as RPTs in mandated disclosures.

According to Li et al. (2015), prior research has also shown that high ownership concentration has a moderating effect on board performance, however, this effect varies depending on the ownership types and institutional environment of the nation. Between 2003 and 2008, the effect of board independence on the performance of the company increased as ownership concentration in China decreased. In the Indian context, however, a high founder ownership level strengthens the link between corporate governance and firm performance. Improved business performance results from better governance, which reduces self-dealing by controlling shareholders (Chauhan et al., 2016). Furthermore, it has been seen that dominant owners may abuse RPTs and other financial statements, as was the case in Indonesia (Ernawati & Aryani, 2019).

If the majority shareholders utilize ownership concentration and RPTs as a means of seizing the wealth of minority stakeholders, there may also be a conflict of interest in the case (P C et al., 2019). Furthermore, tunnelling is the word used to describe the practice of firms redirecting the resources they earn from their activities to their primary owners and affiliates. This tendency is particularly noticeable for enterprises under group management. Furthermore, the RPTs have been identified as "red flags" that indicate possible financial misrepresentation in studies done for S&P 1500 companies in 2001, 2004, and 2007 (Kohlbeck & Mayhew, 2017). Tobin's Q and market-to-book equity results, for example, with the RPTs in China indicate that the market lowers the share prices of these enterprises, implying that the market perceives loans as tunneling (Jian & Wong, 2010).

The cash flow rights granted to the company's promoters and shareholders increase with ownership concentration, and increased ownership concentration expedites RPTs (Chen & Wu, 2010). The more ownership concentration there is, the more favourably it is correlated with RPTs; RPTs mostly arise when the agency problem gets worse and is used to tunnel, which reduces firm value (Kang et al., 2014; Wan & Wong, 2015). Nonetheless, the influence of RPTs on company performance in Israel is represented by a non-linear inverted U-shaped curve, which suggests that it is consistent with the globally reported Inverted U-shaped quadratic link between RPTs and firm performance as determined by Tobin's Q (Amzaleg & Barak, 2011).

According to AlHadab et al. (2020), ownership structure has a favourable correlation with the success of the firm when it comes to publicly

traded Jordanian industrial companies. According to our analysis, there are two types of ownership concentration: shares pledged and held by foreign and Indian promoters, respectively. Additionally, we took into account the shares that both foreign and Indian promoter corporate organizations held and pledged. So, our conjectures for this section comprise the following: the percentage of shares held by the promoters, the percentage of shares pledged by both Indian and foreign promoters, and the percentage of shares held and pledged by Indian promoter corporate bodies as well as by the foreign promoter corporate bodies.

The different significant hypotheses are grouped into two categories:

H1: The shares held by the promoters do not significantly impact the firm's performance.

H2: The shares pledged by the promoters do not significantly impact the firm's performance.

3. DATA AND RESEARCH METHODOLOGY

The Indian National Stock Exchange (NSE) 500 Index served as the study's sample. The maximum free-float market capitalization of 96.1% as of March 29, 2019, is the sample selected for the study. Therefore, market capitalization is used to establish the size of the sample that was selected for the study. 152 of the 500 listed companies on the stock exchange have been placed in a separate category based on the type of ownership: these are companies under central or state government control, or they are in the financial sector (banking or financial services) and have different governing mechanisms than private companies (Haldar & Rao, 2011). Various different social and legal requirements are required by the former companies.

The manufacturing and services sector is made up of the remaining 348 private enterprises. 94 of the 348 businesses are in the services industry, and 254 are in the manufacturing sector. The manufacturing companies belong to diversified industrial sectors such as 3M India Ltd. belongs to plastic furniture, floorings and miscellaneous items, ABB India Ltd. belongs to the diversified machinery, ACC Ltd. belongs to cement industry and many more. Similarly, the services industrial sector also includes companies belonging to diversified segments such as 8K Miles Software Services Ltd. belonging to computer software, Adani Ports & Special Economic Zone Ltd. belonging to shipping transport infrastructure services and many more. Table 1 lists the variables used in the investigation. The Prowess IQ, CMIE (Centre for Monitoring Indian Economy), India, is the source of the variable data. The description and formulas for the variables used to calculate the variable are displayed in Table 1. For the NSE 500 Index sample, a panel data set including all corporate governance and company performance characteristics was arranged between 2012 and 2020. The dataset comprised annual data from 348 companies. The data is winsorized at the 1% and 99% levels, respectively, and the analysis is conducted using the program EViews 11 Student Version.

Table 1. Variable description

No.	Variables	Description
1	ATS	(Advertising expenditure / Total sales) * 100
2	LOGOA	Log of organizational age
3	LOGMC	Log of market capitalization
4	PSH	Percentage of shares held by the promoters
5	PSP	Percentage of shares pledged by the promoters
6	SHIP	Percentage of shares held by the Indian promoters
7	FPSH	Percentage of shares held by the foreign promoters
8	SHIPCB	Percentage of shares held by the Indian promoter corporate bodies
9	SHFPCB	Percentage of shares held by the foreign promoter corporate bodies
10	SPIP	Percentage of shares pledged by the Indian promoters
11	FPSP	Percentage of shares pledged by the foreign promoters
12	SPIPCB	Percentage of shares pledged by the Indian promoter corporate bodies
13	SPFPCB	Percentage of shares pledged by the foreign promoter corporate bodies
14	TARPTTA	Total amount of related party transactions / Total assets
15	TOBIN'S Q	$Tobin's\ Q = \dfrac{Equity\ Market\ Value(Market\ Cap)}{Book\ Value\ of\ Equity(Book\ value\ per\ share * No.\ of\ outstanding\ shares)} * 100$
16	ROA	Return on assets

Note: Table 1 shows the variable description for the different variables and how they are calculated.

According to Agnihotri and Bhattacharya (2019), the independent variables are the percentage of shares owned by the promoters (*PSH*) and the percentage of shares pledged by the promoters (*PSP*). The variables are separated into four nominal dimensions in each of these two major categories. For example, under *PSH*, it refers to the following: shares held by foreign promoters (*FPSH*), Indian promoters (*SHIP*), Indian promoter corporate bodies (*SHIPCB*), and foreign promoter corporate bodies (*SHFPCB*). Pledged shares from foreign promoters (*SPFP*), Indian promoter corporate bodies (*SPIPCB*), foreign promoter corporate bodies (*SPFPCB*), and Indian promoter corporate bodies (*SPIP*) fall under the *PSP* category.

Log of organizational age (*LOGOA*), advertising expenditure / total sales (*ATS*), and log of market capitalization (*LOGMC*) are the controlling variables as used by Agnihotri and Bhattacharya (2019). Since there was a greater than 0.75 correlation between total assets and the total amount of related party transactions / total assets (*TARPTTA*) in the instance of company size, we utilized market capitalization as a stand-in indicator for controlling variables and discarded total assets as the measure of firm size. According to Agnihotri and Bhattacharya (2019), the dependent variables are *ROA* and *TOBIN'S Q*. The ratio's description may be found in the variable description. Table 2 contains the descriptive statistics for the factors listed above.

Table 2. Descriptive statistics

Variables	Mean	Median	Maximum	Minimum	Std. dev.	Skewness	Kurtosis	Observations
TOBIN'S Q	7.533	3.656	105.101	0.311	13.100	4.666	29.129	2513
ROA	7.836	6.700	36.161	-14.009	7.757	0.755	4.438	2629
ATS	1.881	0.746	18.141	0.001	2.957	2.932	13.158	1339
LOGMC	24.811	24.650	29.788	19.264	1.483	0.295	3.210	2368
LOGOA	1.433	1.462	2.072	0.000	0.357	-1.096	5.052	3076
PSP	25.787	15.060	100.000	0.000	27.501	1.169	3.392	837
PSH	55.336	56.230	86.388	12.926	15.397	-0.448	2.549	2329
SHIP	46.107	49.550	82.615	0.000	21.956	-0.668	2.673	2179
SPIP	14.924	1.330	98.740	0.000	24.921	1.846	5.440	1056
FPSP	6.076	0.000	100.000	0.000	18.260	3.393	14.077	314
FPSH	17.817	0.140	78.271	0.000	26.598	1.151	2.690	1587
SHIPCB	35.398	37.710	80.326	0.000	21.724	-0.096	1.992	1729
SPFPCB	7.383	0.000	100.000	0.000	21.425	3.001	10.876	234
SPIPCB	18.509	1.750	99.883	0.000	28.456	1.524	4.095	847
SHFPCB	40.832	50.590	81.096	0.000	27.218	-0.161	1.516	637

Note: Table 2 shows the descriptive statistics of the different variables taken in the study.

For organizational age, there were up to 3076 observations, and for shares pledged by foreign promoter corporate bodies, there were at least 234 observations. The lack of ownership concentration data is the reason for the data's dispersed nature. To improve the symmetry of the data, the log has been applied to organizational age and market capitalization. Organizational age is measured in years, while market capitalization is expressed in millions. The market capitalization falls between 232.4 million to 8641224 million Indian rupees. Since the 2012 data-gathering period, organizational age has ranged from a maximum of 118 years to 0 years.

Advertising expenses / sales (*ATS*), shares held (*PSH*), shares pledged (*PSP*), shares pledged by the foreign promoters (*FPSH*), shares pledged by the Indian promoters (*SPIP*), shares pledged by the foreign promoters (*SPFP*), shares held by the Indian promoter corporate bodies (*SHIPCB*), shares held by the foreign promoter corporate bodies (*SHFPCB*), shares pledged by the Indian promoter corporate bodies (*SPIPCB*), shares pledged by the Indian promoter corporate bodies (*SPIPCB*), shares pledged by the foreign promoter corporate bodies (*SPFPCB*), and *TOBIN'S Q* are expressed as percentages.

Table A.1 (see Appendix) shows the Pearson correlation coefficient matrix for the above-enumerated variables. Table A.1 (see Appendix) shows a high degree of correlation between the ownership concentration variables and the market constituents. For instance, market capitalization and Tobin's Q correlate with nearly all the variables with a lesser degree of correlation, i.e., less than 0.75. Similarly, shares held by Indian promoters are highly correlated with the percent of shares held with 0.613 degrees of correlation, and shares pledged by Indian promoters and foreign promoters are also showing a high degree of correlation with the percent of shares pledged with 0.804 and 0.842 degrees of correlation. Therefore, we have also taken these variables separately in the regression equation. However, all the other variables show a low degree of correlation in Table A.1 (see Appendix).

4. EMPIRICAL RESULTS

4.1. Step-wise regression estimates

This subsection presents OLS regression estimates. A regression of the following form and its nested versions are estimated and shown in Table A.2 (see Appendix):

$$TOBIN'S\ Q_{it} = \alpha + \beta_1 * ATS_{it} + \beta_2 * LOGMC_{it} + \beta_3 * LOGOA_{it} + \beta_4 * X_{it} + \varepsilon \tag{1}$$

$$ROA_{it} = \alpha + \beta_1 * ATS_{it} + \beta_2 * LOGMC_{it} + \beta_3 * LOGOA_{it} + \beta_4 * X_{it} + \varepsilon \tag{2}$$

where, *TOBIN'S Q* and *ROA* are the dependent variables, α and β are the regression coefficients, *i* and *t* correspond to the *i*th term in period *t* and *ATS*, *LOGMC* and *LOGOA* are the controlling variables. *X* refers to the different independent variables taken in the study. ε is the error term.

Table A.2 (see Appendix) shows that whereas shares owned by foreign promoters had a positive significant impact on the business performance, shares held by Indian promoters had a negative significant impact (as determined by Tobin's Q). The other independent factors have no bearing on the performance of the company, but the controlling variables are all favourably significant. According to Table A.3 (see Appendix), the firm's performance is significantly improved by the shares held by foreign promoters as well as by the promoters overall, whereas the firm's performance is negatively impacted by the shares pledged by the promoters overall (as determined by ROA).

Even after additional categorization, the Indian and foreign promoters' pledged shares significantly harmed the company's performance. The controlling variables have a positive significant influence on the firm performance except organizational age which hampered the firm performance as the organization matured. Now, as the step-wise regression approach tells us the independent impact of the variables on the firm performance, we could also examine its cumulative impact on the firm performance. So, we classified the ownership concentration under different sections represented by the following equations shown below:

$$TOBIN'S\ Q_{it} = \alpha + \beta_1 * ATS_{it} + \beta_2 * LOGMC_{it} + \beta_3 * LOGOA_{it} + \beta_4 * PSH_{it} + \beta_5 * PSP_{it} + \varepsilon \quad (3)$$

$$TOBIN'S\ Q_{it} = \alpha + \beta_1 * ATS_{it} + \beta_2 * LOGMC_{it} + \beta_3 * LOGOA_{it} + \beta_4 * SHIP_{it} + \beta_5 * FPSH_{it} + \varepsilon \quad (4)$$

$$TOBIN'S\ Q_{it} = \alpha + \beta_1 * ATS_{it} + \beta_2 * LOGMC_{it} + \beta_3 * LOGOA_{it} + \beta_4 * SPIP_{it} + \beta_5 * FPSP_{it} + \varepsilon \quad (5)$$

$$ROA_{it} = \alpha + \beta_1 * ATS_{it} + \beta_2 * LOGMC_{it} + \beta_3 * LOGOA_{it} + \beta_4 * PSH_{it} + \beta_5 * PSP_{it} + \varepsilon \quad (6)$$

$$ROA_{it} = \alpha + \beta_1 * ATS_{it} + \beta_2 * LOGMC_{it} + \beta_3 * LOGOA_{it} + \beta_4 * SHIP_{it} + \beta_5 * FPSH_{it} + \varepsilon \quad (7)$$

$$ROA_{it} = \alpha + \beta_1 * ATS_{it} + \beta_2 * LOGMC_{it} + \beta_3 * LOGOA_{it} + \beta_4 * SPIP_{it} + \beta_5 * FPSP_{it} + \varepsilon \quad (8)$$

The aforementioned formulas looked at the overall effect of ownership concentration on the firm's performance as determined by *ROA* and *TOBIN'S Q*, respectively. The findings imply that shares held by the promoters had no discernible effect on the firm performance overall or in any particular area in Table A.4 (see Appendix) when the FEM/REM model replaced the OLS model in examining the impact on the firm performance (measured by Tobin's Q), avoiding unobserved heterogeneity. The performance of the company as a whole, as well as the performance of the Indian and foreign promoter groups separately, are adversely affected by the shares pledged by the promoters. Furthermore, neither of the models in Table A.5 (see Appendix) explains the meaningful impact of ownership concentration on the firm performance (measured by ROA).

4.2. Robustness check

The FEM and REM specification are displayed in Tables 6 and 7, along with improved and more justified model fit R squared (%) findings. In order to eliminate the bias caused by omitted factors and primarily control the effects of unmeasured variables, we employed the FEM. Subsequently, we employed the identical methodology to investigate the influence of the shares held and pledged by foreign and Indian promoter corporate bodies on the performance of the firm, as determined by *TOBIN'S Q* and *ROA*. The following equations illustrate the procedure mentioned as follows:

$$TOBIN'S\ Q_{it} = \alpha + \beta_1 * ATS_{it} + \beta_2 * LOGMC_{it} + \beta_3 * LOGOA_{it} + \beta_4 * X_{it} + \varepsilon \quad (9)$$

$$ROA_{it} = \alpha + \beta_1 * ATS_{it} + \beta_2 * LOGMC_{it} + \beta_3 * LOGOA_{it} + \beta_4 * X_{it} + \varepsilon \quad (10)$$

$$TOBIN'S\ Q_{it} = \alpha + \beta_1 * ATS_{it} + \beta_2 * LOGMC_{it} + \beta_3 * LOGOA_{it} + \beta_4 * SHIPCB_{it} + \beta_5 * SHFPCB_{it} + \varepsilon \quad (11)$$

$$TOBIN'S\ Q_{it} = \alpha + \beta_1 * ATS_{it} + \beta_2 * LOGMC_{it} + \beta_3 * LOGOA_{it} + \beta_4 * SPIPCB_{it} + \beta_5 * SPFPCB_{it} + \varepsilon \quad (12)$$

$$ROA_{it} = \alpha + \beta_1 * ATS_{it} + \beta_2 * LOGMC_{it} + \beta_3 * LOGOA_{it} + \beta_4 * SHIPCB_{it} + \beta_5 * SHFPCB_{it} + \varepsilon \quad (13)$$

$$ROA_{it} = \alpha + \beta_1 * ATS_{it} + \beta_2 * LOGMC_{it} + \beta_3 * LOGOA_{it} + \beta_4 * SPIPCB_{it} + \beta_5 * SPFPCB_{it} + \varepsilon \quad (14)$$

We further examined the effect of shares held and pledged by the Indian and foreign promoter corporate bodies on the performance of the companies. Table A.6 (see Appendix) shows that robust results of FEM/REM regression techniques indicate that the shares pledged by the Indian promoter corporate bodies have a negative significant impact on the firm performance (as measured by Tobin's Q) (Model 8). Nonetheless, Table A.7's (see Appendix) strong FEM/REM regression results imply that the shares pledged and owned by the foreign and Indian promoter corporate bodies had no appreciable effect on the overall profitability of the company as determined by ROA.

Additionally, the results showed that the Indian promoter corporate bodies' shareholding had a negative significant impact on the companies' performance. The organizational age in Tables A.6 and A.7 produced inconsistent findings, however, the *LOGMC* and *ATS* were positively significant among the controlled factors.

5. DISCUSSION

As per the earlier studies, the ownership concentration measures have a negative significant impact on the firm performance (Agnihotri & Bhattacharya, 2019; Fisman & Wang, 2010). However, some studies concluded that the ownership concentration has a moderating effect on the board performance but it varies depending upon the type of ownership structures and the institutional environment of the nation (Li et al., 2015). However, in the Indian context, high founder ownership strengthens the link between corporate governance and firm performance but this was not observed in the present study. Rather, in the present study it is observed that shares held by the Indian and foreign promoters didn't have any significant impact on the firm performance as measured by the market measure of firm performance (Tobin's Q) as well as by the accounting measure of firm performance (ROA).

Moreover, the shares pledged by the Indian promoters and foreign promoters have a negative significant impact on the firm performance (as measured by Tobin's Q and ROA). The results obtained in the present study have been confirmed by the earlier studies implying that the ownership concentration measures reduce the firm value through tunneling (P C et al., 2019; Kohlbeck & Mayhew, 2017; Jian & Wong, 2010; Chen & Wu, 2010; Kang et al., 2014; Wan & Wong, 2015) but still the results are somewhat different from these studies as a detailed classification of the ownership concentration components has not been done earlier. Some of the earlier studies stated that the ownership concentration measures have a favourable correlation with the firm value but this has not been observed in the present study and the results of the present study are in contrast to these earlier findings (AlHadab et al., 2020; Agnihotri & Bhattacharya, 2019). Moreover, the results show that the ownership concentration components reduce the firm value of the Indian companies which could have been due to the large business and corporate houses in India in which the promoters may have been pledging the shares as collateral for their personal investments. However, in the long run, these defects may be removed due to the implementation of the corporate governance

policies (as per amendments in the Companies Act of 2013) at the root level as it takes time for the policies to be implemented at a large nationwide level.

Moreover, in the present study, the ownership concentration measures have been classified and studied in detail and this classification of the ownership concentration measures into Indian and foreign promoters as well as considering the shares held and pledged by the Indian and foreign promoter corporate bodies has not been done earlier. This ownership concentration measures classification and further examining their impact on the firm performance have not been done earlier as per the literature review. Hence, the present study adds to the existing literature with a detailed classification of the ownership concentration measures and their impact on the firm performance as evaluated by the market measure of firm performance (Tobin's Q) as well as by the accounting measure of firm performance (ROA).

6. CONCLUSION

The findings show that the Indian promoters' and corporate bodies' pledged shares have a detrimental effect on the performance of the company, as demonstrated by the negative substantial impact on both ROA and Tobin's Q. Similar to this, the shares pledged by foreign promoters and foreign promoter corporate bodies also have a detrimental effect on the success of the company, as demonstrated by Tobin's Q and overall ROA measurements. The aforementioned finding unequivocally indicates

that ownership or pledge of shares by Indian promoters or Indian promoter corporate bodies, whether self-employed or part of a family business group, negatively impacts the performance of the company. Comparable findings are noted with regard to foreign promoters or foreign promoter corporate bodies.

In this case, the acts of propping or tunnelling demonstrate how the foreign group's controlling stockholders take personal advantage of the business. The performance of the company was not significantly impacted by the shares held by the promoter corporate bodies, foreign and Indian promoters, or both.

Additionally, the Indian setting does not exhibit the internationalization effect at the expense of foreign ownership, which is in contrast to an earlier study on internationalization (Agnihotri & Bhattacharya, 2019). Foreign ownership seeks to give businesses access to resources, both financial and otherwise, in order to improve business performance in a manner akin to Chinese research (Jian & Wong, 2010).

Finally, because our analysis is limited to the manufacturing and services sectors alone, it has several limitations. Second, the Prowess IQ did not contain information regarding the meeting minutes or the voting rights of the audit committee's independent directors and shareholders. As of March 25, 2021, a change to the SEBI (Listing and Disclosure Requirements) Regulations, 2015 made the database available in India as well. As a result, the topic is ongoing, and there are several opportunities for development.

REFERENCES

Agnihotri, A., & Bhattacharya, S. (2019). Internationalization, related party transactions, and firm ownership structure: Empirical evidence from an emerging market. *Research in International Business and Finance, 48*, 340–352. https://doi.org/10.1016/j.ribaf.2019.02.004

Alhadab, M., Abdullatif, M., & Mansour, I. (2020). Related party transactions and earnings management in Jordan: The role of ownership structure. *Journal of Financial Reporting and Accounting, 18*(3), 505–531. https://doi.org/10.1108/JFRA-01-2019-0014

Amzaleg, Y., & Barak, R. (2011). *Ownership concentration and the value effect of related party transactions.* https://doi.org/10.2139/ssrn.1959557

Chauhan, Y., Lakshmi, K. R., & Dey, D. K. (2016). Corporate governance practices, self-dealings, and firm performance: Evidence from India. *Journal of Contemporary Accounting & Economics, 12*(3), 274–289. https://doi.org/10.1016/j.jcae.2016.10.002

Chen, C.-W., & Wu, C. (2010). *Related party transactions and ownership concentration: Theory and evidence* [Paper presentation]. E-Leader Conference 2010, Singapore. https://www.g-casa.com/conferences/singapore/papers_in_pdf/wed/Chen.pdf

Ernawati, D., & Aryani, Y. A. (2019). Controlling shareholders, audit committee characteristics, and related party transaction disclosure: Evidence from Indonesia. *Jurnal Keuangan dan Perbankan, 23*(1), 14–28. https://doi.org/10.26905/jkdp.v23i1.2701

Fisman, R., & Wang, Y. (2010). Trading favors within Chinese business groups. *American Economic Review, 100*(2), 429–433. https://doi.org/10.1257/aer.100.2.429

Haldar, A., & Rao, S.V. D. N. (2011). Empirical study on ownership structure and firm performance. *Indian Journal of Corporate Governance, 4*(2), 27–34. https://doi.org/10.1177/0974686220110203

Jian, M., & Wong, T. J. (2010). Propping through related party transactions. *Review of Accounting Studies, 15*, 70–105. https://doi.org/10.1007/s11142-008-9081-4

Kang, M., Lee, H.-Y., Lee, M.-G., & Park, J. C. (2014). The association between related-party transactions and control-ownership wedge: Evidence from Korea. *Pacific-Basin Finance Journal, 29*, 272–296. https://doi.org/10.1016/j.pacfin.2014.04.006

Kohlbeck, M., & Mayhew, B. W. (2017). Are related party transactions red flags? *Contemporary Accounting Research, 34*(2), 900–928. https://doi.org/10.1111/1911-3846.12296

Li, K., Lu, L., Mittoo, U. R., & Zhang, Z. (2015). Board independence, ownership concentration and corporate performance — Chinese evidence. *International Review of Financial Analysis, 41*, 162–175. https://doi.org/10.1016/j.irfa.2015.05.024

P C, A. R., Mallikarjunappa, T., & Thomachan, K. T. (2019). Promoter ownership, related party transactions and firm performance: A study among selected companies in India. *FIIB Business Review, 8*(3), 205–217. https://doi.org/10.1177/2319714519834400

Wan, Y., & Wong, L. (2015). Ownership, related party transactions and performance in China. *Accounting Research Journal, 28*(2), 143–159. https://doi.org/10.1108/ARJ-08-2013-0053

APPENDIX

Table A.1. Correlation matrix

Variables (T-statistics) (Probability)	TOBINS'Q	ROA	ATS	LOGMC	LOGOA	PSP	PSH	SHIP	SPIP	FPSP	FPSH	SHIPCB	SPFPCB	SPIPCB	SHFPCB
TOBINS'Q	1.000 ---- ----	-0.023 -0.086 0.933	0.646 3.168 0.007 ***	0.751 4.260 0.001 ***	-0.263 -1.020 0.325	-0.635 -3.076 0.008 ***	-0.009 -0.032 0.975	-0.399 -1.629 0.126	-0.407 -1.668 0.118	-0.677 -3.440 0.004 ***	0.480 2.048 0.060 *	-0.213 -0.815 0.429	-0.679 -3.458 0.004 ***	-0.414 -1.700 0.111	0.557 2.508 0.025 **
ROA		1.000 --- ---	0.406 1.664 0.118	0.189 0.720 0.483	0.049 0.185 0.856	-0.248 -0.958 0.354	-0.091 -0.340 0.739	0.420 1.731 0.106	-0.449 -1.879 0.081 *	-0.315 -1.242 0.235	-0.591 -2.740 0.016 **	0.323 1.278 0.222	-0.335 -1.332 0.204	-0.450 -1.883 0.081 *	-0.540 -2.403 0.031 **
ATS			1.000 --- ---	0.598 2.794 0.014 **	-0.067 -0.251 0.805	-0.650 -3.198 0.006 ***	0.227 0.873 0.398	0.034 0.128 0.900	-0.651 -3.210 0.006 ***	-0.687 -3.542 0.003 ***	0.219 0.839 0.416	0.159 0.601 0.558	-0.687 -3.540 0.003 ***	-0.662 -3.307 0.005 ***	0.297 1.162 0.265
LOGMC				1.000 --- ---	-0.201 -0.769 0.455	-0.285 -1.113 0.285	-0.164 -0.622 0.544	-0.425 -1.756 0.101	-0.031 -0.118 0.908	-0.463 -1.956 0.071 *	0.350 1.400 0.183	0.055 0.207 0.839	-0.471 -1.995 0.066 *	-0.043 -0.161 0.874	0.417 1.717 0.108
LOGOA					1.000 --- ---	0.120 0.452 0.658	0.081 0.303 0.766	0.340 1.354 0.197	0.068 0.255 0.802	0.022 0.081 0.937	-0.326 -1.290 0.218	0.313 1.235 0.237	0.094 0.353 0.729	0.069 0.257 0.801	-0.334 -1.327 0.206
PSP						1.000 --- ---	-0.158 -0.599 0.559	-0.103 -0.387 0.705	0.804 5.065 0.000 ***	0.842 5.834 0.000 ***	-0.051 -0.189 0.853	0.187 0.713 0.487	0.846 5.941 0.000 ***	0.807 5.114 0.000 ***	-0.145 -0.548 0.592
PSH							1.000 --- ---	0.613 2.902 0.012 **	-0.249 -0.963 0.352	0.213 0.817 0.427	0.294 1.150 0.270	0.584 2.693 0.018 **	0.164 0.624 0.543	-0.256 -0.991 0.339	0.305 1.200 0.250
SHIP								1.000 --- ---	-0.388 -1.575 0.138	0.195 0.745 0.469	-0.575 -2.628 0.020 **	0.681 3.484 0.004 ***	0.176 0.671 0.513	-0.386 -1.567 0.139	-0.559 -2.519 0.025 **
SPIP									1.000 --- ---	0.685 3.513 0.003 ***	0.194 0.740 0.472	0.044 0.163 0.873	0.686 3.524 0.003 ***	1.000 200.938 0.000 ***	0.115 0.432 0.672
FPSP										1.000 --- ---	-0.031 -0.116 0.909	0.378 1.530 0.148	0.991 28.061 0.000 ***	0.689 3.553 0.003 ***	-0.125 -0.472 0.644
FPSH											1.000 --- ---	-0.220 -0.844 0.413	-0.058 -0.216 0.832	0.185 0.703 0.494	0.993 32.091 0.000 ***
SHIPCB												1.000 --- ---	0.360 1.443 0.171	0.039 0.146 0.886	-0.225 -0.863 0.403
SPFPCB													1.000 --- ---	0.690 3.569 0.003 ***	-0.154 -0.584 0.569
SPIPCB														1.000 --- ---	0.105 0.394 0.700
SHFPCB															1.000 --- ---

Note: Table A.1 shows the Pearson correlation coefficient matrix for the variables under study. *, **, and *** show the level of significance for 1%, 5%, and 10% significance, respectively.

Table A.2. Ordinary least square regression (Tobin's Q)

Dependent variable: TOBIN'S Q	Model 1 (T-statistics) (Probability)	Model 2 (T-statistics) (Probability)	Model 3 (T-statistics) (Probability)	Model 4 (T-statistics) (Probability)	Model 5 (T-statistics) (Probability)	Model 6 (T-statistics) (Probability)
PSH	0.023 (1.204) (0.229)					
PSP		-0.021 (-1.258) (0.209)				
SHIP			-0.040 (-2.744) (0.006) ***			
FPSH				0.047 (2.415) (0.016) **		
SPIP					0.014 (01.031) (0.303)	
FPSP						-0.008 (-0.277) (0.782)
ATS	0.877 (9.133) (0.000) ***	0.414 (2.896) (0.004) ***	0.872 (8.915) (0.000) ***	1.065 (7.743) (0.000) ***	0.404 (3.668) (0.000) ***	0.980 (6.635) (0.000) ***
LOGOA	1.853 (1.914) (0.056) *	-1.299 (-0.706) (0.481)	1.394 (1.397) (0.163)	1.009 (0.643) (0.521)	-0.029 (-0.025) (0.980)	-3.209 (-1.565) (0.121)
LOGMC	2.003 (9.939) (0.000) ***	2.125 (6.327) (0.000) ***	1.815 (8.688) (0.000) ***	1.746 (5.255) (0.000) ***	1.753 (7.296) (0.000) ***	1.407 (3.600) (0.001) ***
Intercept	-48.915 (-9.216) (0.000) ***	-45.020 (-5.116) (0.000) ***	-40.339 (-7.233) (0.000) ***	-40.163 (-4.603) (0.000) ***	-38.795 (-6.274) (0.000) ***	-26.692 (-2.493) (0.014) **
Adjusted R squared (%)	17.485	13.586	16.404	15.693	12.667	42.066
Hausman test specification	No	No	No	No	No	No
Fixed effect model	No	No	No	No	No	No
Random effect model	No	No	No	No	No	No
No. of observations	1066	379	1019	670	506	118

*Note: Table A.2 shows the OLS estimates concerning Tobin's Q as the dependent variable. *, **, and *** show the level of significance for 1%, 5%, and 10% significance, respectively.*

Table A.3. Ordinary least square regression (ROA)

Dependent variable: ROA	Model 1 (T-statistics) (Probability)	Model 2 (T-statistics) (Probability)	Model 3 (T-statistics) (Probability)	Model 4 (T-statistics) (Probability)	Model 5 (T-statistics) (Probability)	Model 6 (T-statistics) (Probability)
PSH	0.031 (2.174) (0.030) **					
PSP		-0.098 (-7.529) (0.000) ***				
SHIP			0.002 (0.190) (0.850)			
FPSH				0.037 (3.039) (0.003) ***		
SPIP					-0.098 (-8.832) (0.000) ***	
FPSP						-0.115 (-3.108) (0.002) ***
ATS	0.488 (6.777) (0.000) ***	0.439 (3.818) (0.000) ***	0.467 (6.391) (0.000) ***	0.657 (7.775) (0.000) ***	0.324 (3.395) (0.001) ***	0.727 (3.615) (0.000) ***
LOGOA	-1.338 (-1.859) (0.063) *	-3.117 (-2.362) (0.019) **	-1.906 (-2.588) (0.009) ***	-1.728 (-1.798) (0.073) *	-2.901 (-2.875) (0.004) ***	-4.798 (-1.716) (0.089) *
LOGMC	1.473 (9.768) (0.000) ***	1.541 (5.695) (0.000) ***	1.431 (9.195) (0.000) ***	1.411 (6.988) (0.000) ***	1.344 (6.453) (0.000) ***	1.105 (2.113) (0.037) **
Intercept	-28.796 (-7.259) (0.000) ***	-25.685 (-3.686) (0.000) ***	-25.443 (-6.131) (0.000) ***	-25.722 (-4.863) (0.000) ***	-20.550 (-3.837) (0.000) ***	-12.122 (-0.852) (0.396)
Adjusted R squared (%)	13.923	24.603	12.411	18.855	20.237	23.684
Hausman test specification	No	No	No	No	No	No
Fixed effect model	No	No	No	No	No	No
Random effect model	No	No	No	No	No	No
No. of observations	1095	404	1049	689	525	123

Note: Table A.3 shows the OLS estimates concerning ROA as the dependent variable. *, **, and *** show the level of significance for 1%, 5%, and 10% significance, respectively.

Table A.4. Ordinary least square (FEM/REM) regression estimates of shares held and pledged by the promoters (Tobin's Q)

Dependent variable: TOBIN'S Q	Model 1 (T-statistics) (Probability)	Model 2 (T-statistics) (Probability)	Model 3 (T-statistics) (Probability)	Model 4 (T-statistics) (Probability)	Model 5 (T-statistics) (Probability)	Model 6 (T-statistics) (Probability)
PSH	0.075 (2.195) (0.029) **	0.059 (0.695) (0.488)				
PSP	-0.013 (-0.586) (0.558)	-0.087 (-2.368) (0.019) **				
SHIP			0.018 (0.481) (0.630)	-0.067 (-0.412) (0.680)		
FPSH			0.096 (2.330) (0.020) **	0.064 (0.372) (0.710)		
SPIP					0.020 (0.926) (0.357)	-0.163 (-3.822) (0.000) ***
FPSP					-0.086 (-3.315) (0.001) ***	-0.080 (-2.206) (0.032) **
ATS	0.335 (1.940) (0.053) *	0.138 (0.405) (0.686)	1.080 (6.130) (0.000) ***	2.450 (4.197) (0.000) ***	0.788 (5.645) (0.000) ***	1.299 (2.656) (0.011) **
LOGOA	-1.118 (-0.501) (0.617)	24.600 (2.026) (0.044) **	1.155 (0.609) (0.542)	51.466 (3.274) (0.001) ***	-4.053 (-1.867) (0.066) *	6.769 (0.477) (0.635)
LOGMC	2.246 (5.459) (0.000) ***	1.620 (1.909) (0.056) *	1.683 (4.010) (0.000) ***	0.446 (0.395) (0.693)	1.073 (3.467) (0.001) ***	1.469 (2.197) (0.033) **
Intercept	-51.821 (-4.649) (0.000) ***	-71.326 (-3.407) (0.001) ***	-39.589 (-3.529) (0.000) ***	-84.276 (-2.747) (0.006) ***	-17.159 (-2.013) (0.048) **	-41.342 (-2.113) (0.040) **
Adjusted R squared (%)	12.463	62.792	12.062	27.180	35.698	84.973
Hausman test specification	No	Yes (0.199)	No	Yes (0.002) ***	No	Yes (0.000) ***
Fixed effect model	No	No	No	Yes	No	Yes
Random effect model	No	Yes	No	No	No	No
No. of observations	302	302	619	619	86	86

*Note: Table A.4 shows the OLS estimates concerning Tobin's Q as the dependent variable. *, **, and *** show the level of significance for 1%, 5%, and 10% significance, respectively.*

Table A.5. Ordinary least square (FEM/REM) regression estimates of shares held and pledged by the promoters (ROA)

Dependent variable: ROA	Model 1 (T-statistics) (Probability)	Model 2 (T-statistics) (Probability)	Model 3 (T-statistics) (Probability)	Model 4 (T-statistics) (Probability)	Model 5 (T-statistics) (Probability)	Model 6 (T-statistics) (Probability)
PSH	0.091 (3.796) (0.000) ***	0.005 (0.112) (0.911)				
PSP	-0.106 (-7.017) (0.000) ***	-0.008 (-0.389) (0.697)				
SHIP			0.010 (0.553) (0.580)	-0.002 (-0.035) (0.972)		
FPSH			0.030 (1.382) (0.168)	0.015 (0.278) (0.781)		
SPIP					-0.127 (-3.348) (0.001) ***	0.016 (0.244) (0.808)
FPSP					0.013 (0.202) (0.840)	-0.049 (-0.889) (0.378)
ATS	0.246 (1.986) (0.048) **	-0.180 (-0.942) (0.347)	0.618 (6.789) (0.000) ***	-0.033 (-0.185) (0.853)	0.688 (3.059) (0.003) ***	-1.248 (-1.677) (0.099) *
LOGOA	-3.006 (-1.966) (0.050) *	-11.025 (-1.613) (0.108)	-2.113 (-2.143) (0.033) **	-20.161 (-4.267) (0.000) ***	-9.344 (-2.613) (0.011) **	-40.960 (-1.843) (0.071) *
LOGMC	1.492 (5.086) (0.000) ***	1.956 (4.143) (0.000) ***	1.424 (6.588) (0.000) ***	2.137 (6.436) (0.000) ***	0.632 (1.019) (0.311)	2.712 (2.742) (0.008) ***
Intercept	-28.363 (-3.572) (0.000) ***	-25.112 (-2.115) (0.035) **	-25.928 (-4.434) (0.000) ***	-14.298 (-1.591) (0.112)	7.237 (0.429) (0.669)	5.603 (0.186) (0.853)
Adjusted R squared (%)	26.556	78.914	16.394	81.925	28.723	88.314
Hausman test specification	No	Yes (0.049) **	No	Yes (0.004) ***	No	Yes (0.039) **
Fixed effect model	No	Yes	No	Yes	No	Yes
Random effect model	No	No	No	No	No	No
No. of observations	319	319	639	639	92	92

Note: Table A.5 shows the OLS estimates concerning ROA as the dependent variable. *, **, and *** show the level of significance for 1%, 5%, and 10% significance, respectively.

Table A.6. Ordinary least square (FEM/REM) regression estimates of shares held and pledged by the promoter corporate bodies (Tobin's Q)

Dependent variable: TOBIN'S Q	Model 1 (T-statistics) (Probability)	Model 2 (T-statistics) (Probability)	Model 3 (T-statistics) (Probability)	Model 4 (T-statistics) (Probability)	Model 5 (T-statistics) (Probability)	Model 6 (T-statistics) (Probability)
SHIPCB	-0.025 (-1.693) (0.091) *				-0.048 (-0.667) (0.506)	-0.028 (-0.312) (0.755)
SHFPCB		0.053 (1.609) (0.109)			-0.036 (-0.417) (0.677)	-0.025 (-0.242) (0.809)
SPIPCB			0.016 (1.492) (0.137)			
SPFPCB				0.038 (1.079) (0.285)		
ATS	0.711 (6.882) (0.000) ***	2.250 (9.097) (0.000) ***	0.420 (4.442) (0.000) ***	1.852 (6.716) (0.000) ***	2.804 (7.160) (0.000) ***	3.023 (6.369) (0.000) ***
LOGOA	1.499 (1.440) (0.150)	-4.774 (-1.663) (0.098) *	0.203 (0.199) (0.843)	-5.283 (-1.826) (0.073) *	-5.496 (-1.450) (0.150)	-2.924 (-0.551) (0.583)
LOGMC	1.854 (8.270) (0.000) ***	1.063 (1.936) (0.054) *	1.721 (8.412) (0.000) ***	1.365 (2.357) (0.022) **	0.810 (1.174) (0.243)	1.354 (1.484) (0.141)
Intercept	-42.609 (-7.307) (0.000) ***	-17.252 (-1.121) (0.264)	-38.898 (-7.083) (0.000) ***	-24.287 (-1.436) (0.156)	-8.360 (-0.427) (0.670)	-26.488 (-1.066) (0.289)
Adjusted R squared (%)	12.759	34.416	19.321	51.157	36.480	28.589
Hausman test specification	No	No	No	No	No	Yes (0.237)
Fixed effect model	No	No	No	No	No	No
Random effect model	No	No	No	No	No	Yes
No. of observations	833	223	401	65	123	123

Note: Table A.6 shows the OLS estimates concerning Tobin's Q as the dependent variable. *, **, and *** show the level of significance for 1%, 5%, and 10% significance, respectively.

Table A.7. Ordinary least square (FEM/REM) regression estimates of shares held and pledged by promoter corporate bodies (ROA)

Dependent variable: ROA	Model 1 (T-statistics) (Probability)	Model 2 (T-statistics) (Probability)	Model 3 (T-statistics) (Probability)	Model 4 (T-statistics) (Probability)	Model 5 (T-statistics) (Probability)	Model 6 (T-statistics) (Probability)
SHIPCB	-0.046 (-4.326) (0.000) ***				-0.071 (-1.934) (0.055) *	-0.030 (-0.639) (0.524)
SHFPCB		0.048 (2.608) (0.009) ***			-0.155 (-3.351) (0.001) ***	-0.020 (-0.364) (0.716)
SPIPCB			-0.074 (-7.187) (0.000) ***			
SPFPCB				-0.037 (-1.074) (0.287)		
ATS	0.486 (6.399) (0.000) ***	0.954 (6.785) (0.000) ***	0.453 (4.747) (0.000) ***	0.786 (2.702) (0.009) ***	1.260 (5.781) (0.000) ***	0.483 (1.928) (0.056) *
LOGOA	-1.659 (-2.180) (0.030) **	1.760 (1.077) (0.283)	-1.464 (-1.442) (0.150)	1.444 (0.487) (0.628)	-0.604 (-0.290) (0.773)	2.050 (0.614) (0.540)
LOGMC	1.261 (7.675) (0.000) ***	1.028 (3.378) (0.001) ***	1.261 (5.900) (0.000) ***	1.682 (2.940) (0.005) ***	0.650 (1.749) (0.083) *	0.835 (1.749) (0.083) *
Intercept	-20.642 (-4.837) (0.000) ***	-23.494 (-2.777) (0.006) ***	-21.934 (-3.961) (0.000) ***	-37.862 (-2.308) (0.024) **	-6.614 (-0.638) (0.524)	-15.720 (-1.232) (0.220)
Adjusted R squared (%)	12.336	32.184	21.253	32.603	20.625	2.007
Hausman test specification	No	No	No	No	No	Yes (0.089) *
Fixed effect model	No	No	No	No	No	No
Random effect model	No	No	No	No	No	Yes
No. of observations	862	230	423	69	131	131

*Note: Table A.7 shows the OLS estimates concerning Tobin's Q as the dependent variable. *, **, and *** show the level of significance for 1%, 5%, and 10% significance, respectively.*