Related Party Transactions, Family Firms, and Regulation: Evidence from India[1]

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Abstract

In recent years, Related Party Transactions (RPTs) have received considerable attention from regulators in India. The Securities and Exchange Board of India (Listing Obligations and Disclosure Requirements) Regulations 2018 emphasized the role of promoters as a related party, introduced stricter disclosure requirements, and expanded the ambit of audit committee. Using a sample of BSE (formerly Bombay Stock Exchange) listed firms for the period between 2011-12 and 2021-22, we assess the determinants of incidence and value of RPTs and the impact of the regulatory change in 2018. We find that 'total receipts or income' and 'total expenses or payments' account for most of the RPTs reported by BSE-listed firms. The manufacturing sector accounts for more than half of the RPTs. Promoter holding is associated with both a higher likelihood of RPTs and higher value of RPTs normalized by total assets. Business Groups are less likely to be involved in RPTs, but the value of their RPTs normalized by total assets is higher. We show that regulations reduced both the proportion of firms reporting RPTs as well as the mean value of RPTs normalized by total assets. The 2018 regulations also altered the distribution of RPTs in favour of beneficial RPTs. We also show that the regulatory reforms introduced in 2018 had a greater impact than the reforms of 2013 and 2015. We also find that an increase in reporting of RPTs involving firms with less than 20 per cent promoter holding after 2018. This possibly justifies the 2021 amendments to the LODR that reduce the threshold of promoter holding for the identification of related parties from 20 to 10 per cent.

Keywords: BSE, Business Group, Family Firm, India, Promoter, Regulation, Related Party Transactions, SEBI

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1.0 Introduction

Companies often engage with entities under their control or with familiar entities to substitute internal markets in order to reduce costs, increase efficiency and achieve optimal utilisation of resources. An RPT occurs in case of exchanges/transactions or deals between parties enjoying a pre-existing relationship, where either one of them has an interest in the other, exercises control over the other or both are controlled by the same entity. The transparency of pricing of assets being exchanged maybe questionable in such transactions because managers and controlling owners could expropriate wealth from minority shareholders (Cheung et al 2006, Berkman et al 2009). In his address at the National Academy of Audit and Accounts (NAAA), Shimla, the Governor of the Reserve Bank of India (RBI) drew attention to "instances of diversion of funds and / or transfer of profits to connected parties through various means – intra-group loans on favourable terms, over or under invoicing of transactions, asset transfers without fair valuation, etc" (Das 2021). He urged auditors "to identify and thoroughly scrutinise related or connected party transactions to ensure that there is no undue transfer of income or assets" (ibid).

However, RPTs can also be beneficial if they substitute internal markets resulting in cost savings, increased efficiency, and optimal utilisation of resources (Fisman and Khanna 2004). Consequently, RPTs need to be regulated but should not be banned. Many countries have adopted regulations to constrain expropriations through RPTs and protect minority shareholders.

RPTs are regulated in India by the Companies Act 2013, the Indian Accounting Standards (Ind AS 18) and the Securities and Exchange Board of India (SEBI) (Listing Obligations and Disclosure Requirements) Regulations (LODR). In 2018, following the recommendations of the Uday Kotak Committee, the SEBI expanded the definition of related party to include promoters with effect from May 9, 2018. The impact of this regulatory change could be significant in the Indian context characterized by a concentration of promoter holding and business groups. Promoters can leverage ownership and control across entities to act opportunistically and extract benefits at the cost of firms, particularly, minority shareholders.

In this paper, we identify the trends and patterns of reported RPTs in India using a sample of BSE (formerly Bombay Stock Exchange) listed firms for the period between 2011-12 and 2021-22. The incidence of Related Party Transactions (RPTs) *reported* by BSE listed companies grew from a mere 1,064 in 2011-12 to 63,025 in 2021-22 (Figure 1), where incidence refers to the number of related parties involved but each of them could potentially be involved in more than one transaction.[4] During this period companies in our sample involved in RPTs transferred as much as 5.91 per cent of their market capitalization (Profit Before Tax) through RPTs. These estimates are lower bounds as several unreported instances of alleged RPTs have also come to light, including cases involving major non-banking financial companies (Upadhyay 2019), a leading pharmaceutical firm (Choudhary 2020), the largest private airline (Kundu and Dhanjal 2021) and one of the largest conglomerates (Business Standard 2023).

Figure 1 about here

This paper contributes to the literature on market regulation and corporate governance by showing that the changes in regulation of RPTs in 2018 altered the incidence, value, and nature of RPTs in the direction intended by the regulator. More specifically, we assess the determinants of incidence and value of RPTs and the impact of the regulatory change in 2018 controlling for ownership, financial characteristics, and corporate governance. We find that total receipts or income and total expenses or payments account for most of the RPTs reported by BSE-listed firms. The manufacturing sector accounts for more than half of the RPTs. The mean promoter holding is higher in firms that reported RPTs. Business groups are less likely to engage in RPTs but the value of their RPTs normalized by total assets (henceforth, normalized RPT value) is higher. We show that regulations reduced both the proportion of firms reporting RPTs as well as the normalized value of RPTs and altered the distribution of the normalized value of RPTs across transaction types with an increase in the proportion of

[4] The above figures are based on raw data from CMIE Prowess, which includes all types of RPT transactions across all related parties. The analysis in this paper is, however, based on cumulative annual RPT transactions across all related party types.

beneficial RPTs. We also show that the regulatory reforms introduced in 2018 had a greater impact than the reforms of 2013 and 2015.

The remainder of this paper is organized as follows. Section 2 discusses the evolution of the institutional framework governing RPTs in India. Sections 3 and 4 discuss the literature and the data. The results are presented in Section 5 followed by concluding remarks and a discussion of the way forward in Section 6.

2.0 Institutional Setting

The Companies Act, 2013, the Indian Accounting Standard 18 (Ind AS 18), and the LODR 2021 govern RPTs in India. The Income Tax Act, 1961 also contains provisions on transfer pricing. We will first discuss the evolution of RPT regulations in India.

The pre-2013 RPT regulations mandated disclosure but did not call for its approval by an independent organ of the corporation, say, independent board members who are not interested parties. After the Satyam Scandal (2008-09), the Companies Act 2013 moved closer to global standards by requiring the approval of disclosures by an independent organ of the company. In 2015, the SEBI amended Clause 49 of LODR to align it with the Companies Act, 2013. The Uday Kotak Committee that expanded the definition of related parties to include promoters marks the beginning of the third phase, while the fourth and current phase began in 2021 when the recommendations of a Working Group on RPTs were adopted by the SEBI (Figure 2). The Working Group called for the harmonisation of provisions governing RPTs in various regulations and recommended further strengthening of monitoring and enforcement mechanisms. Its recommendations included changes in the definitions of related parties, the threshold classification of RPTs and a tightening of disclosure mechanisms with a greater onus on audit committee of the listed entity. The LODR 2021 has also brought the timeline of disclosure closer to the announcement of the financial results and has also prescribed a list of documents to be submitted by the listed entity seeking approval from its audit committee.

Figure 2 about here

Following the Working Group's recommendation, the definition of related party has been expanded to cover promoters and promoter groups with any level of shareholding. Since 2022 it includes any person or their relatives having at least 20 per cent shareholding. This threshold dropped to 10 per cent in 2023.[5] The definition of 'relative' follows the Companies Act 2013 (Art 2 (77)).

The Working Group noted that RPTs increasingly involve complex transactions, say, through relatives not covered in the regulation and loans being given to an unrelated party that in turn offers loan to a related party. Accordingly, the Working Group recommended that RPTs should include transactions which are undertaken, whether directly or indirectly, with the intention of benefitting related parties. These changes were accepted by the SEBI.[6]

The SEBI added ₹1,000 crore[7] to the threshold of 10 per cent of the consolidated annual turnover of the listed entity for determining materiality of a transaction for shareholder approval. This makes the requirement of shareholder approval more stringent. Similarly, the scope of audit committee for scrutinising RPTs has been increased. For instance, for a listed entity the timeline of disclosure of an RPT to stock exchange and shareholders has been compressed from 30 days to 15 days (every six months) after the publication of the consolidated and standalone financial results. Effective from 1 April 2023, this disclosure needs to be on the date of publication of the financial results. Notably, the SEBI has introduced the regulatory changes in a phased manner. Some of the changes were effective from the financial year 2022 and few others became operational on 1 April 2023. The recent history of the regulatory change is summarised in Table 1 and can be divided into four phases

[5] The lowering of the threshold was not suggested by the Working Group though.

[6] At the same time, the SEBI did not accept the exclusions suggested by the Working Group, which recommended that corporate actions such as payment of dividend, sub-division or consolidation of securities, buy-back, rights and bonus issue of securities should be excluded from the list of RPTs as they treated all shareholders equally. Similarly, Working Group also recommended that the preferential allotment of securities should be excluded as they are governed by a separate regulation.

[7] The mean (median) market capitalization of firms in our sample is Rs 4,018 (250) crores.

outlined above in Figure 2. A stylised outline of how RPTs are processed as per the latest regulations is presented in Figure 3a.

Table 1 and Figure 3a about here

In this paper, we focus on the 2018 amendments in the LODR that introduced three changes. First, the SEBI mandated that "any person or entity belonging to the promoter or promoter group of the listed entity and holding 20 per cent or more of the shareholding in the listed entity shall be deemed to be a related party." Second, to increase transparency, the SEBI mandated the disclosure of RPTs on a consolidated basis in the annual accounts as per the accounting standards on the website of the listed entity within thirty days of publication of the half yearly financial results. Third, in line with the requirements of Companies Act 2013, the amendments require related parties to not vote in board meetings on material RPTs involving them. We treat the regulatory changes in 2013, 2015 and 2018 as exogenous shocks and analyse the impact of change in regulation on the value of RPT. The potential impact of regulation on RPTs is captured by the decision tree shown in Figure 3b.

Figure 3b about here

In Figure 3b, Period 1 represents the period before 2018 regulation. In Period 1, a firm must decide whether to carry out RPTs. In case it chooses to engage in RPTs, it can choose to report or not report. Reporting includes cases of under-reporting the value and/or misreporting the type of transaction. After the introduction of regulations meant to curb RPTs and make them more transparent, i.e. period 2 in the tree, the firm again decides whether to carry out an RPT. Firms can be divided into two broad groups, depending on whether they carry out RPTs after regulatory shift. The firms that engaged in RPTs include those that (i) do not alter the magnitude and/or nature of their RPTs in response to the regulatory shock, (ii) those that reduce the value of RPTs and/or change the type of RPTs and (iii) begin to report (a) but do not alter the magnitude and/or type of their RPT and (b) reduce the value of RPTs and/or change the type of RPT. Further, firms that do not engage in RPTs include firms that do not need RPTs and those deterred by the regulation. If reporting is not complete even after the change in regulation, the non-reporters include those who do not alter their related party behaviour and those who reduce the size or transaction type. So, the impact on new regulations comprises the following: (a) change in type of RPT (i.e., change in distribution of overall RPT value across types), (b) reduction in aggregate value of overall RPT, and (c) avoidance of RPTs.

3.0 Literature Review

There are two different views regarding the role of RPTs. According to the efficient transactions view, RPTs benefit shareholders as they provide for the economic needs of the firm through exchange between "parties who have built up trust and shared private information" (Gordon et al 2004). As a result, it becomes an efficient contractual agreement, particularly in markets characterized by incomplete and asymmetric information. Fisman and Khanna (2004) examine BSE (formerly Bombay Stock Exchange) listed firms, including those affiliated to a business group, for the period 1989-95. They argue that business groups reduce transaction costs by creating an internal market for themselves.

On the other hand, the conflict-of-interest view suggests that RPTs pose an agency conflict between the management and shareholders of the firm. Type I agency problems arise because of the manager's tendency to appropriate the firm's resources for personal consumption *qua* perquisites at the expense of outside shareholders (Jensen and Meckling 1976).[8] On the other hand, Type II agency problems are associated with a conflict of interest between a promoter and minority shareholders. RPTs also provide ways to manipulate earnings towards desired targets (La Porta et al., 2003; Jian and Wong, 2010; Lo et al., 2010, Healy., 2018). Accordingly, the literature distinguishes RPTs in terms of beneficial and expropriate RPTs (Cheung 2006, Kohlbeck and Mayhew 2017). Following Bansal and Thenmozhi (2020) and Cheung (2006), we distinguish RPTs based on impact on minority shareholders. We classify them as expropriative transactions, i.e., transactions resulting in the expropriation of minority shareholders (asset acquisitions, asset sales, and cash payments)

[8] Morck et al (2005) suggest that professional managers can be "entrenched" by setting up takeover defenses and undermining shareholder democracy.

and beneficial transactions, i.e., transactions beneficial for the minority shareholders (cash and loan receipts). Expropriate and beneficiary transactions account for 84.86 per cent of all the transactions.

Families have both the ability and incentive to monitor managers because of their greater involvement in firms. As a result, their presence reduces the agency costs arising from separation between ownership and control, which is referred to as the *alignment effect* (Demsetz 1983; Shleifer and Vishny 1986; Sarkar and Sarkar 2000). This contrasts with the *entrenchment effect* as family involvement could create conflicts of interest between different types of principals over the distribution of wealth created by the firm. The controlling family can potentially divert the firm's resources for personal benefits at the expense of other investors (Morck and Yueng 2003, Chrisman et al 2010). But note that family firms often have more reputational concerns than non-family firms and consider ownership to be an asset to pass on to future generations (Anderson and Reeb 2003; Chen et al 2008), which can potentially deter RPTs.

The literature suggests that family firms are more likely to engage in RPTs than non-family firms (Ali et al 2007). In particular, in emerging markets founder owners are observed to expropriate minority shareholders by indulging in self-dealings (Johnson et al 2000, Claessens et al 2002, Djankov et al 2008, Dahya et al 2008, Chauhan et al 2016). Emerging markets such as India might be particularly prone to RPTs owing to the concentrated ownership structure dominated by promoters (Bansal and Thenmozhi 2020). According to a recent report, as many as ninety-one per cent firms listed on BSE are family controlled (Li and Agarwal 2022), which compares favourably with our sample described in Section 4. We also control for business groups as the literature suggests they undertake RPT, particularly loans and guarantees, as a co-insurance in the face of credit crunch (Jia, Shi and Wang 2013), or to avoid tax (2018) and transaction cost concerns (Wang, Cho and Lin 2019).

We will examine RPTs involving family and non-family firms in India and focus on, among other things, the impact of the regulatory change on the value of RPTs. Regulatory changes in most countries are directed towards increasing disclosure of RPTs. It has been observed that in the absence of disclosure requirements firms do not make voluntary disclosures of expropriate RPTs (Lo and Wong.,2011) and disclosure requirements in turn tend to improve the quality of RPTs (Hwang et al., 2013). The literature also suggests that in addition to country specific regulations, RPTs are impacted by the quality of external audits and corporate governance (Moataz., 2018, Gavana et al. 2022).

4.0 Data

The data used in this paper is extracted from CMIE Prowess,[9] which is a database on Indian companies starting from 1989. There were 4,845 BSE listed firms in the CMIE Prowess database as of October 5, 2022. We use data on reported RPTs for all these firms for the period 2011-12 to 2021-22. We exclude state-owned firms from our sample since these are not comparable to the privately owned firms of interest to us. We also exclude financial firms since they are governed by a different regulatory regime. This leaves us with 1,938 firms that reported RPTs and 2,292 firms with no RPT (Table 2a). After excluding transactions with missing data on transaction value, total assets, board size and independent director and cash holding and negative/zero valued transactions,[10] we are left with 1,938 firms and 26,380 transactions (Table 2b). The distribution of firm according to whether they carried out RPTs before and after the regulatory change in 2018 is given in Table 3c.

Tables 2 and 3 about here

PROWESS database provides information on a wide range of firm characteristics. It also includes information on the date, type and value of RPT and the type of related party. We match the RPT data with firm characteristics. Market capitalization, Price-to-Book Ratio (PB), leverage and return on assets (ROA) capture financial characteristics. Information on board

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[9] The Centre for Monitoring Indian Economy Pvt. Ltd. (CMIE) is a privately owned business information company, which both compiles secondary data as well as conducts large scale periodic surveys covering various aspects of the Indian economy.

[10] There were 176 negative valued observations including *Net outstanding borrowings taken/loan given* (107), *Net outstanding current receivables/payables* (54), *Total revenue receipts/income* (10), *Guarantees given during the year* (3) and *Total revenue expenses/payments* (2). In addition, there were 372 zero value observations that include *Total revenue receipts/income* (255), *Total revenue expenses/payments* (90), *Total capital receipts* (9), *Outside guarantee* (4), *Total capital account payments* (4), *Guarantees given during the year* (3) , *Net outstanding current receivables/payables* (3), *Share capital issued during the year (1), Margin money received during the year* (1), *Outstanding closing balance of investments* (1) and *Share application money received* (1).

size, the percentage of independent directors and auditors capture corporate governance. Promoter holding, affiliation to a business group and the country of origin of promoters capture ownership characteristics. Table 4 reports the definition and summary statistics of variables.

Table 4 about here

Table 5 shows the distribution of RPTs across different industries/sectors. Except for *Wholesale trade, except of motor vehicles and motorcycles* (8.79 per cent), seven out of the eight two-digit NIC categories that reported the highest number of RPTs belonged to the manufacturing sector. The manufacturing sector accounted for 57.45 per cent of the firms and 58.32 per cent of the RPTs. Among NIC sections, *Manufacturing* (60 per cent), *Wholesale and retail trade; repair of motor vehicles and motorcycles* (10 per cent), *Construction* (9 per cent) and *Information and communication* (7 per cent) accounted for most of the RPTs.

Tables 5 about here

We are interested in the determinants of the 'Transaction value' normalized by Total Assets of RPTs and the impact of the regulatory changes. Prowess reported eighteen different kinds of RPTs. Table 6a reports the distribution of RPTs across types of transactions. Two types of transactions - *Total revenue expenses/payments* (44.11 per cent) and *Total revenue receipts/income* (39.87 per cent) - accounted for almost 85 per cent of all the RPTs in our sample (Table 6a). These two also accounted for at least 70 per cent of the RPTs for each NIC category (Table 6b). *Outstanding guarantees taken/given* and *Guarantees taken/given during the year* account for between 5 and 20 per cent of the RPTs under most transaction types. Interestingly, only firms classified under *Professional, scientific and technical activities* and *Arts, entertainment and recreation* reported a greater diversity in terms of transaction types. Further, the distribution of the type of RPTs does not vary perceptibly across different levels of promoter holding (Table 7).

Tables 6-7 about here

The independent variables include ownership structure of the firms, namely, promoter holding, country of origin of owners and affiliation to business group.[11] Prowess provides data on promoter holding for 4,707 out of 4,845 firms. The normalized transaction values are plotted against promoter holding in Figure 4.

Figure 4 about here

There are 492 BSE listed firms out of 4,707 firms whose mean promoter holding is less than 20 per cent, including 25 firms with no promoter holding. A 20 per cent threshold is often used in the literature to identify family firms (see, for instance, Anderson & Reeb 2003).[12] So, 93.97 per cent firms in our sample, which reported more than 20 per cent promoter holding, can be classified as family firms. Likewise, out of 1,938 firms that reported RPTs, excluding public firms and financial sector firms, there are 117 firms with less than 20 per cent promoter holding including 14 firms with zero promoter holding. In other words, firms involved in RPTs have a larger proportion of family firms compared to the overall sample. Also note that business groups account for 31 per cent of firms in our sample with more than 92 per cent of these being family-owned firms.

We classify firms into three categories depending on the extent of ownership. As discussed above, the literature treats companies with more than 20 per cent promoter holding as family firms. Firms with promoter ownership in excess of 50 per cent allow families to exercise full control. So, we have non-family firms (< 20 per cent promoter holding, Family20), family-owned firms without majority control (< 50 per cent promoter holding, Family2050) and family-owned firms with majority control (> 50 per cent promoter holding, Family50).

[11] Shareholding in firms in our dataset can be divided into Promoter holding, Non-Promoter holding and Custodian holding. The custodian is a third party that holds share for safe keeping but does not have any role in corporate governance or influencing firm decisions. The custodians should be classified as non-promoters. Custodians account for 0.09 per cent of the shareholding in our sample.

[12] The 20 per cent threshold referred to above also corresponds to the notion of 'significant influence' in the Companies Act under the definition of 'associate company': "control of at least 20% of the total voting power, or control or participation in business decisions under an agreement". Further, Indian Accounting Standards 18 also states: "If an entity holds, directly or indirectly (e.g., through subsidiaries), 20% or more of the voting power of the investee, it is presumed that the entity has significant influence, unless it can be clearly demonstrated that this is not the case" (Working Group Report 2020).

Further, we classify promoters into three categories: only Indian promoter(s), only foreign promoter(s) and mixed (Figure 5). The mean promoter holding in 1,938 BSE listed firms that reported RPTs is 56.71 per cent compared to 47.72 per cent for the firms that did not report even one RPT during 2012-22. Mean promoter holding in these three types of firms is 56.18, 64.41 and 57.43 per cent, respectively. Foreign promoters, mostly from western countries, are likely to be more circumspect vis-a-vis RPTs due to prior exposure to regulations in their home countries. The 'Mixed' category could be more circumspect than firms with only Indian promoters due to the influence of foreign promoters or even more susceptible to RPTs due to the misalignment of the interests of the two types of promoters.

Figure 5 about here

Our control variables include those that capture financial characters of firms. Financial variables such as Market Capitalization, Price-Book ratio (PB), Leverage, Return on Assets (ROA), and Cash holding. Corporate governance is captured by board characteristics such as board size and percentage of independent directors on board and whether the firm’s auditor is among the four large auditing firms. The Big 4 account for 12.5 per cent of the firms in our sample. The mean market capitalization of the firms served by the Big 4 is almost thrice that of the firms with firms served by other auditors.

5.0 Results

Using a pooled sample of firms between the period 2011-12 to 2021-22, we analyze the relationship between the incidence and normalized value of RPTs and ownership characteristics, transaction type, industry group, financial characteristics, firm age, and corporate governance. The regressors are lagged by one period to avoid endogeneity. More specifically, we examine the following hypotheses.

H1: Regulations reduced the share of firms reporting in RPTs.

H2: Regulations reduced the total value of RPTs relative to total assets.

H3: Regulations altered the distribution of normalized RPT value across RPT transaction types.

H4: The 2018 regulations had a greater impact than earlier regulatory changes.

Incidence of RPTs: To determine the incidence of RPT, we proxy incidence by the probability of a firm engaging in at least one RPT in a given year as a function of ownership and corporate governance, and financial characteristics. The dependent variable is the probability of a firm undertaking at least one RPT transaction in a year. The econometric model is as follows:

> Prob(Firm i carries out RPT in year t) = Constant + Regulation + Ownership characteristics + Firm characteristics + Corporate governance + Financial performance + Industry dummies + Year dummies + Error (1)

Table 9 summarizes the results of logit regressions for determinants of the incidence of RPTs. The 2018 regulation has a significantly negative impact on the probability of firms engaging in RPTs. Older firms and firms with larger market capitalization are more likely to be associated with a higher incidence of RPTs. Promoter holding is associated with higher incidence of RPTs. However, less than 50 per cent of family holding is associated with a lower incidence of RPTs. When interacted with the dummy for the 2018 regulation, ownership levels below 20% show a positive and significant impact on the incidence of RPTs.

Business groups are associated with a lower incidence of RPTs. Ony fully foreign owned firms are associated with higher incidence of RPTs vis-à-vis fully Indian owned firms.

Board size has a significantly negative effect on the incidence of RPTs, while independent directors and auditors from among the Big 4 are associated with a higher incidence of RPTs.

Firm performance variables do not show a clear pattern with Return on Assets being positively associated with RPTs, while Cash holding and Price to Book ratio are negatively associated. Also, Leverage is positively associated with RPTs.

Table 9 about here

RPT value: We will next examine the impact of regulatory change on normalized RPT value. This is approximated using Tobit regressions, accounting for firms which did not engage in RPT. The dependent variable normalized RPT value is censored to the left owing to zero value corresponding to observations for firms which did not undertake or did not report any RPT. "Conventional regression methods fail to account for the qualitative difference between limit (zero) observations and non-limit (continuous) observations" (Greene, 2000, p. 906). Accordingly, the following Tobit model is applied at the level transactions in the regression analysis:

RPT Value/Total Assets = Constant + Regulation + Ownership characteristics + Firm characteristics + Corporate governance + Financial performance + Transaction type dummies + Industry dummies + Year dummies + Error (2)

Table 10 summarizes the results of our analysis of the determinants of RPT value normalized by asset size. It reports the results of 5 regressions divided into 2 broad categories: base (columns 1-2) and regulation (columns 3-5). Column 1 shows the effect of ownership, governance characteristics, firm financials, transaction types, industry, and year dummies. In Column 2, we replace transaction types with the dummy for beneficial RPTs. Columns 3 and 4 replicate Columns 1 and 2, respectively after replacing year dummies with regulation dummies. Column 5 adds an interaction term to Column 4.

Table 10 about here

The first set of control variables capture ownership characteristics. Higher levels of promoter holding and affiliation to a business group are associated with higher normalized RPT value as these are associated with greater corporate control and opportunity for RPTs, respectively. Foreign ownership is associated with higher normalized RPT values than Indian ownership. Mixed ownership, though, does not differ significantly vis-à-vis Indian ownership.

The second set of controls assesses the impact of corporate governance. Board size is consistently associated with lower normalized RPT values, possibly, due to collective action problems in larger boards. Contrary to expectations, independent directors do not have any significant impact on RPT value, while Big 4 auditors are associated with higher RPT values.

The age of firm is associated with lower normalized RPT value in most regressions, even though the coefficients are not significant in a few cases. Firms with larger market capitalization and higher leverage reported lower normalized RPT values. On the other hand, Cash holding, Returns on Asset and Price to Book ratio are associated with higher normalized RPT values.

Only two transaction types – *Guarantees taken during the year* and *Outstanding guarantees taken* – are associated with higher normalized RPT values than *Guarantees given during the year*, the base category. Beneficial RPTs (transaction types including Net outstanding current receivables, Total capital receipts and Total revenue receipts/income) are associated with higher normalized RPT values. These results are stronger in the post regulation period, suggesting regulations shifted firms toward more beneficial RPTs.

Distribution of RPTs: Regulations altered the distribution of RPT value across transaction types with *Guarantees given during the year* accounting for a larger share of RPTs (Figure 6). Likewise, *Guarantees given during the year* reported a sharp increase in the mean value of transactions normalized by total assets (Figure 7). On the other hand, *Outstanding guarantees taken* registered a decline in the mean normalized transaction value. While the reported transaction values normalized by total assets increased after the introduction of changes in the regulations in 2018 (Table 11), the increase is driven by beneficial RPTs (Table 10, Column 10).

Table 11 and Figures 6 and 7 about here

Relative impact of regulations: The Companies Act, 2013 necessitated the approval of disclosures by an independent organ of the firm. In 2015, the SEBI amended Clause 49 of LODR to align it with the Companies Act, 2013. In 2018, the SEBI introduced stricter disclosure requirements and expanded the ambit of enforcement.

Table 12 shows the impact of the RPT regulations between 2013 to 2018 on the incidence of RPT. Column 1 shows the effect of the regulatory changes in 2013, 2015 and 2018. Column 2 interacts the regulation dummies with Promoter Holding. Column 3 replaces Promoter Holding by Family20 and Family 2050 dummies in Column 1. Column 4 interacts the regulation dummies with Family20 and Family2050 dummies. The 2018 regulations had a higher impact on suppressing the incidence of RPTs.

Table 12 about here

6.0 Concluding Remarks

Using a sample of BSE listed firms for the period between 2011-12 and 2021-22, we examine the determinants of the incidence and value of RPTs and the impact of the regulatory change on RPTs. We find that total receipts or income and total expenses or payments account for most of the RPTs reported by BSE-listed firms. The manufacturing sector accounts for more than half of the RPTs. The mean promoter holding in the firms that reported RPTs is higher than those that did not report any RPT.

Older firms are more likely to be involved in RPTs, but the value of RPTs is smaller in their case. Firms with larger market capitalization are more likely to carry out RPTs, but they carry out smaller RPTs. Higher promoter holding is associated with both higher incidence and normalized value of RPTs. Business groups are associated with a lower incidence of RPTs, but a higher normalized RPT value. Firms with foreign ownership are associated with both a higher incidence and normalized value of RPTs.

While the full impact of the changes adopted by SEBI over the last decade will become clear only after the latest amendments to the LODR are implemented in 2023-24, the current sample allows us to capture the effect of earlier reforms. We show that regulations reduced both the proportion of firms reporting RPTs and the mean normalized value of RPTs and altered the distribution of the normalized value of RPTs across transaction types. We also show that the regulatory changes introduced in 2018 had a greater impact than regulatory changes of 2013 and 2015. The reported normalized transaction values increased after the introduction of regulation in 2018, but the increase is driven by beneficial RPTs. Also, note that we find that an increase in reporting of RPTs involving firms with less than 20 per cent promoter holding after 2018. This possibly justifies the 2021 amendments to the LODR that reduce the threshold of promoter holding for the identification of related parties from 20 to 10 per cent.

While we have shown that the 2018 reforms have significantly affected the incidence, value and nature of RPTs, a few gaps remain to be addressed even in the revised regulations. The audit committee is left to determine what constitutes 'material modification', which could be a source of subjectivity. There is also some conflict between overlapping regulations, with the SEBI defining materiality in terms of turnover and the Companies Act defining it in terms of net worth. Finally, according to the SEBI, an RPT is a transaction with the 'purpose and effect' of 'benefitting a related party of the listed entity or any of its subsidiaries', though it is unclear how this will be evaluated by the audit committee.

We show that the 2018 amendments significantly reduced the value of RPTs in case of higher promoter holdings. The successful reform of the RPT regulations highlights the importance of inclusive deliberations, gradualism and alignment with other domestic regulations and adoption of international best practices (Singh and Kumar 2022b). The reform process has been gradual. RPT regulations were amended in 2013, 2015, 2018, 2021 and again in April 2022 (Figure 2). Deliberations around the latest reforms began when the SEBI formed a working group on 4 November 2019. The amendments were formally introduced on 9 November 2021, after lengthy consultation, public scrutiny and board discussions. The new regulations became operational in two steps in April 2022 and April 2023. The inclusive and transparent process of consultation, followed by phased implementation with advance notice, allows stakeholders to better understand the changes. It also ensures the SEBI will not unilaterally and abruptly change the rules of the game, improving the effectiveness of regulations and reducing the cost of enforcement.

There are four lines of inquiry that merit further research. First, the impact of RPT on firm value across family and non-family firms can be assessed using accounting measures like ROA, Tobin's Q, and PAT. Second, the effect of the timing of public disclosure of the RPT can be assessed by examining the impact of disclosure on the short term cumulative abnormal returns. Third, the impact of regulatory changes introduced in 2021 on RPTs needs to be examined. Fourth, an examination of the impact of management structure on RPT, which could not be carried out in this paper due to lack of relevant data in Prowess, is required. The literature suggests that such an analysis will be useful. Family ownership and family management affect strategic decision making (Kotlar et al 2014; Nieto et al 2015) and performance (Sciascia & Mazzola 2008). Some studies suggest family managed firms outperform their professionally managed counterparts (Kowalewski et al 2010), while others find a negative effect of family management on performance (Filatotchev et al 2005; Lauterbach & Vaninsky 1999; Westhead & Howorth 2006). So, ownership alone is not sufficient to understand family firms, the nature of management (Anderson & Reeb 2003; Villalonga & Amit 2006) and the distribution of shareholding also matter (Ali et al 2021). While the alignment effect affects all family-owned firms, the effect of entrenchment varies with the nature of management.

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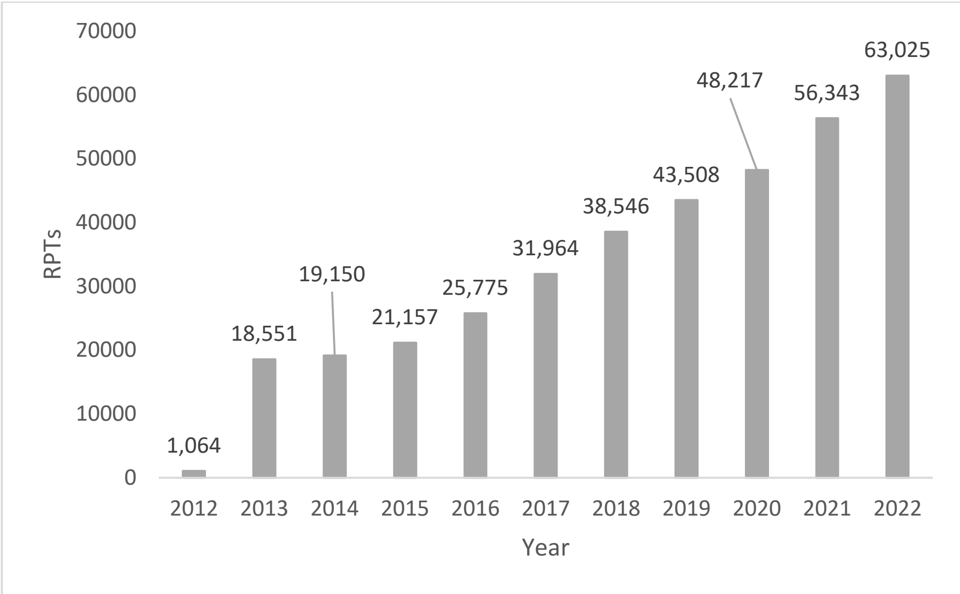
Figures and Tables

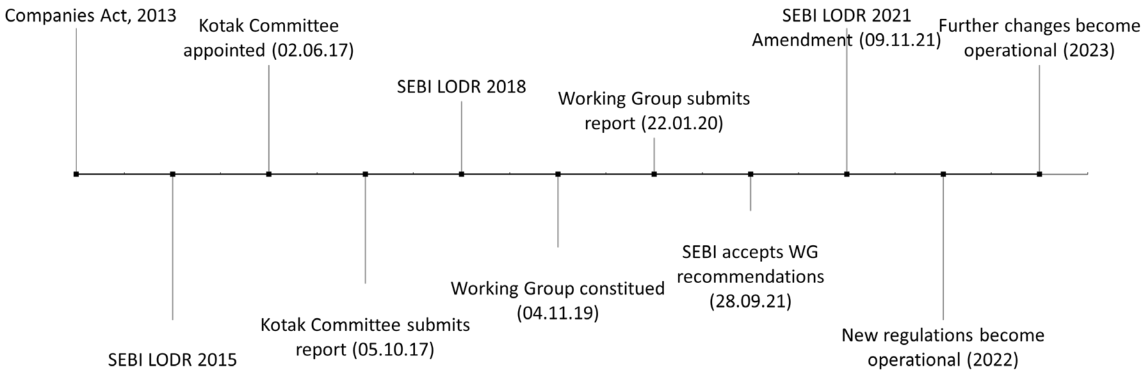
Figure 1: Incidence of RPTs Reported by BSE listed Companies, 2012-22



Note: (1) Incidence captures the lower bound of the number of RPTs reported as the Prowess data identifies each type of transaction (e.g., revenue receipts, loan guarantees, etc) between related parties and cumulative value of that type but not the number of times a particular type of transaction was reported in a given period. (2) Year is the reporting year, e.g., 2022 corresponds to 2021-22. (iii) Incidence includes financial and government firms.

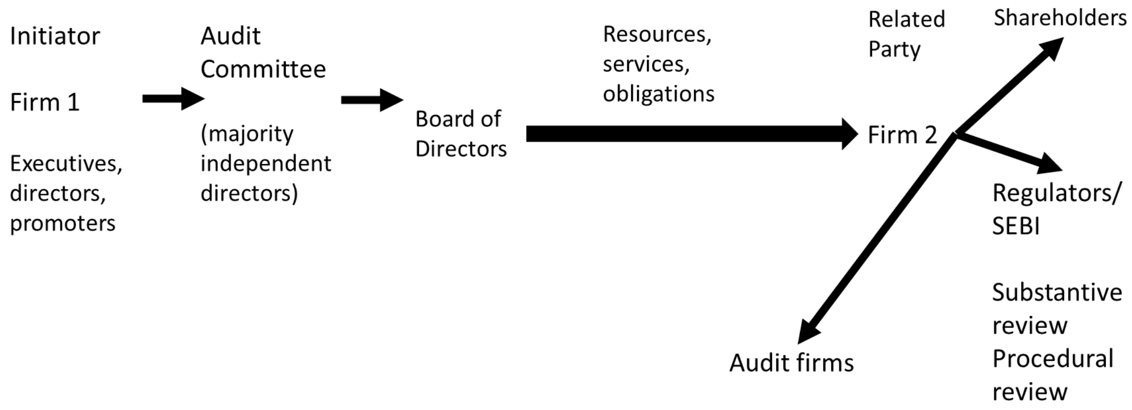
Source: Prepared by authors using data from CMIE Prowess

Figure 2: Evolution of RPT regulations



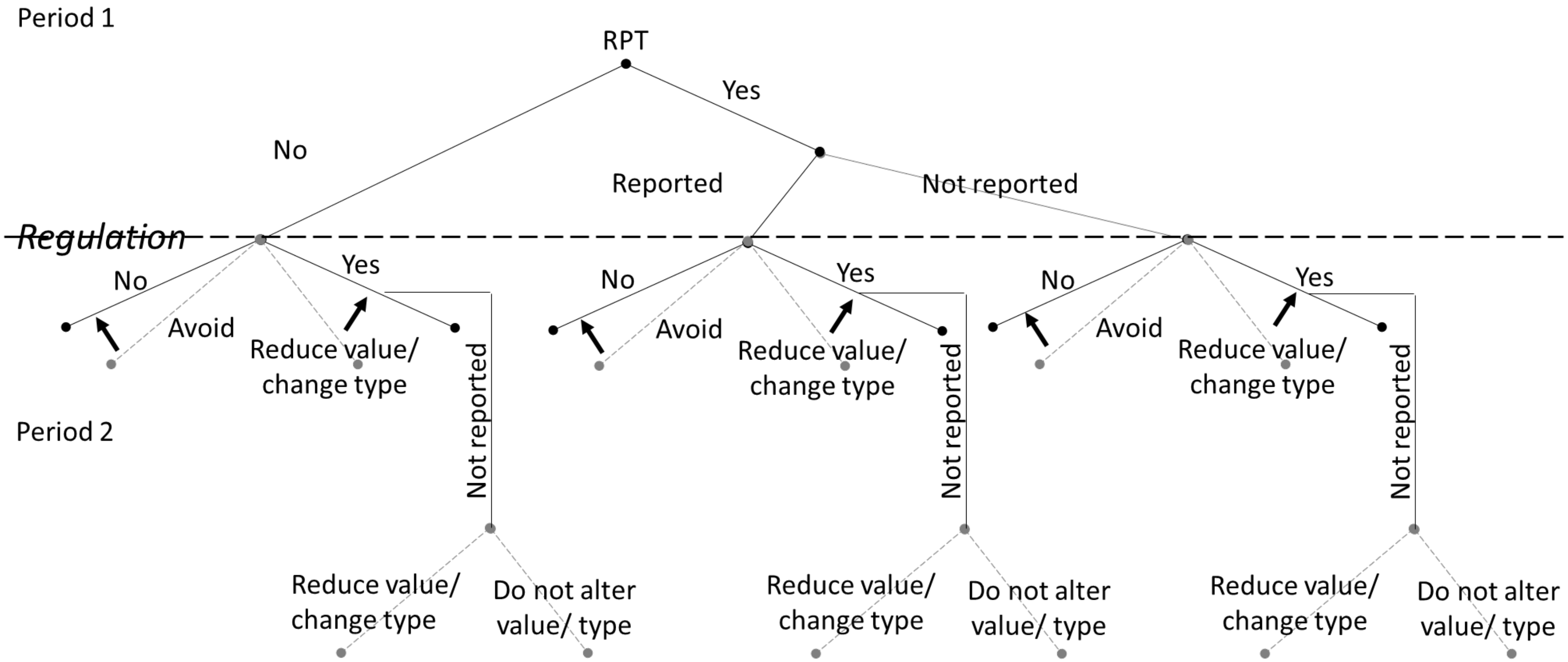
Source: Singh and Kumar (2022a)

Figure 3a: A Stylized Depiction of Related Party Transactions



Source: Singh and Kumar (2022a)

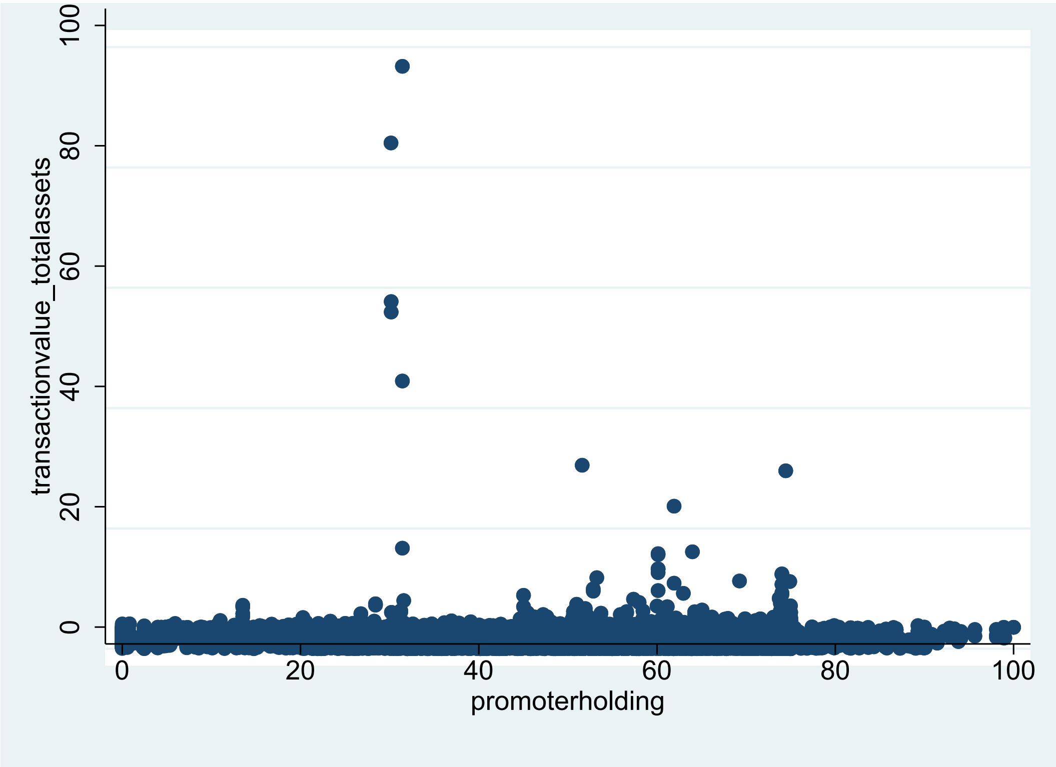
Figure 3b: Impact of Regulatory Shock on RPTs



Source: Authors

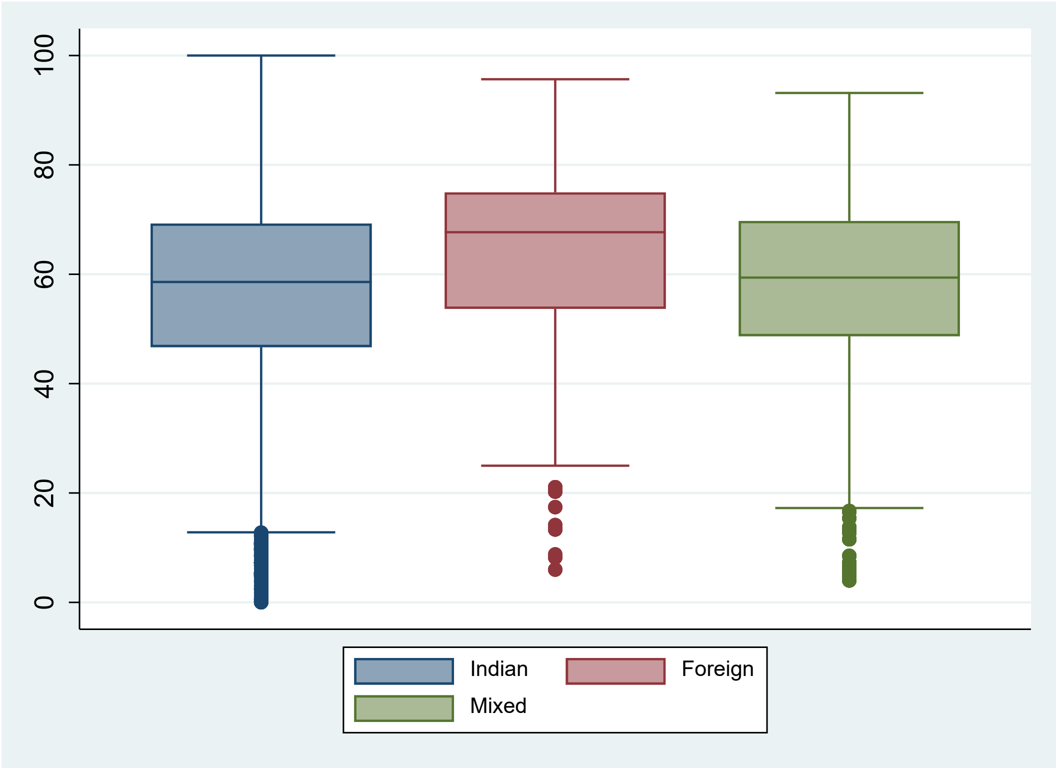
Notes: (i) See Table 3 for the distribution of firms according to their involvement in RPTs. (ii) The unobserved (not reported) and unobservable (avoidance and alteration of RPT behavior) instances of RPT contribute to the overestimation of the impact of regulations.

Figure 4: Transaction Value/Total Assets vs Promoter Holding (in per cent), 2012-22



Source: Authors

Figure 5: Promoter Holding by Nationality of Promoters of BSE Listed Firms, 2012-22



Source: Authors

Notes: Indian: only Indian promoters, Foreign: only foreign promoters, Mixed: Both.

Figure 6a: Distribution of Number of RPTs across Transaction Types

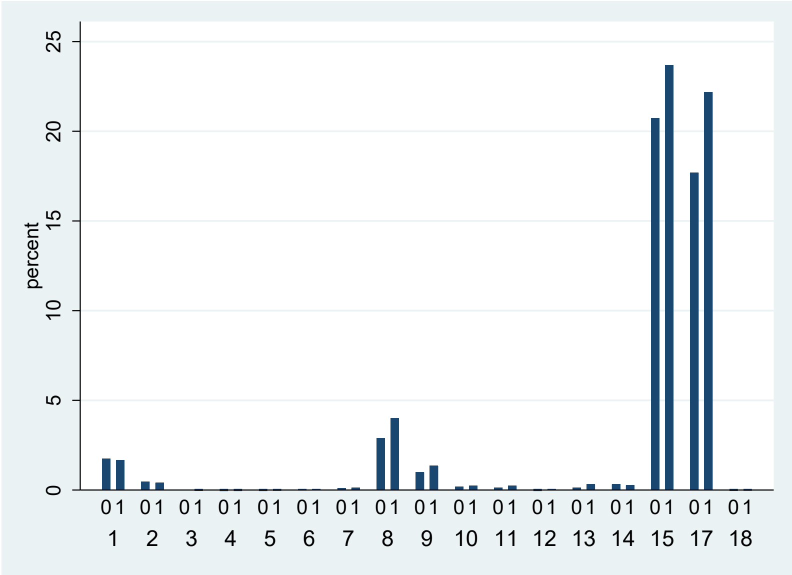
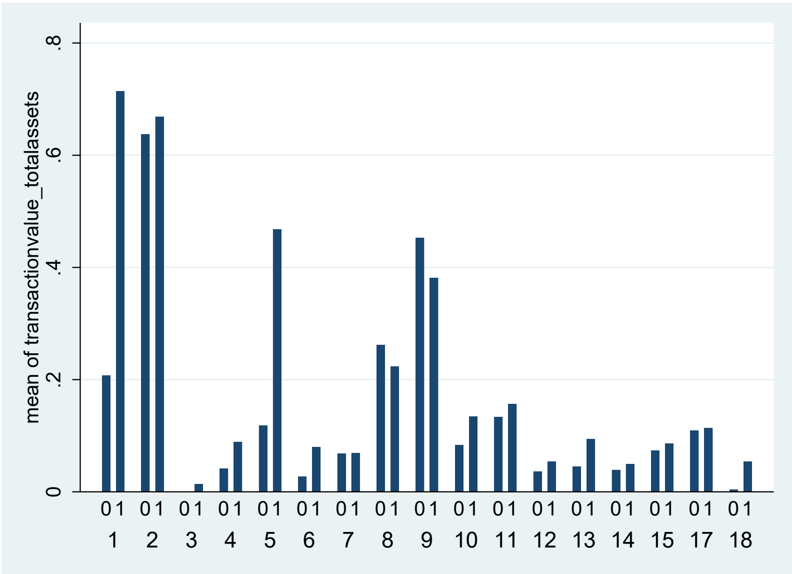


Figure 6b: Distribution of RPT Value across Transaction Types



Source: Authors

Note: (i) In 6a, the Y-axis is the share of firms. (ii) In 6b, the Y-axis is the mean of the normalized RPT value for firms in pre- (0) and post- (1) regulation periods. (iii) The X-axis lists transaction types numbered 1 through 18 (see Figure 4a for the list of types and their codes) and for each transaction type it identified pre- (0) and post- (1) periods. (iv) Regulation dummy = 0 for pre-2018 regulation period, 1 otherwise.

Table 1: Comparison of different regulations in India

	Companies Act (amended 2017)	SEBI (LODR) 2018	SEBI (LODR) 2021	Differences
Related Party	Related party includes director, relatives of a director, key managerial personnel	In addition to the requirements of the Companies Act and accounting standards, the LODR deems any person or entity belonging to the promoter or promoter group of the listed entity and holding 20% or more of the shareholding of the listed entity, to be a related party.	Includes any person or entity (a) belonging to the *'promoter' or 'promoter group'*, irrespective of their shareholding in the listed entity and (b) any person/entity holding 20% or more equity shares in the listed entity, either directly or on a beneficial interest basis at any time during the preceding financial year. From April 2023, this threshold will be 10% or more.	Promoter included as a related party in LODR. The shareholding threshold reduced in LODR 2021.
RPT	a. Sale, purchase or supply of any goods or materials; b. selling or otherwise disposing of, or buying, property of any kind; c. leasing of property of any kind; d. availing or rendering of any services; e. appointment of any agent for purchase or sale of goods, materials, services or property; f. such related party's appointment to any office or place of profit in the company, its subsidiary company or associate company; and	A transfer of resources, services or obligations between a listed entity and a related party (excluding units issued by mutual funds which are listed on a recognised stock exchanges), regardless of whether a price is charged.	Transactions between: a. the listed entity or any of its subsidiaries on one hand and a related party of the listed entity or any of its subsidiaries on the other; b. the listed entity or any of its subsidiaries on one hand, and any other person or entity on the other, the purpose and effect of which is to benefit a	Definition of RPT is broader in the Companies Act

	Companies Act (amended 2017)	SEBI (LODR) 2018	SEBI (LODR) 2021	Differences
	g. underwriting the subscription of any securities or derivatives thereof, of the company.		related party of the listed entity or any of its subsidiaries w.e.f. April 1, 2023.	
Threshold Classification	10% of the annual consolidated turnover of the listed entity as per the last audited financial statements of the listed entity in case of sale or purchase of material through agent, property, leasing of property and engagement of service. In case of related party appointment, threshold for shareholder approval is a remuneration exceeding Rs. 2,50,000/- per month. The threshold is 1% of the net worth of the company in case of underwriting of securities etc. All these RPTs would require board approval, irrespective of the threshold.	A transaction with a related party shall be considered material if the transaction(s) to be entered into individually or taken together with previous transactions during a financial year, exceeds - 10% of the annual consolidated turnover of the listed entity as per the last audited financial statements of the listed entity.	A threshold of lower of ₹1,000 crore or 10% of the consolidated annual turnover of the listed entity for shareholder approval.	Threshold classification similar in Companies Act and LODR. The LODR 2021 adds a lower threshold of ₹1,000 crore
Oversight	Board Approval of all RPTs. Shareholder approval required over a certain threshold, mentioned above. Approval of audit committee after board approval in companies where audit committee exists as per Section 177(1) of the Companies Act.	Part C of Schedule II of the LODR B. The audit committee shall mandatorily review the following information: disclosure of any RPTs approval or any subsequent modification of transactions of the listed entity with related parties. The audit committee shall mandatorily review the information statement	Enhanced disclosure of information related to RPTs, including between subsidiaries, to be: a. placed before the audit committee, b. provided in the notice to shareholders for material RPTs, and	Audit committee approval is required by both the Companies Act and LODR, but the thresholds vary. The LODR 2021 also requires the approval of

	Companies Act (amended 2017)	SEBI (LODR) 2018	SEBI (LODR) 2021	Differences
		of significant RPTs (as defined by the audit committee), submitted by management. The disclosure timeline: within 30 days from the date of publication of the financial results of the listed entity.	c. provided to the stock exchanges every six months in the format specified by the Board with the following timelines: i. within 15 days from the date of publication of financials. ii. simultaneously with the financials w.e.f. April 1, 2023. The amendments shall be effective from April 1, 2022 unless otherwise specified above.	transactions between subsidiaries by the audit committee.

Source: Singh and Kumar (2022a)

Table 2a: Firm count

BSE Listed Firms downloaded from Prowess (on October 5, 2022)	4,845
Exclusions	
BSE Listed Firms that reported at least one RPT (2012-2021)	2,631
Financial Firms	422
Government Owned Firms	66
Government Owned Financial Firms	10
Firms for analysis	
Number of Non-Financial, Non-Government Firms	2,153

Table 2b: Observation count

Total reported transactions (All party types)	42,614
Exclusions	
Missing data on transaction value	516
Missing data on Total Income (156) and Total Capital (49)	205
Missing data on promoter holding	3,769
Missing data on market cap	1,595
Missing data on debt-equity ratio	11
Negative transaction value	176
Zero transaction value	372
Observations for analysis	
Number of observations/transactions in final data	26,380
Total Firms corresponding to 33313 observations	1,938

Table 3: Distribution of Firms

		Post-Regulation (2018)		Total
		RPT	No RPT	
Pre-Regulation (2018)	RPT	1,564	65	1,629
	No RPT	299	1,819	2,118
Total		1,863	1,884	3,747

Note: (i) RPT: Firms that were involved in at least one RPT. Non-RPT: Firms that were not involved in even one RPT. (ii) The table does not include 75 firms that were incorporated after 2018 of which 10 were involved in RPTs.

Table 4a: Variable Description

Variable Name	**Definition**
	Dependent variable
RPT Code	= 1 if the firm i engages in RPT in year t = 0 otherwise
RPT Value/Total Assets	Transaction Value divided by Total Assets
	Transaction type
Beneficial RPTs	= 0 when transaction type is Net outstanding borrowings, Total capital payments or Total revenue expense/payments = 1 when transaction type is Net outstanding current receivables, Total capital receipts or Total revenue receipts/income
	Ownership
Promoter Holding	Percent of promoter holding
Indian Promoter	Dummy variable that takes value 1 if the in case of exclusively Indian promoters and 0 otherwise,
Foreign Promoter	Dummy variable which takes a value 1 in case of exclusively Foreign promoters and 0 otherwise,
Mixed Promoter	Dummy variable which takes a value 1 if the promoters include both Indian and Foreign promoters, 0 otherwise
Family Ownership 20	Dummy variable that takes the value of 1 if the promoter holding is less than 20 per cent, else 0
Family Ownership 20-50	Dummy variable that takes the value of 1 if the promoter holding is greater than 20 per cent and less than 50, else 0
Family Ownership 50	Dummy variable that takes the value of 1 if the promoter holding is greater than 50 per cent, else 0
Business Group	Dummy variable that takes the value of 1 if the firm belongs to a business group
	Regulation
Regulation2018	Dummy variable that takes the value 1 if year is greater than 2018 and 0 if year is less than 2018
Big 4	Dummy variable that takes the value 1 if the auditor of the company is any of the Big 4 auditors, viz. KPMG, Deloitte, PwC, E&Y
	Corporate governance
Board Size	Natural logarithm of the number of directors on the board
Independent Director	Proportion of independent directors on the board
	Financial characteristics
Market Cap	Natural logarithm of the market capitalisation of the firm
PB Ratio	Price to Book Ratio
Leverage	Long-term debt to equity ratio
ROA	Ratio of net income before extraordinary items scaled by total assets
Total Assets	Sum of the book value of all current and non-current assets
	Firm characteristics
Firm age	The difference between the year of the RPT Reporting and the year of incorporation in logarithmic form

Table 4b: Summary Statistics for Transaction-level Variable

Variable (Transaction Code)	**Observations**	**Mean**	**Standard Deviation**	**Min**	**Max**
RPT Value/Total Assets	33,313	0.129	0.956	0	95
Guarantees given during the year (1)	33,313	0.034	0.181	0	1
Guarantees taken during the year (2)	33,313	0.009	0.092	0	1
Margin Money Paid o/s (Asset) (3)	33,313	0.000	0.009	0	1
Margin Money Recd. o/s (liability) (4)	33,313	0.000	0.009	0	1
Margin Money Received during the year (5)	33,313	0.000	0.014	0	1
Net outstanding borrowings taken/loan (6)	33,313	0.001	0.029	0	1
Net outstanding current receivables/payables (7)	33,313	0.002	0.047	0	1
Outstanding guarantees given (8)	33,313	0.069	0.253	0	1
Outstanding guarantees taken (9)	33,313	0.023	0.151	0	1
Outstanding share capital (10)	33,313	0.004	0.065	0	1
Outstanding/Closing balance of investment (11)	33,313	0.004	0.060	0	1
Share Application Money received during the year (12)	33,313	0.001	0.023	0	1
Share capital issued during the year (13)	33,313	0.005	0.067	0	1
Total capital account payments (14)	33,313	0.006	0.076	0	1
Total capital receipts (15)	33,313	0.003	0.055	0	1
Total revenue expenses/payments (16)	33,313	0.441	0.497	0	1
Total revenue receipts/income (17)	33,313	0.399	0.489	0	1
Share Application Money received o/s (liability) (18)	33,313	0.000	0.016	0	1

Notes: (i) † In two cases non-promoter holding is greater than 100 due to rounding off errors, which has been corrected. (ii) Non-promoter holding in this table does not include custodian holding but that does not affect our analysis. See Footnote 4.

Table 4c: Summary Statistics for Firm-Year Level Variables

Variables	Observations	Mean	Std Deviation	Minimum	Maximum
Financial characteristics					
ROA	15,005	2.79	9.42	-49.15	28.62
Leverage	15,005	0.97	2.11	00.00	15.89
PB	15,005	2.37	3.46	00.00	23.55
Cash holding	15,005	0.06	0.11	00.00	00.60
Market Cap	15,005	44,541	293,889	0.83	1.40E+07
Assets	15,005	32,569	205,295	1.10	9,700,000
Corporate Governance					
Independent Director	15,005	1.75	1.58	00.00	10.00
Board Size	15,005	3.53	2.71	00.00	18.00
Big 4	15,005	0.054	0.23	00.00	1.00
Ownership characteristics					
Promoter holding	15,005	56.67	15.70	00.00	100.00
Indian	15,005	49.87	21.35	00.00	100.00
Foreign	15,005	6.79	18.06	00.00	95.66
Mixed	7,290	24.00	29.76	00.00	99.67
BG	15,005	0.44	0.50	00.00	1.00
Firm characteristics					
Firm Age	15,005	36.16	20.34	2	159

Table 5: Incidence of RPTs Across 2-digit NIC Codes

Industry	**NIC 2-digit code**	**Frequency**	**Per cent**	**Cumulative**
Wholesale trade, except of motor vehicles and motorcycles	46	3,195	8.79	8.79
Manufacture of chemicals and chemical products	20	3,080	8.48	17.27
Manufacture of basic metals	24	2,469	6.79	24.06
Manufacture of textiles	13	1,937	5.33	29.39
Manufacture of food products	10	1,762	4.85	34.24
Manufacture of pharmaceuticals, medicinal chemical and botanical products	21	1,752	4.82	39.06
Manufacture of machinery and equipment n.e.c.	28	1,665	4.58	43.64
Manufacture of rubber and plastics products	22	1,614	4.44	48.08
Civil engineering	42	1,606	4.42	52.5
Telecommunications	62	1,548	4.26	56.76
Construction of buildings	41	1,424	3.92	60.68
Manufacture of pharmaceuticals, medicinal chemical and botanical products	29	1,400	3.85	64.53
Manufacture of electrical equipment	27	1,282	3.53	68.06
Manufacture of other non-metallic mineral products	23	1,186	3.26	71.32
Diversified	34	978	2.69	74.01
Accommodation	55	590	1.62	75.64
Rest†	-		24.36	100.00

Notes: † This table presents data for industries that together account for more than 75 per cent of the observations in our sample.

Table 6a: The Typology of Transactions

Transaction Type	**Frequency**	**Per cent**
Total revenue expenses/payments	14,696	44.11
Total revenue receipts/income	13,282	39.87
Outstanding guarantees given	2,294	6.89
Outstanding/Closing balance of investment	1,132	3.40
Outstanding guarantees taken	776	2.33
Guarantees taken during the year	285	0.86
Total capital account payments	191	0.57
Share capital issued during the year	150	0.45
Outstanding share capital	141	0.42
Outstanding/Closing balance of investment	122	0.37
Total capital receipts	101	0.30
Net outstanding current receivables/payables	75	0.23
Net outstanding borrowings taken/loan given	29	0.09
Share Application Money received during the year	17	0.05
Share Application Money received o/s (liability)	9	0.03
Margin Money Received during the year	7	0.02
Margin Money Paid o/s (asset)	3	0.01
Margin Money Recd. o/s (liability)	3	0.01
Total	33,313	100.00

Table 6b: Incidence of RPTs Across Industries

Transaction type	NIC Sections															
	B	**C**	**D**	**F**	**G**	**H**	**I**	**J**	**M**	**N**	**O**	**P**	**Q**	**R**	**S**	**– †**
Guarantees given during the year	0.00	2.94	7.53	6.15	2.50	4.63	4.24	3.45	3.05	3.86	0.00	4.15	4.94	1.76	0.00	4.91
Guarantees taken during the year	0.00	0.77	0.72	2.22	0.46	0.82	0.34	0.48	1.53	0.59	0.00	1.55	1.48	0.59	0.00	0.82
Margin Money Paid o/s (Asset)	0.00	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Margin Money Recd. o/s (liability)	0.00	0.02	0.00	0.00	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Margin Money Received during the year	0.00	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Net outstanding borrowings taken/loan given	0.00	0.11	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
Net outstanding current receivables/payables	0.00	0.27	0.00	0.61	0.00	0.00	0.00	0.00	1.72	0.00	0.00	0.00	0.00	0.00	0.00	0.20
Outstanding guarantees given	0.00	5.74	13.98	14.04	4.68	10.75	9.15	7.46	6.30	4.22	0.00	12.95	11.85	6.47	0.00	11.15
Outstanding guarantees taken	0.00	1.95	2.51	5.25	1.79	2.99	3.05	1.71	3.44	1.29	0.00	5.18	3.70	2.35	0.00	2.66
Outstanding share capital	0.00	0.56	0.36	0.03	0.49	1.09	0.68	0.30	1.91	0.00	0.00	0.00	0.00	0.00	0.00	0.20
Outstanding/Closing balance of investment	0.00	0.46	0.00	0.77	0.05	0.00	0.00	0.00	1.91	0.00	0.00	0.00	0.00	0.00	0.00	0.41
Share Application Money received during the year	0.00	0.05	0.00	0.03	0.08	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.25	0.00	0.00	0.00
Share Application Money received o/s (liability)	0.00	0.04	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Share capital issued during the year	0.00	0.49	0.36	0.35	0.30	0.27	1.53	0.26	0.76	0.12	0.00	0.52	1.48	2.35	0.00	0.51
Total capital account payments	0.00	0.52	2.51	0.58	0.44	0.95	1.02	0.59	1.53	0.59	0.00	0.00	0.74	3.53	0.00	0.20
Total capital receipts	0.00	0.22	1.79	0.45	0.41	1.09	0.17	0.30	1.15	0.12	0.00	0.00	0.49	3.53	0.00	0.00
Total revenue expenses/payments	53.19	45.43	35.48	35.91	47.23	40.14	42.03	43.65	39.89	45.55	50.00	38.86	38.52	40.59	45.00	40.39
Total revenue receipts/income	46.81	40.44	34.77	33.37	41.25	37.28	37.80	41.80	36.83	43.56	50.00	36.79	36.54	38.82	55.00	38.45
All	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Notes: (i) Mining & quarrying (B), Manufacturing (C), Electricity, gas, steam and air conditioning supply (D), Construction (F), Wholesale and retail trade; repair of motor vehicles and motorcycles (G), Transportation and storage (H), Accommodation and Food service activities (I), Information and communication (J), Professional, scientific and technical activities (M), Administrative and support service activities (N), Public administration and defence; compulsory social security (O), Education (P), Human health and social work activities (Q), Arts, entertainment and recreation (R), Other service activities (S), Diversified (-). (ii) † Diversified is not a NIC category but is mentioned in Prowess.

Table 7: Incidence of RPTs Across Levels of Promoter Holding

Transaction type	**Promoter holding**		
	< 20	20-50	> 50
Guarantees given during the year	0.03	0.04	0.03
Guarantees taken during the year	0.01	0.01	0.01
Margin Money Paid o/s (Asset)	0.00	0.00	0.00
Margin Money Recd o/s (liability)	0.00	0.00	0.00
Margin Money Received during the year	0.01	0.00	0.00
Net outstanding borrowings	0.00	0.00	0.00
Net outstanding current	0.00	0.00	0.00
Outstanding guarantees given	0.08	0.08	0.06
Outstanding guarantees taken	0.03	0.02	0.02
Outstanding share capital	0.00	0.01	0.00
Outstanding/Closing balance of investments	0.00	0.00	0.00
Share Application Money received during the year	0.00	0.00	0.00
Share Application Money received o/s (liability)	0.00	0.00	0.00
Share capital issued during the year	0.00	0.00	0.00
Total capital account payments	0.00	0.01	0.01
Total capital receipts	0.00	0.00	0.00
Total revenue expense/payments	0.42	0.44	0.44
Total revenue receipts/income	0.42	0.39	0.40
Total	**1.00**	**1.00**	**1.00**

Table 8: Correlation between Transaction Value and Promoter Holding

Normalized transaction value	All companies	Market capitalization‡	
		< mean	> mean
	Promoter holding		
Transaction value/Total Assets		-0.0220	0.0563
		(0.0186)	(0.000)

Note: ‡ See Table 4c for mean value of market capitalization. (iii) *p*-values are reported within parentheses.

Table 9: Determinants of the Incidence of RPTs

Dependent Variable: RPT Code				
Independent Variable	1	2	3	4
Regulation				
Regulation (2018)	-0.107**	-0.142*	-0.123**	-0.179**
	(-3.37)	(-1.81)	(-3.89)	(-4.69)
Regulation*Promoter Holding		0.001		
		(0.47)		
Regulation*Family20				0.696**
				(4.60)
Regulation*Family2050				0.074
				(1.06)
Ownership characteristics				
Promoter Holding	0.026**	0.026**		
	(34.24)	(24.53)		
Family20			-1.716**	-2.080**
			(-22.84)	(-17.92)
Family2050			-0.174**	-0.212**
			(-4.88)	(-4.25)
BG	-0.538**	-0.538**	-0.492**	-0.492**
	(-14.41)	(-14.41)	(-13.28)	(-13.29)
Foreign	0.951**	0.952**	0.959**	0.952**
	(5.05)	(5.05)	(5.42)	(5.39)
Mixed	0.441**	0.443**	-0.025	-0.025
	(9.39)	(9.39)	(-0.60)	(-0.59)
Corporate Governance				
Board Size	-0.566**	-0.566**	-0.571**	-0.572**
	(-22.22)	(-22.18)	(-22.59)	(-22.60)
Independent Director	1.157**	1.157**	1.220**	1.217**
	(19.17)	(19.18)	(20.32)	(20.23)
Big 4	0.431**	0.431**	0.442**	0.446**
	(3.87)	(3.87)	(4.04)	(4.07)
Financial Characteristics				
Market Capitalization	0.688**	0.688**	0.716**	0.716**
	(75.56)	(75.49)	(79.92)	(80.00)
Cash holding	-1.268**	-1.268**	-1.212**	-1.213**
	(-15.81)	(-15.81)	(-15.38)	(-15.37)
ROA	0.003*	0.003*	0.002	0.002
	(2.26)	(2.26)	(1.51)	(1.57)
Leverage	0.070**	0.070**	0.075**	0.074**
	(9.71)	(9.72)	(10.34)	(10.25)
PB	-0.214**	-0.214**	-0.208**	-0.207**
	(-27.04)	(-27.02)	(-26.59)	(-26.55)
Firm characteristics				
Firm Age	0.699**	0.699**	0.745**	0.740**
	(28.36)	(28.37)	(29.87)	(29.56)

Dependent Variable: RPT Code				
Independent Variable	1	2	3	4
Intercept	-7.235**	-7.218**	-6.091**	-6.039**
	(-31.38)	(-30.99)	(-28.47)	(-28.16)
Industry Dummy	Yes	Yes	Yes	Yes
Year Dummy	No	No	No	No
No. of Obs.	35,417	35,417	35,417	35,417
Pseudo R-Squared	0.4591	0.4684	0.4586	0.4591
LR Test	9,154.12	9,138.2	9,255. 05	9,259.05

Note: (i) The parenthesis includes t-statistic. (ii) *, **, *** show significance at p<0.10, p<0.05 and p<0.01, respectively.

Table 10: Determinants of Normalized RPT Value

Dependent Variable: RPT Value/Total Assets	Base regression		Regulation		
Independent Variables	1	2	3	4	5
Ownership characteristics					
Promoter Holding	0.028**	0.018**	0.028**	0.018**	0.018**
	(2.80)	(2.85)	(2.78)	(2.81)	(2.81)
Business Group	1.933**	1.208**	1.890**	1.182**	1.182**
	(2.89)	(4.99)	(2.87)	(5.01)	(5.01)
Foreign ownership	1.524*	0.490	1.455*	0.450	0.450
	(1.98)	(1.47)	(1.91)	(1.35)	(1.35)
Mixed ownership	0.005	0.089	0.006	0.084	0.084
	(0.01)	(0.40)	(0.01)	(0.38)	(0.38)
Corporate Governance					
Board Size	-0.876*	-0.277*	-0.929*	-0.313*	-0.313*
	(-2.06)	(-1.89)	(-2.12)	(-2.17)	(-2.17)
Independent Director	0.347	-0.022	0.332	-0.040	-0.040
	(0.60)	(-0.08)	(0.58)	(-0.15)	(-0.15)
Big 4	1.601*	0.689*	1.610*	0.691*	0.691*
	(2.26)	(2.25)	(2.27)	(2.24)	(2.25)
Firm characteristics					
Firm Age	-1.309**	-0.439**	-1.297**	-0.430**	0.029
	(-3.30)	(-2.92)	(-3.30)	(-2.93)	(1.20)
Financial Characteristics					
Market Capitalization	-1.426**	-0.617**	-1.400**	-0.604**	-0.604**
	(-3.72)	(-5.31)	(-3.72)	(-5.30)	(-5.31)
Cash holding	4.639*	1.413*	4.445*	1.330*	1.330*
	(2.54)	(2.18)	(2.48)	(2.05)	(2.05)
Return on Assets	0.014	0.029*	0.014	0.029*	0.029*

Dependent Variable: RPT Value/Total Assets	Base regression			Regulation	
Independent Variables	1	2	3	4	5
	(0.73)	(2.41)	(0.71)	(2.44)	(2.44)
Leverage	-0.184*	-0.152**	-0.184*	-0.153**	-0.153**
	(-2.09)	(-2.83)	(-2.07)	(-2.79)	(-2.79)
Price to Book Ratio	0.245**	0.138**	0.257**	0.144**	0.144**
	(3.15)	(4.47)	(3.18)	(4.45)	(4.45)
Related Party Transaction Type					
Beneficial		0.891**		0.887**	0.890**
		(4.58)		(4.55)	(3.71)
Guarantees taken during the year	1.812*		1.905*		
	(1.82)		(1.93)		
Outstanding guarantees taken	2.128**		2.143**		
	(2.81)		(2.83)		
Net outstanding borrowings taken/loan given	-45.940**		-47.428**		
	(-3.94)		(-3.93)		
Net outstanding current receivables/payables	-38.437**		-38.200**		
	(-3.88)		(-3.86)		
Outstanding guarantees given	-0.265		-0.256		
	(-0.28)		(-0.27)		
Outstanding share capital	-38.819**		-4.728*		
	(-3.91)		(-1.80)		
Outstanding/Closing balance of investments	-4.727*		-38.539**		
	(-1.79)		(-3.89)		
Share Application Money received during the year	-41.882**		-43.451**		
	(-3.97)		(-3.96)		
Share Application Money received o/s (liab.)	-46.119**		-45.967**		
	(-4.01)		(-3.97)		

Dependent Variable: RPT Value/Total Assets	Base regression		Regulation		
Independent Variables	1	2	3	4	5
Share capital issued during the year	-40.445**		-41.405**		
	(-3.92)		(-3.93)		
Total capital account payments	-39.330**		-39.868**		
	(-3.95)		(-3.94)		
Total capital receipts	-39.878**		-39.528**		
	(-3.94)		(-3.94)		
Total revenue expenses/payments	-7.159**		-7.106**		
	(-2.96)		(-2.95)		
Total revenue receipts/income	-5.002**		-4.954**		
	(-2.63)		(-2.62)		
Regulatory change					
Regulation			0.885*	0.412*	
			(1.83)	(2.38)	
Regulation*Beneficial					0.415*
					(1.65)
Intercept	-0.180	-2.968*	-0.553	-3.038*	-0.260
	(-0.05)	(-1.95)	(-0.17)	(-2.07)	(-0.51)
Industry Dummy	Yes	Yes	Yes	Yes	Yes
Year Dummy	Yes	Yes	No	No	Yes
var(e.RPT Value)	55.420*	9.806**	55.748*	9.898**	9.898**
	(2.03)	(2.96)	(2.02)	(2.94)	(2.95)
No. of Obs.	26,380	22,535	26,380	22,535	13,316
R-Squared	0.1072	0.0917	0.1058	0.0891	0.1898
F test	1.46**	1.94**	1.52**	2.21***	167.08***

Source: Authors

Note: (i) The parenthesis includes t-statistic. (ii) *, **, *** show significance at p<0.10, p<0.05 and p<0.01, respectively.

Table 11: Mean Normalized RPT Value Across Years

Year	Mean Transaction Value (Normalized by Total Assets)
2012	0.1120
2013	0.1134
2014	0.1182
2015	0.1159
2016	0.1236
2017	0.1192
2018	0.1264
2019	0.1511
2020	0.1313
2021	0.1244
2022	0.1589
All	0.1292

Source: Authors

Note: Year is the reporting year, e.g., 2022 corresponds to 2021-22.

Table 12: Relative Impact of Regulations

Dependent Variable: RPT Code				
Independent Variable	1	2	3	4
Regulation2018	-0.119**	-0.134**	-0.167	-0.189**
	(-2.87)	(-3.26)	(-1.60)	(-3.77)
Regulation 2015	-0.059	-0.068*	-0.141	-0.050
	(-1.45)	(-1.66)	(-1.36)	(-1.01)
Regulation 2013	0.004	0.011	0.019	0.014
	(0.08)	(0.22)	(0.14)	(0.22)
Ownership Characteristics				
Promoter Holding	0.026**		0.025**	
	(34.19)		(13.47)	
Family20		-1.714**		-1.833**
		(-22.81)		(-10.13)
Family2050		-0.173**		-0.240**
		(-4.87)		(-2.74)
Regulation2018*Promoter Holding			0.001	
			(0.49)	
Regulation2018*Family20				0.497**
				(2.65)
Regulation2018*Family2050				0.098
				(1.08)
Regulation2013*Promoter Holding			-0.000	
			(-0.11)	
Regulation2015*Promoter Holding			0.002	
			(0.84)	
Regulation2013*Family20				-0.414
				(-1.57)
Regulation2015*Family20				-0.299
				(-1.62)
Regulation2013*Family2050				0.056
				(0.48)
Regulation2015*Family2050				-0.026
				(-0.29)
BG	-0.539**	-0.493**	-0.539**	-0.511**
	(-14.44)	(-13.32)	(-14.45)	(-13.74)
Foreign	0.948**	0.956**	0.949**	
	(5.03)	(5.40)	(5.04)	
Mixed	0.441**	-0.024	0.442**	-0.043
	(9.39)	(-0.57)	(9.38)	(-1.02)
Corporate Governance				
Board Size	-0.563**	-0.568**	-0.563**	-0.579**
	(-22.09)	(-22.44)	(-22.04)	(-22.91)
Independent Director	1.161**	1.224**	1.162**	1.240**
	(19.23)	(20.38)	(19.23)	(20.68)

Dependent Variable: RPT Code				
Independent Variable	1	2	3	4
Big4	0.430**	0.441**	0.430**	0.459**
	(3.86)	(4.03)	(3.85)	(4.15)
Market Cap	0.688**	0.716**	0.689**	0.722**
	(75.58)	(79.94)	(75.52)	(80.35)
Cash holding	-1.269**	-1.214**	-1.269**	-1.189**
	(-15.81)	(-15.38)	(-15.82)	(-15.34)
ROA	0.003*	0.002	0.003*	0.002
	(2.21)	(1.46)	(2.21)	(1.40)
Leverage	0.070**	0.075**	0.070**	0.074**
	(9.71)	(10.34)	(9.72)	(10.18)
PB	-0.214**	-0.207**	-0.214**	-0.203**
	(-26.96)	(-26.51)	(-26.94)	(-26.95)
Firm characteristics				
Firm Age	0.700**	0.745**	0.700**	0.744**
	(28.38)	(29.88)	(28.38)	(29.78)
Intercept	-7.219**	-6.076**	-7.175**	-6.026**
	(-31.06)	(-28.13)	(-29.09)	(-27.72)
Industry Dummy	Yes	Yes	Yes	Yes
Year Dummy	No	No	No	No
No. of Obs.	35,417	35,417	35,417	35,417
Pseudo R-Squared	0.4685	0.4587	0.4685	0.4583
Wald statistic	9133.86	9250.87	9153.35	9324.43

Source: Authors

Note: (i) The parenthesis includes t statistics. *, **, *** show significance at p<0.10, p<0.05 and p<0.01, respectively. (ii) Standard errors are robust. (iii) 26380 observations correspond to RPT and 9087 observations.