ANALYSIS OF RELATED PARTY TRANSACTIONS IN INDIA: A GROUP AND NON-GROUP COMPANY PERSPECTIVE

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Abstract

Related party transactions (RPTs) which occur between related companies which are commonly reported in published financial reports. Regulations have been enforced by authorities globally, to control and prevent misuse of these types of transactions through extensive disclosure requirements. Research on RPTs in a country is important as it gives an indication of the usage of these transactions by companies during their operations. These transactions need to be tracked as they could be for legitimate reasons or for influencing the performance reports, thereby misleading potential global investors.

This paper examines 1) the impact of increased regulatory requirements introduced in India for disclosure of RPTs by listed companies and 2) the usage pattern of RPTs by companies which are part of a Group, as compared to those of standalone companies.

Analysis of RPTs reported by 78 non-financial companies (part of the Bombay Stock Exchange Index 100) shows an increasing trend for RPTs reported for the period 2013-15, as compared to 2009-12. This trend is an indication that the regulatory requirements in India through the new Companies Act 2013, is proving to be effective in achieving its objectives. Such regulations passed to improve transparency in financial reporting in India will also act as a deterrent to companies, who may be intending to misuse these transactions in the future.

Statistical tests show that Group Companies have a higher value of average annual RPTs, for transactions related to balance sheet and profit and loss accounts, as compared to Non-Group companies. This confirms that Group companies use RPTs extensively in their business operations, for achieving various objectives.

Unlike other studies on RPTs in India, this study focuses on the use of these transactions by Group and Non- Group companies separately, over a seven-year period. The study goes into further detail on the different types of RPTs and shows the trend for each type after the revised regulations have been enforced.

Keywords: Related Party Transactions, Related Party Disclosures, Earnings Management

1. INTRODUCTION

Related party transactions (RPTs) are those which occur between a reporting company and an entity, which is connected to the reporting company in a particular relationship, either as an individual Director/Manager. This could also be a separate entity, which is a subsidiary or associate company. These transactions are often initiated by management or the majority shareholder of the



listed company and can take up several forms. They can be beneficial to the business if appropriately used, but can also be manipulated by management to distort reported performances.

In India, several cases have been discovered where companies used related party transactions to falsify their earnings and report superior financial performance. In 2009, Satyam Computer Services was involved in a case of fraudulent reporting and was found to have a web of 356 investment companies which were used to allegedly divert funds from the parent company (Hindustan Times, Apr 09, 2015). These companies had several transactions in the form of inter-corporate investments, advances, and loans within and among them.

A number of public listed companies in India are controlled by owners who as a single entity are the largest shareholder. In such companies there is always a danger of these owner-shareholders transferring funds to entities which are fully owned by them, thereby deceiving the minority shareholders (Marianne Bertrand et al., 2002; Ming Jian and T. J. Wong, 2003).

These practices necessitate the study of the extent of use of RPTs by a company in India. A review of these transactions provides indications of the following:

- 1. Dependence of the company on related parties for sales, purchases, and financing.
- 2. Support of the parent company to its subsidiaries through various loans/advances.
- 3. Diversion of funds through these transactions to the associate and related companies.

Globally interest in RPTs has increased when several corporate frauds have been discovered where RPTs were widely used. Enron, an American company in the energy industry, used a number of transactions with related companies, to mask its losses. In China, there is evidence of diversion of funds using RPTs, by several corporate group companies (Ming Jian and T. J. Wong, 2003).

This study evaluates the impact of the strict requirements of Companies Act 2013, on the value of related party transactions published in India. The paper examines the average value of RPTs as reported from 2013 to 2015, and compares it with the average values reported in the previous four years (2009 to 2012). This comparison gives an indication of the impact of the stricter regulations introduced.

The study further evaluates the use of different types of RPTs for companies which are a part of a Group and compares it to standalone companies. A high use of RPTs in operations is often an indication of earnings management by the majority shareholder (Ming Jian and T.J.Wong, 2003). Impact of RPTs is found either on the profit and loss statement or on the balance sheet and this perspective is reviewed in this study for the two types of companies.

The study also reviews the relationship of the entity with which the company has had the maximum transactions and examines if this has changed over the period under review.

The paper has been divided into several sections with Section 2 discussing literature review under two themes: Regulations for disclosure of RPTs and Impact of RPTs on the financials reported by a company. Section 3 outlines the methodology of research with details on data collated and the hypothesis formulated and tested. Section 4

discusses the results and their implications and Section 5 concludes the paper.

2. LITERATURE REVIEW

Literature review is divided into two parts:

- 1. Regulatory disclosure requirements for related party transactions
- 2. Impact of RPTs on the financials reported by a company.

2.1. Regulatory disclosure requirements for RPTs

Regulatory disclosures requirements for RPTs are present in most countries and consist of different reporting criteria.

Indian Accounting Standards (AS18) define related party transactions as those transacted between two parties related in a particular way as defined:

- "Enterprises that directly, or indirectly through one or more intermediaries, control or are controlled by, or are under common control with, the reporting enterprise (this includes holding companies, subsidiaries, and fellow subsidiaries);
- 2. Associates and joint ventures of the reporting enterprise and the investing party or venture in respect of which the reporting enterprise is an associate or a joint venture;
- 3. Individuals owning, directly or indirectly, an interest in the voting power of the reporting enterprise that gives them control or significant influence over an enterprise, and relatives of any such individual;
- 4. Key management personnel and relatives of such personnel; and
- 5. Enterprises over which any person described in 3) or 4), above can exercise significant influence".

RPTs in the financial sector are strongly regulated in most of the countries. In India the banking industry is regulated as per the Banking Regulation Act, 1949 with rules which are enforced for any RPTs carried out. Section 20 of the Act, prohibits loans and advances to directors and to any firm or company in which the Bank directors have an interest. It also prohibits loans to individuals in respect of whom any of its directors is a partner or guarantor. Disclosure of interest by directors is mandatory and in case there is any likelihood of conflict of interest arising, the concerned director is required to abstain from participating in the decision-making process relating to that case (Shyamala Gopinath, 2008).

Clause 49 was introduced in India, as part of the Listing Agreement between a company and a stock exchange and has several regulations for transactions with a related party. All related party transactions need to be approved by an Audit Committee of the company if they are not in the normal course of business.

In America, the Financial Accounting Standards Board (No. 57, Related Party Disclosures), defines a related party as an executive, a non-executive director, a principal owner or investor, a subsidiary, or a joint venture partner. Alternatively, the party may be a family member or the company is owned by or affiliated with, any of these related individuals.

The Board provides a few examples of common types of transactions with related parties: sales, purchases, transfers of real estate and personal property; services received or furnished,

(accounting, management, engineering, and legal services); use of property and equipment by lease or otherwise; borrowings and lending's with the party; guarantees; maintenance of bank balances as compensating balances for the benefit of another; intercompany billings based on allocations of common costs; and filings of consolidated tax returns.

As per International Accounting Standards (IAS 24), RPTs could take a variety of forms in the normal course of business, or one-off transactions made at a fair value on an arm's length basis. They could be at book value or some other amount that differs from market prices. These standards require that information about RPTs is disclosed as per the rules laid out in the Standards.

Several regulations govern transfer pricing between related parties especially from the perspective of taxation in foreign countries where the subsidiary is located. OECD Guidelines (OECD - 2014), for transfer pricing, provides details of the "the arm's length" principle as the standard to guide transfer pricing.

Global researchers have reviewed these regulatory requirements and reported their deficiencies. These studies have recommended several methods through which these regulations can be further improved. Reporting of related party transactions is often found to be inadequate or not standardized by the companies in a country (Padmini Srinivasan, 2013; Mohamad Ariff et al., 2013).

Studies have found that regulations in the USA are deficient in their control of RPTs. These Standards with a requirement of only disclosure do not control or limit transactions with related parties. The present disclosure requirements often prevent management from engaging in transactions which may be beneficial to the company. Current regulations in America allow transactions below US\$ 60,000 to remain undisclosed. However, there could be transactions below this threshold limit, which are not disclosed and information of which could still be useful to financial analysts and shareholders (Elizabeth A. Gordon et al. 2004).

Realizing the importance of related party disclosures the European Commission has amended the shareholder rights directive which requires prior approval of shareholders and disclosure of related party transactions exceeding a particular value. The EU Accounting Rule 15 provides detailed requirements to be followed by companies in EU for any related party transactions.

Regulatory requirements are often aimed at disclosure of as much information as possible so that all minority shareholders are able to assess the impact of the transaction. Good corporate governance requires the Board to be independent and thus ensure that RPTs which benefit only certain section of the shareholders are not transacted.

Corporate Governance in India has improved over the years with increased mandatory disclosure requirements of financial and non-financial information. In India, the level of voluntary disclosures varies across companies. Reporting culture and practices are different and most companies do not follow a standard practice. Studies have shown that a company with good governance practices led to higher market value and increased shareholder goodwill (Jayati Sarkar, Subrata Sarkar 2010). This encourages companies to improve their disclosure policies and extend it to beyond the

mandatory requirements. With a few exceptions, Indian listed companies limit their disclosure to that mandated by the regulatory requirements. The practice of voluntary disclosures has yet to be imbibed as part of the company culture and there is definitely a great scope for improvement in this aspect of corporate governance in Indian companies (Arijit Sen 2011, Mita and Arti, 2013).

Transparency leads to better corporate governance and a higher voluntary financial reporting disclosure (Shamimul Hasan et. al., 2013). A study on corporate disclosure practices in India over seven years and across sectors has found that there is little difference in the reporting structure of companies which are focused entirely on that which is mandated by regulations (Satvinder Kaur Sachdeva et al., 2015).

The studies show that regulatory requirements in India are necessary to improve financial disclosures by companies. Keeping this objective in mind, the Companies Act (2013) has been designed such that there will be an increase in the financial disclosures by listed companies in India.

The Companies Act, 2013, has revised the regulations for RPTs disclosures. The Act now considers all RPTs to be at arm's length and all RPTs now require prior internal audit committee approval. Audit Committee can refer to an external source and get their opinion on the transactions under review. Audit Committee must have full access to information contained in the records of the company. RPTs are required to be disclosed in the board's report along with justification for entering into such transactions. RPTs not in the ordinary course or not at arm's length require prior board approval and also the prior approval of shareholders (special resolution), where it exceeds specified threshold values. Interested members have to abstain from voting on this special resolution. All details of RPTs are required to be filed with the Registrar of Companies (ROC).

The Act defines the related parties as follows:

- Holding and Subsidiary companies (direct or indirect).
- 2. Associate Company (>20% or control of business decisions under an agreement).
- 3. Directors and Key Management Personnel (including their relatives) of the company or its holding company.
- 4. Firms and Private companies in which directors, managers or relatives are a partner, director or members.
- Any person who provides advice to a director or manager, and which is not given in a professional capacity.
- 6. Public company in which the director or manager is a director and holds along with his relatives more than 2 % of the paid-up share capital

The Act also requires that there should be prior approval of shareholders for all material RPTs. Information on the policy, adopted by the company for transactions with related parties, must be disclosed on the Company's website and in the annual report.

The impact of increased regulatory requirements has been reviewed and opposing results have been found. One point of view is that voluntary reporting reduces if the requirements are too complex and the requirement is in great detail (Dye, 1985). The second point of view suggests that voluntary disclosure lead to increase in further

information which is often not mandated by the laws and which is often proprietary (Faizah Darus & Dennis Taylor, 2009; Dye, 1986).

The objective of mandating disclosures is to ensure that investors are better informed and make comprehensive investing decisions with all information provided to them. Managers of a company are privy to information which is often not disclosed in the published reports. Regulatory bodies use legal framework to mandate disclosures which will ensure that all relevant information is disclosed to all stakeholders through the published reports. The enhanced disclosure requirements as mandated by the Companies Act 2017 have been formulated with this objective in mind.

This paper reviews if the requirements on disclosure of RPTs by the Companies Act 2013 have had the desired results and if they have achieved the objectives of increased transparency in the transactions with related parties.

This leads to the first hypothesis that the average value of RPTs per year is higher for the period 2013 to 2015 as compared to the earlier four year period, 2009 to 2012 when the revised disclosure requirements were not in place.

2.2. Impact of RPTs on the financials reported by a company

RPTs are found to be used extensively in many companies globally for various types of transactions. RPTs are efficient transactions and often add value to the firm if used without a self-interested motive. Extant literature has found that RPTs could, in the long run, reduce the cost for the organization when purchases are made from a related party. These types of transactions between related entities could lead to a smoother purchase process (Elizabeth A. Gordon et al., 2004).

However, where RPTs are used for personal benefit or for managing performance or to comply with a regulatory requirement, the company shows a lower performance in the long run.

Transactions made by the majority shareholding are often found to be unfavorable to minority shareholders and often override the rights of the minority shareholder.

In China, it is required that a company achieves a return on equity of at least 10% for three consecutive years before it can qualify for a rights issue. Companies just managing to reach these targets have been found to have a high percentage of discretionary items such as accounts receivables, abnormal accruals, and non-core earnings transacted with related parties (Kevin C.W.Chen & Hong-Qi Yuan, 2001).

Such companies who obtained rights issue approval using a high proportion of RPTs were found to be performing poorly in the stock exchange in later years (Kevin C.W. Chen, Hong-Qi Yuan, 2001).

A study on finance companies in New Zealand analyzed the related party transactions of 13 failed finance companies and found they were involved in high lending without satisfactory securities. These transactions were breaches of statutory requirements and agreements. These finance companies finally had to close down, as a result of their transactions with related parties (Xiaojing Wu & Sue Malthus, 2012).

Through the medium of RPTs, organizations often try to achieve various objectives. Group

companies in China often resort to related party transactions to meet the specified requirements as laid down by the government for new equity offerings. This strategy is also used when there is a danger of getting delisted by the regulatory body for not meeting the earnings thresholds (Ming Jian & T.J.Wong, 2003).

A high volume of RPTs often indicates tunneling, or diversion of funds from the parent company to various entities controlled by the dominant owner. In China, firms who have high cash balances, divert these resources to controlling shareholders through generous trade credits and other loans (Ming Jian & T.J.Wong, 2003).

Tunneling has been found to be prevalent among Group companies in India. (Marianne Bertrand et al. 2002). A similar misuse of RPTs has been found in Israel for diverting funds through compensation and private issues of stocks and options to associated companies. Propping the subsidiary is often achieved through the transfer of assets and giving loans to these entities by the controlling shareholders (Amzaleg Yaron et al., 2016)

RPTs often lead to financial frauds with fictitious sales made to a related party or by payments made to a related party for services which were never provided (Elizabeth A. Gordon & Elaine Henry 2005).

An independent board, strong corporate governance culture, and an external auditor of a high quality control the use of RPTs for managing earnings or diverting funds.

In India, RPTs are found to be lower in those companies where big audit firms are external auditors, (Padmini Srinivasan, 2013).

A strong corporate governance culture ensures that only those RPTs which are not a conflict of interest with the majority shareholders or managers are executed (Chu-Yang Chien & Joseph C. S. Hsu, 2010).

RPTs in listed companies in Malaysia are often detrimental to the shareholders and reduce the performance of the company. However, where there is higher board independence, adequate executive directors' remuneration and a strong internal audit committee, incidents of RPTs are lower (Effiezal Aswadi Abdul Wahab et al., 2011).

A study of the impact of related party transactions on the market price of the stock price has found that companies with high RPTs have significantly lower market valuations. (Mark Kohlbeck et al., 2010). Companies that report a higher incidence of RPTs, eventually lead to negative cumulative abnormal returns (Stouraitis et al., 2006).

Studies in different countries on the pattern of ownership and the use of related party transactions have found a positive relationship between a high controlling ownership and increased number and value of transactions with related parties.

Firms in Malaysia controlled by families are found to indulge in higher related party transactions which have an impact on the earnings quality. However, this trend is based on the level of family ownership whether high or low (Sa'adiah Munir et al., 2013).

Good governance leads to strong monitoring mechanisms and prevents extensive use of RPTs to manage performance (Elizabeth A. Gordon et al., 2004; Mark Kohlbeck & Brian Mayhew, 2004).

Related party transactions are also found in state-owned companies in China where control of

the government is high. In these companies, a high level of internal control ensures there are few related party transactions (Yan Tong et al., 2014).

Related party transactions tend to be more prevalent among companies where the ownership is concentrated within a single entity. Several researchers' have found that shareholders with a controlling stake in the company, tend to indulge in a higher value of RPTs through which they derive personal benefits or attempt to manage the earnings (Ming Jian & T.J.Wong, 2003). Size of firms in China and the shareholding ratio of the controlling shareholder is positively related to tunneling behavior (Wenting Chen et al., 2016). It has been established in several studies globally the that Independence of the Board has a mitigating effect on the prevalence of RPTs for managing earnings (Genius Khober et al., 2017, Wenting Chen et al., 2016).

In several East Asian economies, companies which were a part of a Group were found to be involved in several related party transactions. These transactions were beneficial to the Group companies but often lead to increased earnings management and inefficient allocation of resources (Claessens, Stijn & Fan, Joseph P. H. & Lang, Larry H.P., 2002).

Companies with a dominant shareholding entity often have limited corporate governance and reduced board independence. This mainly occurs when a company belongs to a Group or conglomerate. In the absence of these monitoring and controlling mechanisms, there are instances of high related party transactions which are often unfavorable to the minority shareholders.

This hypothesis is tested in this paper by analyzing the value of RPTs in Group and Non-Group companies in India, over the period 2009 to 2015.

The second hypothesis formulated is that companies belonging to a Group have a higher average value of RPTs per year as compared to companies which do not belong to a Group.

3. METHODOLOGY

The data is selected from a group of companies which are classified as BSE index 100. This index is a representative of the top 100 companies listed on the Bombay Stock exchange with the highest market capitalization and trading activity.

Existing studies on RPTs have been carried out for companies in India which review the value of RPTs over a period and correlate them based on their sales value, asset size, ownership or board structure. Studies in China (Ming Jian & T.J.Wong, 2003; Kevin C.W. Chen, Hong-Qi Yuan, 2001) have reviewed RPTs from the impact they have on the earnings or on the value of the company after they report these transactions.

However, there are limited studies which show the type of RPTs used extensively by Group companies as compared to Non-Group companies, for the current years.

Further, a study of the trend in the value and type of RPTs reported in India, after a regulation is enforced, has not been evaluated in detail, in existing literature.

This study indicates that companies are now being transparent in their dealings with related parties. This confirms the effectiveness of the regulations enforced. A further breakdown of these RPTs into different types of transactions shows which transactions are being used more extensively by the two types of companies: Group and Non-Group.

A study of this detail is important as it gives an indication of the impact the transaction would have on the published Balance sheet or Profit and Loss report.

These companies form a sample of a balanced industry representation of the listed companies and are considered to have an acceptable track record in the opinion of the BSE Index Committee. From this set of 100 companies, 78 companies belonging to the non-financial sectors and having significantly high related party transactions were selected. Financial sector companies are omitted as these have specific rules and regulations, governing related party transactions.

Related party transactions reported by these 78 companies from 2009 to 2015 have been collated from the CMIE Prowess database which extracts the data from the financial reports published.

The data has been divided into Group companies (13 in number) and non-Group companies (65 in number). Group companies are those where the majority shareholding is held by a particular company or individual and can exercise 26% of voting rights or can appoint the majority of the board members in the company.

The average value of the related party transactions per company for each year is computed. This average value is compared between the two sets of companies and statistically tested using t-test of means between the two samples.

Related party transactions were broadly classified into following types:

- A. Balance Sheet Transactions of the following types:
 - a. Net outstanding borrowings taken/loan given
 - b. Current Assets Balance
 - c. Current Liabilities Balances
 - d. Total capital account payments which consisted of investment in Equity Shares of the subsidiary and any asset purchases in the related party
 - e. Total capital receipts consisted of sales of fixed assets to related parties and the receipt of payments for these sales.
- B. Profit and Loss Transactions of the following types:
 - a. Revenue/Receipt transactions
 - b. Purchases/Expense transactions
- C. Guarantees Given: These are Bank guarantees given to related parties to support them in their operations.
- D. Others (which are not clearly defined in the financial reports)

Further classification was made based on the entity with whom the particular transaction was made. These entities were classified as: Subsidiary company, Holding Company, Joint Venture, Key Management Personnel and their relatives, Companies where control exist or Associate Companies, and Others. This classification was made based on the declaration made by the company in its annual report and as reported in the database.

3.1. Presentation of data

The related party transaction data for the period 2009 to 2015 for the two categories of companies (Group and non-Group) provided the following information:

- 1. Average value of RPT per year for each category and type of transaction- Balance Sheet, Profit, and Loss, Guarantee, Others (Appendix: Table 1)
- 2. Annual growth in each category and type (Appendix: Table 2).
- 3. Analysis of the entity with which the transaction was carried out (Appendix: Table 3,4 and 5)

3.2. Hypothesis

The hypothesis formulated and tested in this study are:

- 1. The average value of RPTs per year is higher for the period 2013 to 2015 as compared to the period 2009 to 2012 after the introduction of the revised reporting requirements of the Companies Act 2013.
- 2. The average value of RPTs per year, for each of the different transactions impacting the Balance Sheet, P&L, and Guarantees, is higher for companies which belong to a Group.

3.3. Descriptive statistics

Descriptive statistics are presented in two parts

- 1. Data classified based on the type of transactions
- 2. Data classified based on the entity with whom the transaction was made.

The data based on the type of transaction is presented in Table 6 and 7 with the following values:

- 1. Total annual value of RPTs for all companies in the two categories of companies (Group and Non-Group) and under each type of transaction (Balance Sheet, P&L, Guarantee and Others).
- 2. Average value of RPT per company per year for the two sets of companies for each of the types of transactions (Balance Sheet, P&L, Guarantee and Others)
- 3. Standard Deviation for each category and type.
- 4. The maximum value of RPTs under each category and type.

The data shows that the average and maximum value has grown considerably with growth rates of over 100% during the period for several types of transactions. The mean value for loans taken/given has grown over three times from 2009 to 2015 for Non-Group companies as compared to Group companies which have remained steady during this period. Mean value of the sale of fixed assets to related parties shows a huge increase (over 100%) for Group Companies, indicating increased activity for these types of transactions in the later years.

The statistics based on the entity with whom the transaction is made is shown in Table 3, 4 and 5.

This analysis of data focuses on the different related entities with which transactions are made: Subsidiary, Holding company, Joint Ventures, Key Personnel and relatives of Key Management Personnel, Parties where control exists or Associate companies and lastly others.

Analysis of the two types of companies shows that:

A) For Non-Group companies majority of transactions are with subsidiaries. However, sales and purchases are largely made with Associate companies or companies where control exists. Higher purchases from these entities show a higher balance of liabilities with

- them. Guarantees are given to subsidiary companies only.
- B) For Group companies, the majority of the transactions are with subsidiaries. However, a higher level of purchases is made with Associate companies where control exists. Guarantees are also given to mainly subsidiary companies.

This analysis of entities with whom the two categories of companies transact shows that major transactions are mainly with entities where there is direct control or the company has an authority to make decisions, such as a subsidiary or associated companies. Joint venture companies are not favored for transacting business.

4. RESULTS AND DISCUSSION

H1: The average value of RPTs per year is higher for the period 2013 to 2015 as compared to the period 2009 to 2012.

The average annual value of RPTs (as listed in Table 1) for the period 2009 to 2012 and that for the period 2013 to 2015 is tested statistically with the ttest showing that the average value of RPTs is higher during the period 2013 to 2015 (Table 6) as compared to the years 2009 to 2012. The empirical tests thus support Hypothesis 1.

This evidence proves that companies have started complying with the new regulations (Companies Act 2013), and have started reporting the higher value of RPTs from 2013.

The annual average value for each type of transaction for both types of companies has been computed and graphs plotted to further analyze the trend of the growth in the value of RPTs (Figure 1 and 2).

Analysis on the trend of the growth in value for the different related party transactions:

4.1. Trend of balance sheet type of related party transactions

The value of RPTs related to Balance sheet transactions shows an increasing trend during the period. However, this trend is found to be higher for Non-Group companies for all types of transactions (Figure 2).

For Group Companies there is a sharp increase in sales of capital assets to related companies which is indicated by the high sale of fixed assets by the Group companies to their related parties in 2014 and 2015 (Figure 1).

Balances in current assets and current liabilities have also grown extensively from 2009 to 2015 with liabilities balances for Non-Group companies showing an increase of over 300% in this period. This is an indication of higher purchases by Non-Group companies from related parties.

4.2. Trend of P&L type of related type of transactions

There is an increasing trend for both categories of companies for Profit and Loss types of transactions. During the period sales and revenue transactions with related parties grew by over 300% for both types of companies. For Non-Group Companies purchases from related parties grew by over 350% indicating higher purchases being made from related parties.

4.3. Trend of Guarantee type of related type of transactions

There is a growing trend of Guarantees given to related parties by Non-Group companies. This has grown considerably with high values reported from 2013 to 2015. The jump in this period could indicate that many companies in this category are now declaring any bank guarantees given to their related parties as mandated by the Companies Act.

4.4. Analysis of value of RPTs reported in 2009 compared to those reported in 2015

If a comparison of revenue of all the companies is computed for the period 2009 to 2015 it shows that there has been a growth of 84% during this period, indicating the level of growth these companies experienced. However, a similar computation for the value of RPTs between 2009 and 2015 shows a growth of over 125% for most of the transactions, with some being over 300%.

This percentage of growth in the value of RPTs reported is much higher than the revenue growth of 84% these companies clocked during this period. This indicates that all companies are now declaring a higher number of related party transactions in their financial reports, as compared to the earlier period. This is a strong indication that strict regulations on the reporting of related parties, as per the Companies Act 2013, are proving to be effective. Transactions which were not reported earlier as related parties are now being highlighted and shown separately in the financial reports as transactions between related parties as required by the new laws.

H2: The average value of RPTs per year, for each of the different transactions impacting the Balance Sheet, P&L, and Guarantees, is higher for companies which belong to a Group.

The above hypothesis is tested using the t-test with the following three sets of data:

- a. Average value of RPT per year of the Balance sheet type of related party transaction for 65 companies which do not belong to a Group and 13 companies which belong to a Group.
- b. Average value RPT per year of the Profit and Loss type of related party transaction for 65 companies which do not belong to a Group and 13 companies which belong to a Group
- c. Average value of RPT for guarantees given per year for 65 companies which do not have any Group affiliation and for 13 companies which belong to Groups.

The output of the t-test is shown in Table 7 and provides the following results:

- 1. Group Companies are found to have a statistically significantly higher value of average RPTs per year than Non-Group companies for following types of transactions which are part of the Balance Sheet:
 - i. Loans Given (t = 1.65, p<0.10)
 - ii. Current Assets (*t*=2.094 *p*<0.05)
 - iii. Current Liabilities (*t*=1.964, *p*<0.05)

- iv. Capital Account Payments (t=2.019, p<0.05)
- v. Capital Account Receipts (*t*=1.902, *p*<0.05)
- 2. Group companies have higher average RPTs related to Profit and Loss Account type of transactions as compared to non-Group companies.
 - i. Revenue/Receipt Transactions (*t*=1.984, *p*<0.05)
 - ii. Purchase/payment Transactions (*t*=1.765, *p*<0.05).
- 3. Guarantees given to related parties are higher for Non-Group Companies.

The above results clearly indicate that companies which belong to a Group, support related parties through various types of transactions, which are impacting both Balance sheet and Profit and Loss accounts. This strategy could be a technique to manage earnings or diversion of funds. The empirical tests show that Hypothesis 2 is supported.

5. CONCLUSION

The paper finds that there is an increasing trend in the reporting of the value of related party transactions from 2009 to 2015, with a higher trend visible in the period 2013 to 2015. This growth in reporting the value of RPTs is an indication of the success of the stricter regulations required on RPTs reporting as per the new Companies Act 2013. The revised regulations have now mandated that companies disclose all the transactions made by related parties, with non-disclosure leading to high penalties and even imprisonment. The steep rise in the value of RPTs reported during the period 2013-2015, also indicates that there were transactions in the earlier years (prior to 2013), which were never categorized as RPTs and hence remained undisclosed.

The analysis of related party transactions for the two categories of companies, Group and Non-Group shows that the average value of transaction made by a Group company with a related party in a year is higher than a non-Group company across the period 2009-2015. This clearly is an indication that Group companies use related parties for various transactions to improve their performances or to support their associate and subsidiary companies.

The study further shows that all companies have the majority of their RPTs with their subsidiary or associate companies, where they can exercise higher control.

This paper has limited the study to 3 major Groups and their companies which are a part of the BSE Index 100 group. This scope can be widened and additional groups included in future studies.

The data on RPTs as published by the companies in India is not uniform and hence difficult to analyze across firms. A common template could be introduced by Stock Exchange Board of India for reporting these items in the financial reports. This will provide the information in a manner which can be easily compared and analyzed between companies.

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APPENDIX

Table 1. Annual total RPTs based on type of transactions for Group and Non-Group companies

		Rs n	nillion				
	2009	2010	2011	2012	2013	2014	2015
			ce Sheet				
		Non	Group				
Net outstanding borrowings taken/loan given	134,137	106,168	269,201	294,586	328,941	320,242	369,114
Current assets	163,429	163,926	164,419	265,842	255,107	363,688	363,638
Current liabilities	59,747	92,366	121,401	157,144	231,021	304,976	307,113
Total capital account payments: Investment in Equity Shares of the subsidiary+ asset purchases	259,539	121,498	223,535	141,465	275,800	275,832	216,320
Total capital receipts: sales of fixed assets	38,827	10,524	13,666	44,045	64,591	80,397	85,748
		Gı	roup				
Net outstanding borrowings taken/loan given	443,518	207,731	269,414	160,364	382,900	402,228	441,269
Current assets	84,794	124,511	216,699	186,658	222,860	245,921	203,801
Current liabilities	51,591	77,693	149,100	114,354	93,980	133,214	122,626
Total capital account payments: Investment in Equity Shares of the subsidiary+ asset purchases	407,335	232,001	212,710	101,366	134,216	292,685	668,072
Total capital receipts: sales of fixed assets	4,058	92,392	25,328	95,269	158,131	120,945	494,292
	•	F	P&L		•	•	•
		Non	Group				
Total revenue receipts/income	232,232	288,619	404,316	641,417	741,036	905,872	1,070,910
Total purchases/payments	371,373	454,887	713,574	1,018,470	1,512,144	1,857,478	1,779,067
			roup				
Total revenue receipts/income	218,248	510,254	705,849	785,124	879,644	922,901	909,675
Total purchases/payments	213,871	348,324	384,532	435,616	634,898	518,403	663,357
			rantee				
			Group	1		1	r
Guarantee given	268,475	39,003	155,482	199,770	134,152	952,125	1,096,839
			roup	T 444.00:	-		0=0.000
Guarantee given	225,859	53,752	40,644	111,804	44,764	98,506	279,033
		nich cannot be					=0.004
Non Group	396,250	247,608	184,116	142,109	56,978	38,697	53,391
Group	265,222	62,225	67,621	5,109	22,392	28,850	5,907

Table 2. Annual growth in total RPTs (percentage) year on year

	A	verage growth	ver vear				
	2010	2011	2012	2013	2014	2015	
		Balance sh	eet				
		Non Grou	ıp				
Net outstanding borrowings taken/loan given	-21%	154%	9%	12%	-3%	15%	28%
Current assets	0%	0%	62%	-4%	43%	0%	17%
Current liabilities	55%	31%	29%	47%	32%	1%	33%
Total capital account payments: Investment in Equity Shares of the subsidiary+ asset purchases	-53%	84%	-37%	95%	0%	-22%	11%
Total capital receipts: sales of fixed assets	-73%	30%	222%	47%	24%	7%	43%
Average Growth	-18%	60%	57%	39%	19%	0%	
		Group					
Net outstanding borrowings taken/loan given	-53%	30%	-40%	139%	5%	10%	15%
Current assets	47%	74%	-14%	19%	10%	-17%	20%
Current liabilities	51%	92%	-23%	-18%	42%	-8%	23%
Total capital account payments: Investment in Equity Shares of the subsidiary+ asset purchases	-43%	-8%	-52%	32%	118%	128%	29%
Total capital receipts: sales of fixed assets	2177%	-73%	276%	66%	-24%	309%	455%
Average Growth	436%	23%	29%	48%	30%	84%	
		P&L					
		Non Grou	ıp				
Total revenue receipts/income	24%	40%	59%	16%	22%	18%	30%
Total purchases/payments	22%	57%	43%	48%	23%	-4%	32%
Average Growth	23%	48%	51%	32%	23%	7%	
		Group					
Total revenue receipts/income	134%	38%	11%	12%	5%	-1%	33%
Total purchases/payments	63%	10%	13%	46%	-18%	28%	24%
Average Growth	98%	24%	12%	29%	-7%	13%	
		Guarante					
		Non Grou					
Guarantee Given	-85%	299%	28%	-33%	610%	15%	139%
		Group					
Guarantee Given	-76%	-24%	175%	-60%	120%	183%	53%
			ped in the abov				
Non Group	-38%	-26%	-23%	-60%	-32%	38%	-23%
Group	-77%	9%	-92%	338%	29%	-80%	21%

 Table 3. Descriptive statistics

			Rc	million				
Non Group		2009	2010	2011	2012	2013	2014	2015
	1			nce Sheet				-
Net outstanding	Total	134,137	106,168	269,201	294,586	328,941	320,242	369,114
borrowings taken/loan	Mean	2,236	1,769	4,487	4,910	5,482	5,337	6,152
given	St Dev	19,799	14,684	39,548	45,759	47,716	47,013	52,052
	Max	42,694 163,429	17,460 163,926	88,484	125,131 265,842	101,433	96,136	88,296
	Total Mean	2,554	2,561	164,419 2,569	4,154	255,107 3,986	363,688 5,683	363,638 5,682
Current assets	St Dev	4,004	6,932	6,108	7,973	6,169	11,483	12,090
	Max	17,425	44,482	42,750	47,507	26,345	74,563	80,813
	Total	59,747	92,366	121,401	157,144	231,021	304,976	307,113
Current liabilities	Mean	948	1,466	1,927	2,494	3,667	4,841	4,875
Current habilities	St Dev	1,747	3,407	3,427	3,959	6,821	8,257	9,275
	Max	9,279	19,176	17,997	19,079	43,755	46,717	61,919
Total capital account	Total	259,539	121,498	223,535	141,465	275,800	275,832	216,320
payments: Investment in Equity Shares of the	Mean	4,055 17,035	1,898	3,493 8,177	2,210	4,309	4,310 12,451	3,380
subsidiary+ asset	St Dev	,	4,265		4,134	18,387		11,171
purchases	Max	121,128	24,088	40,782	26,864	146,485	65,816	69,181
Total camital vaccinta calca	Total	38,827	10,524	13,666	44,045	64,591	80,397	85,748
Total capital receipts: sales of fixed assets to related	Mean	761	206	268	864	1,266	1,576	1,681
parties	St Dev	2,155	730	947	2,249	3,876	5,340	7,913
r	Max	10,520	3,645	6,217	10,431	21,976	31,851	48,638
	Total	232.232		P&L 404.216	641 417	741.026	005 973	1.070.010
Total revenue	Total Mean	3,629	288,619 4,510	404,316 6,317	641,417 10,022	741,036 11,579	905,872 14,154	1,070,910 16,733
receipts/income	St Dev	6,116	7,804	10,207	19,787	19,380	22.023	22.914
receipts/meome	Max	31,188	40,165	47,150	129,125	97,129	98,029	95,303
	Total	371,373	454,887	713,574	1,018,470	1,512,144	1,857,478	1,779,067
	Mean	5,713	6,998	10,978	15,669	23,264	28,577	27,370
Total purchases/payments	St Dev	11,127	13,950	21,828	28,993	52,781	72,073	60,071
	Max	72,383	73,206	131,278	139,282	322,602	399,7203	359,278
		,		ntee given	,	,	,	,
	Total	268,475	39,003	155,482	199,770	134,152	952,125	1,096,839
	Mean	11,186	1,625	6,478	8,324	5,590	39,672	45,702
	St Dev	47,355	5,159	17,367	21,362	15,038	156,326	175,334
	Max	231,480	23,226	74,366	99,192	72,647	770,148	858,159
	T-+-1		(which cannot be			FC 070	20.007	F2 201
	Total	396,250 4,043	247,608	184,116	142,109	56,978 581	38,697	53,391
	Mean St Dev	16,421	2,527 10,318	1,879 6,876	1,450 7,363	2,283	395 2,585	545 3,846
	Max	133,469	93,461	61,284	65,561	13,880	23,705	35,930
	Max	155,105		million	03,301	13,000	23,703	33,330
Group		2009	2010	2011	2012	2013	2014	2015
				nce Sheet				
Net outstanding	Total	443,518	207,731	269,414	160,364	382,900	402,228	441,269
borrowings taken/loan	Mean	36,960	17,311	22,451	13,364	31,908	33,519	36,772
given	St Dev	64,534	41,469	35,513	23,324	69,747	68,694	84,669
	Max	196,343	138,922	112,091	76,720	232,840	233,440	282,970
	Total	84,794	124,511	216,699	186,658	222,860	245,921	203,801
Current assets	Mean St Dev	6,523	9,578 11,511	16,669 30,587	14,358 18,757	17,143 23,163	18,917 26,616	15,677 28,056
	Max	9,267 33,145	29,982	112,558	60,214	66,271	85,210	101,300
	Total	51,591	77,693	149,100	114,354	93,980	133,214	122,626
Current liabilities	Mean	3,969	5,976	11.469	8,796	7,229	10.247	9,433
carrent mannates	St Dev	5,414	8,277	20,466	11,444	7,533	12,189	10,170
	Max	16,168	23,256	69,410	36,268	25,072	43,205	35,019
Total capital account	Total	407,335	232,001	212,710	101,366	134,216	292,685	668,072
payments: Investment in	Mean	31,333	17,846	16,362	7,797	10,324	22,514	51,390
Equity Shares of the	St Dev	C2 000	29,123	25,062	10 440	22 021	67,681	110,117
subsidiary+ asset	3t Dev	62,898	20,120	20,002	12,448	22,931		
	Max	217,709	108,370	75,931	43,350	84,120	247,270	392,280
subsidiary+ asset purchases	Max	217,709	108,370	75,931	43,350	84,120	247,270	
purchases Total capital receipts: sales	Max Total	217,709 4,058	108,370 92,392	75,931 25,328	43,350 95,269	84,120 158,131	247,270 120,945	494,292
purchases Total capital receipts: sales of fixed assets to related	Max Total Mean	217,709 4,058 312	108,370 92,392 7,107	75,931 25,328 1,948	43,350 95,269 7,328	84,120 158,131 12,164	247,270 120,945 9,303	494,292 38,022
purchases Total capital receipts: sales	Max Total Mean St Dev	217,709 4,058 312 759	108,370 92,392 7,107 18,012	75,931 25,328 1,948 6,315	43,350 95,269	84,120 158,131 12,164 31,422	247,270 120,945 9,303 21,701	494,292 38,022 103,542
purchases Total capital receipts: sales of fixed assets to related	Max Total Mean	217,709 4,058 312	108,370 92,392 7,107 18,012 64,169	75,931 25,328 1,948	43,350 95,269 7,328 13,581	84,120 158,131 12,164	247,270 120,945 9,303	494,292 38,022
purchases Total capital receipts: sales of fixed assets to related	Max Total Mean St Dev	217,709 4,058 312 759	108,370 92,392 7,107 18,012 64,169	75,931 25,328 1,948 6,315 22,919	43,350 95,269 7,328 13,581	84,120 158,131 12,164 31,422	247,270 120,945 9,303 21,701	494,292 38,022 103,542
purchases Total capital receipts: sales of fixed assets to related	Max Total Mean St Dev Max	217,709 4,058 312 759 2,644 218,248 16,788	108,370 92,392 7,107 18,012 64,169 510,254 39,250	75,931 25,328 1,948 6,315 22,919 P&L 705,849 54,296	43,350 95,269 7,328 13,581 41,503 785,124 60,394	84,120 158,131 12,164 31,422 114,980 879,644 67,665	247,270 120,945 9,303 21,701 71,790 922,901 70,992	494,292 38,022 103,542 377,330 909,675 69,975
purchases Total capital receipts: sales of fixed assets to related parties	Max Total Mean St Dev Max Total Mean St Dev	217,709 4,058 312 759 2,644 218,248 16,788 23,384	108,370 92,392 7,107 18,012 64,169 510,254 39,250 51,158	75,931 25,328 1,948 6,315 22,919 P&L 705,849 54,296 78,095	43,350 95,269 7,328 13,581 41,503 785,124 60,394 87,212	84,120 158,131 12,164 31,422 114,980 879,644 67,665 106,584	247,270 120,945 9,303 21,701 71,790 922,901 70,992 131,367	494,292 38,022 103,542 377,330 909,675 69,975 139,946
purchases Total capital receipts: sales of fixed assets to related parties Total revenue	Max Total Mean St Dev Max Total Mean St Dev Max	217,709 4,058 312 759 2,644 218,248 16,788 23,384 80,112	108,370 92,392 7,107 18,012 64,169 510,254 39,250 51,158 156,084	75,931 25,328 1,948 6,315 22,919 P&L 705,849 54,296 78,095 203,392	43,350 95,269 7,328 13,581 41,503 785,124 60,394 87,212 273,012	84,120 158,131 12,164 31,422 114,980 879,644 67,665 106,584 326,425	247,270 120,945 9,303 21,701 71,790 922,901 70,992 131,367 420,487	494,292 38,022 103,542 377,330 909,675 69,975 139,946 472,829
purchases Total capital receipts: sales of fixed assets to related parties Total revenue	Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max Total	217,709 4,058 312 759 2,644 218,248 16,788 23,384 80,112 213,871	108,370 92,392 7,107 18,012 64,169 510,254 39,250 51,158 156,084 348,324	75,931 25,328 1,948 6,315 22,919 P&L 705,849 54,296 78,095 203,392 384,532	43,350 95,269 7,328 13,581 41,503 785,124 60,394 87,212 273,012 435,616	84,120 158,131 12,164 31,422 114,980 879,644 67,665 106,584 326,425 634,898	247,270 120,945 9,303 21,701 71,790 922,901 70,992 131,367 420,487 518,403	494,292 38,022 103,542 377,330 909,675 69,975 139,946 472,829 663,357
purchases Total capital receipts: sales of fixed assets to related parties Total revenue	Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max Total Mean	217,709 4,058 312 759 2,644 218,248 16,788 23,384 80,112 213,871 16,452	108,370 92,392 7,107 18,012 64,169 510,254 39,250 51,158 156,084 348,324 26,794	75,931 25,328 1,948 6,315 22,919 P&L 705,849 54,296 78,095 203,392 384,532 29,579	43,350 95,269 7,328 13,581 41,503 785,124 60,394 87,212 273,012 435,616 33,509	84,120 158,131 12,164 31,422 114,980 879,644 67,665 106,584 326,425 634,898 48,838	247,270 120,945 9,303 21,701 71,790 922,901 70,992 131,367 420,487 518,403 39,877	494,292 38,022 103,542 377,330 909,675 69,975 139,946 472,829 663,357 51,027
purchases Total capital receipts: sales of fixed assets to related parties Total revenue receipts/income	Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev	217,709 4,058 312 759 2,644 218,248 16,788 23,384 80,112 213,871 16,452 17,099	108,370 92,392 7,107 18,012 64,169 510,254 39,250 51,158 156,084 348,324 26,794 36,505	75,931 25,328 1,948 6,315 22,919 P&L 705,849 54,296 78,095 203,392 384,532 29,579 34,333	43,350 95,269 7,328 13,581 41,503 785,124 60,394 87,212 273,012 435,616 33,509 37,542	84,120 158,131 12,164 31,422 114,980 879,644 67,665 106,584 326,425 634,898 48,838 50,126	247,270 120,945 9,303 21,701 71,790 922,901 70,992 131,367 420,487 518,403 39,877 41,329	494,292 38,022 103,542 377,330 909,675 69,975 139,946 472,829 663,357 51,027 52,388
purchases Total capital receipts: sales of fixed assets to related parties Total revenue receipts/income	Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max Total Mean	217,709 4,058 312 759 2,644 218,248 16,788 23,384 80,112 213,871 16,452	108,370 92,392 7,107 18,012 64,169 510,254 39,250 51,158 156,084 348,324 26,794 36,505 112,378	75,931 25,328 1,948 6,315 22,919 P&L 705,849 54,296 78,095 203,392 384,532 29,579 34,333 115,148	43,350 95,269 7,328 13,581 41,503 785,124 60,394 87,212 273,012 435,616 33,509	84,120 158,131 12,164 31,422 114,980 879,644 67,665 106,584 326,425 634,898 48,838	247,270 120,945 9,303 21,701 71,790 922,901 70,992 131,367 420,487 518,403 39,877	494,292 38,022 103,542 377,330 909,675 69,975 139,946 472,829 663,357 51,027
purchases Total capital receipts: sales of fixed assets to related parties Total revenue receipts/income	Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max	217,709 4,058 312 759 2,644 218,248 16,788 23,384 80,112 213,871 16,452 17,099 48,005	108,370 92,392 7,107 18,012 64,169 510,254 39,250 51,158 156,084 348,324 26,794 36,505 112,378 Guara	75,931 25,328 1,948 6,315 22,919 P&L 705,849 54,296 78,095 203,392 384,532 29,579 34,333 115,148 ntee Given	43,350 95,269 7,328 13,581 41,503 785,124 60,394 87,212 273,012 435,616 33,509 37,542 117,182	84,120 158,131 12,164 31,422 114,980 879,644 67,665 106,584 326,425 634,898 48,838 50,126 136,502	247,270 120,945 9,303 21,701 71,790 922,901 70,992 131,367 420,487 518,403 39,877 41,329 108,651	494,292 38,022 103,542 377,330 909,675 69,975 139,946 472,829 663,357 51,027 52,388 143,911
purchases Total capital receipts: sales of fixed assets to related parties Total revenue receipts/income	Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max Total Total Mean St Dev Max	217,709 4,058 312 759 2,644 218,248 16,788 23,384 80,112 213,871 16,452 17,099 48,005	108,370 92,392 7,107 18,012 64,169 510,254 39,250 51,158 156,084 348,324 26,794 36,505 112,378 Guara 53,752	75,931 25,328 1,948 6,315 22,919 P&L 705,849 54,296 78,095 203,392 384,532 29,579 34,333 115,148 ntee Given 40,644	43,350 95,269 7,328 13,581 41,503 785,124 60,394 87,212 273,012 435,616 33,509 37,542 117,182	84,120 158,131 12,164 31,422 114,980 879,644 67,665 106,584 326,425 633,898 48,838 50,126 136,502	247,270 120,945 9,303 21,701 71,790 922,901 70,992 131,367 420,487 518,403 39,877 41,329 108,651	494,292 38,022 103,542 377,330 909,675 69,975 139,946 663,357 51,027 52,388 143,911
purchases Total capital receipts: sales of fixed assets to related parties Total revenue receipts/income	Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max	217,709 4,058 312 759 2,644 218,248 16,788 23,384 80,112 213,871 16,452 17,099 48,005	108,370 92,392 7,107 18,012 64,169 510,254 39,250 51,158 156,084 348,324 26,794 36,505 112,378 Guara 53,752 5,972	75,931 25,328 1,948 6,315 22,919 P&L 705,849 54,296 78,095 203,392 384,532 29,579 34,333 115,148 ntee Given 40,644 4,064	43,350 95,269 7,328 13,581 41,503 785,124 60,394 87,212 273,012 435,616 33,509 37,542 117,182	84,120 158,131 12,164 31,422 114,980 879,644 67,665 106,584 326,425 634,898 48,838 50,126 136,502	247,270 120,945 9,303 21,701 71,790 922,901 70,992 131,367 420,487 518,403 39,877 41,329 108,651 98,506 9,851	494,292 38,022 103,542 377,330 909,675 69,975 139,946 472,829 663,357 51,027 52,388 143,911 279,033 27,903
purchases Total capital receipts: sales of fixed assets to related parties Total revenue receipts/income	Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max	217,709 4,058 312 759 2,644 218,248 16,788 23,384 80,112 213,871 16,452 17,099 48,005 225,859 22,586 40,373	108,370 92,392 7,107 18,012 64,169 510,254 39,250 51,158 156,084 348,324 26,794 36,505 112,378 Guara 53,752 5,972 11,046	75,931 25,328 1,948 6,315 22,919 P&L 705,849 54,296 78,095 203,392 384,532 29,579 34,333 115,148 ntee Given 40,644 4,064 5,423	43,350 95,269 7,328 13,581 41,503 785,124 60,394 87,212 273,012 435,616 33,509 37,542 117,182 111,804 12,423 21,218	84,120 158,131 12,164 31,422 114,980 879,644 67,665 106,584 326,425 634,898 48,838 50,126 136,502 44,764 4,476 6,970	247,270 120,945 9,303 21,701 71,790 922,901 70,992 131,367 420,487 518,403 39,877 41,329 108,651 98,506 9,851 15,058	494,292 38,022 103,542 377,330 909,675 69,975 139,946 472,829 663,357 51,027 52,388 143,911 279,033 27,903 43,878
purchases Total capital receipts: sales of fixed assets to related parties Total revenue receipts/income	Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max	217,709 4,058 312 759 2,644 218,248 16,788 23,384 80,112 213,871 16,452 17,099 48,005 225,859 22,586 40,373 122,388	108,370 92,392 7,107 18,012 64,169 510,254 39,250 51,158 156,084 348,324 26,794 36,505 112,378 Guara 53,752 5,972 11,046 32,178	75,931 25,328 1,948 6,315 22,919 P&L 705,849 54,296 78,095 203,392 384,532 29,579 34,333 115,148 ntee Given 40,644 4,064 5,423 14,455	43,350 95,269 7,328 13,581 41,503 785,124 60,394 87,212 273,012 435,616 33,509 37,542 117,182 111,804 12,423 21,218 49,760	84,120 158,131 12,164 31,422 114,980 879,644 67,665 106,584 326,425 634,898 48,838 50,126 136,502	247,270 120,945 9,303 21,701 71,790 922,901 70,992 131,367 420,487 518,403 39,877 41,329 108,651 98,506 9,851	494,292 38,022 103,542 377,330 909,675 69,975 139,946 472,829 663,357 51,027 52,388 143,911 279,033 27,903
purchases Total capital receipts: sales of fixed assets to related parties Total revenue receipts/income	Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max	217,709 4,058 312 759 2,644 218,248 16,788 23,384 80,112 213,871 16,452 17,099 48,005 225,859 22,586 40,373 122,388 Others	108,370 92,392 7,107 18,012 64,169 510,254 39,250 51,158 156,084 348,324 26,794 36,505 112,378 Guara 53,752 5,972 11,046 32,178 (which cannot be	75,931 25,328 1,948 6,315 22,919 P&L 705,849 54,296 78,095 203,392 384,532 29,579 34,333 115,148 ntee Given 40,644 4,064 5,423 14,455 grouped in the abo	43,350 95,269 7,328 13,581 41,503 785,124 60,394 87,212 273,012 435,616 33,509 37,542 117,182 111,804 12,423 21,218 49,760 ove types)	84,120 158,131 12,164 31,422 114,980 879,644 67,665 106,584 326,425 634,898 48,838 50,126 136,502 44,764 4,476 6,970 18,645	247,270 120,945 9,303 21,701 71,790 922,901 70,992 131,367 420,487 518,403 39,877 41,329 108,651 98,506 9,851 15,058 47,910	494,292 38,022 103,542 377,330 909,675 69,975 139,946 472,829 663,357 51,027 52,388 143,911 279,033 27,903 43,878 115,800
purchases Total capital receipts: sales of fixed assets to related parties Total revenue receipts/income	Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max	217,709 4,058 312 759 2,644 218,248 16,788 23,384 80,112 213,871 16,452 17,099 48,005 225,859 22,586 40,373 122,388 Others 265,222	108,370 92,392 7,107 18,012 64,169 510,254 39,250 51,158 156,084 348,324 26,794 36,505 112,378 Guara 53,752 5,972 11,046 32,178 (which cannot be	75,931 25,328 1,948 6,315 22,919 P&L 705,849 54,296 78,095 203,392 384,532 29,579 34,333 115,148 ntee Given 40,644 4,064 5,423 14,455 grouped in the about 15,421	43,350 95,269 7,328 13,581 41,503 785,124 60,394 87,212 273,012 435,616 33,509 37,542 117,182 111,804 12,423 21,218 49,760	84,120 158,131 12,164 31,422 114,980 879,644 67,665 106,584 326,425 634,898 48,838 50,126 136,502 44,764 4,476 6,970 18,645	247,270 120,945 9,303 21,701 71,790 922,901 70,992 131,367 420,487 518,403 39,877 41,329 108,651 98,506 9,851 15,058 47,910	494,292 38,022 103,542 377,330 909,675 69,975 139,946 472,829 663,357 51,027 52,388 143,911 279,033 27,903 43,878 115,800 5,907
purchases Total capital receipts: sales of fixed assets to related parties Total revenue receipts/income	Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max Total Mean St Dev Max	217,709 4,058 312 759 2,644 218,248 16,788 23,384 80,112 213,871 16,452 17,099 48,005 225,859 22,586 40,373 122,388 Others	108,370 92,392 7,107 18,012 64,169 510,254 39,250 51,158 156,084 348,324 26,794 36,505 112,378 Guara 53,752 5,972 11,046 32,178 (which cannot be	75,931 25,328 1,948 6,315 22,919 P&L 705,849 54,296 78,095 203,392 384,532 29,579 34,333 115,148 ntee Given 40,644 4,064 5,423 14,455 grouped in the abo	43,350 95,269 7,328 13,581 41,503 785,124 60,394 87,212 273,012 435,616 33,509 37,542 117,182 111,804 12,423 21,218 49,760 ove types) 5,109	84,120 158,131 12,164 31,422 114,980 879,644 67,665 106,584 326,425 634,898 48,838 50,126 136,502 44,764 4,476 6,970 18,645	247,270 120,945 9,303 21,701 71,790 922,901 70,992 131,367 420,487 518,403 39,877 41,329 108,651 98,506 9,851 15,058 47,910	494,292 38,022 103,542 377,330 909,675 69,975 139,946 472,829 663,357 51,027 52,388 143,911 279,033 27,903 43,878 115,800

 Table 4. RPT distribution based on entity for Non-Group companies (percentages)

Non-Group Companies		Balance Sheet						Guarantee	Others
	Net outstanding borrowings taken/loan given	Current assets	Current liabilities	Total capital account payments: Investment in Equity Shares of the subsidiary+ asset purchases	Total capital receipts: sales of fixed assets	Total revenue receipts/income	Total purchases /payments	Guarantee Given	Others (which cannot be grouped in the above types)
All subsidiary	69%	48%	31%	79%	65%	28%	13%	90%	45%
Holding Co	3%	2%	11%	2%	0%	6%	11%	0%	4%
Joint venture	0%	0%	0%	0%	0%	0%	0%	0%	0%
Key personnel	0%	0%	2%	0%	0%	0%	1%	0%	0%
Parties where control exists	28%	45%	53%	18%	29%	63%	72%	10%	44%
Others	1%	5%	3%	1%	6%	2%	2%	0%	7%
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%

 Table 5. RPT distribution based on entity for Group Companies (percentages)

Group Companies			Balan	ce Sheet		P&L		Guarantee	Others	
	Net outstanding borrowings taken/loan given	Current Assets	Current Liabilities	Total capital account payments: Investment in Equity Shares of the subsidiary+ asset purchases	Total capital receipts: sales of fixed assets to related parties	Total revenue receipts/income	Total purchases /payments	Guarantee Given	Others (which cannot be grouped in the above types)	
All subsidiary	86%	64%	28%	70%	45%	69%	39%	80%	87%	
Holding Co	0%	1%	1%	1%	1%	1%	8%	0%	0%	
Joint venture	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Key personnel	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Parties where control exists	15%	33%	70%	28%	53%	29%	50%	20%	9%	
Others	-1%	2%	1%	1%	1%	1%	2%	0%	3%	
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%	

Table 6. Hypothesis 1 test results

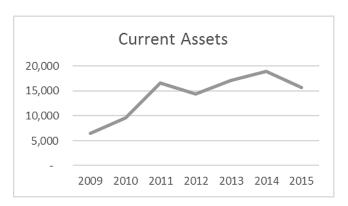
Related Party Transactions		2013 to 2015	2009 to 2012	t-stat	
Average Value of RPTs (Rs millions)	Observations	18	18	3.93	***
	Mean	19.370	11.159		

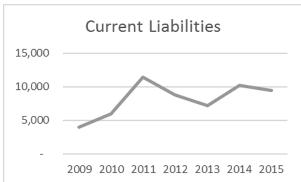
Table 7. Hypothesis 2 test results

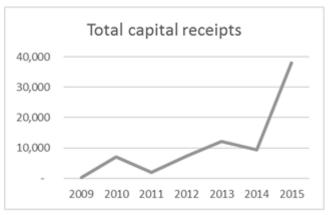
		Rs Millions			
Related party transactions		Group	Non-Group	t-stat	
Borrowings/loans given	Observations	12	60	1.650	*
BOITOWINGS/TOAMS given	Mean	27,469	4,339		
Current assets	Observations	13	64	2.094	**
	Mean	14,124	3,884		
Current liabilities	Observations	13	63	1.964	**
	Mean	8,160	2,888		
Capital account payments	Observations	13	64	2.019	**
	Mean	22,510	3,379		
Comital account receipts	Observations	13	51	1.902	**
Capital account receipts	Mean	10,884	946		
Doronno maccinto /imacon	Observations	13	64	1.984	**
Revenue receipts/incom	Mean	54,194	9,563		
D	Observations	13	65	1.765	**
Purchases/Payments	Mean	35,154	16,938		
Companyage Circon	Observations	10	24	-0.432	
Guarantees Given	Mean	12,309	16,940		

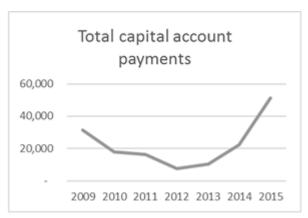
Note: * *p*<0.1, ** *p*<0.05, *** *p*<0.01

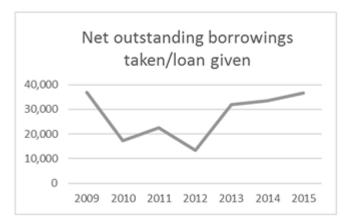
Figure 1. Trend analysis of annual average value of related party transaction for Group companies (Rs Million)



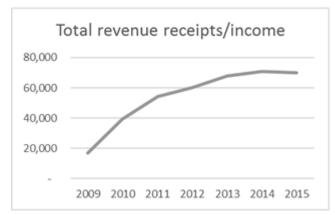












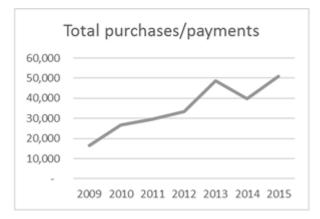


Figure 2. Trend analysis for annual average value of related party transaction for Non-Group companies (Rs million)

