

IMPACTS OF RELATED PARTY TRANSACTIONS ON THE AFFLUENCE OF INDIAN CORPORATE FIRMS

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[Stance of the corporate firms on the abuse of the related party transactions may not always be detrimental to the economic prosperity of the respective firm. Through these transactions the revenue and profit earnings of the entities may be increased unconditionally. This study is an effort to scrutinize the beneficial impacts of the related party transactions on the revenues and profits of the corporate firms across twenty sectors of Indian economy. For the execution of this objective we have used the data of the earlier mentioned companies for consecutive seven years started from 2009-10, and we have employed the panel data regression method. The finding of this study reveals that transactions with associated party can affect an entity's revenue earnings and net profit earnings significantly. Furthermore, transaction with key management personnel can also stimulate the net profits of the companies taken into account.]

Keywords: *Related party transactions, Revenue earnings, Net profit, RPT Revenue, Transactions of key management personnel, Unit root tests, Panel data]*

Introduction

Accounting Standard (AS) 18 has been introduced in India for the sake of the introduction of the transparent corporate governance, and it was effective since April, 2001. This standard has been developed on the basis of the International Accounting Standard (IAS)-24. Indian Accounting Standards (AS - 18) looks at “parties to be related to each other if one party has the ability to control or significantly influence the other in

making financial and/or operating decisions in a particular reporting period”. The major objective behind the introduction of this standard is to ensure the revelation of the fiscal reports by the corporate firms. In business and commerce, indeed, the nexus among the related parties is a common feature. For example, subsidiaries, joint ventures and associates are frequently influencing the entities to execute their objectives.

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Therefore, the business unit brings on the capability to influence the economic and operational strategies under complete control, joint control or substantial mould.

According to the International Accounting Standard Board (IASB, 2005), the related parties of a corporate firm are the key management personnel, board members, major shareholders and any other entity having significant influence over the activities of the corporate firms. Related party transactions (henceforth RPT) include the transactions between two parties holding a pre-existing relation or connection earlier to the transaction. These transactions may be the transfer of goods, facilities or compulsions among reportage corporate firm and its connected associates deprived of the fact that whether these transactions are charged or not¹. Based upon the findings of the studies done by Jiang, Lee, & Yue (2010) and Lin, Liu, & Keng (2010), RPTs are more frequent across the nations with concentrated ownership, or in the countries where investors' protection is very weak (Ma, Ma, & Tian, 2013).

RPTs play twofold roles on the operations of the corporate firms, as it may be used for value-creation or generation as well as for value-destruction purposes². RPTs

may be used as a means to manage earnings of the corporate firms as well as it may be used to divert resources from their companies. These facts can be observed from the numerous scandals happened in U.S.A. and in several other countries across the world. Corporate scams in Enron, Tyco, Parmalat, and Satyam are blatant instances of the abuse of the transactions among the parties related to each other in the field of corporate firms. The latent to mishandling RPTs is a matter of distress all over the nations of the world both for the regulators and for the investors. If RPT is widespread and used in distorted form, then it may produce grave consequences. While RPTs are abused then those not merely shrink the earnings to external stockholder nonetheless, those as well arouse qualms on the efficiency of the supremacy of the firm, which successively encumbers the process of progress in the mart of equity, in addition to the inclusive advancement of the economy of a nation.

The beneficial or positive influence of RPTs through the process of value generation process of a corporate firm has been found and analyze in a considerable number of studies (Jia & Wong, 2010; Loon & Ramos, 2009; Munir et al., 2013). In fact, the beneficial impacts of RPTs are - reduction in the transaction

¹Related parties may enter into some transactions that is not possible among the parties which are not related. For instance, an entity that sells goods to its parent organization/s at a cost and condition that might not be applicable for other customers.

²Value generation is the creation of value for the customer which helps to sell the products; for the shareholders, in the form of increases in the prices of the stock; and assures the future availability of investment capital. The created value may be destroyed by poor management decisions and poor governance.

cost, efficient generation of the resources and allocation of the resources through internal market within the group, and sustenance of the less profitable but important units of production and/or business (Loon & Ramos, 2009). On the contrary, some research works have focused and found the negative or detrimental impacts of RPTs (Munir et al., 2013; Mustafa et al., 2011). According to the argument of these studies RPTs are generally applied by corporate executive (monitoring stockholders and management) as a fomite for firm confiscation. Nevertheless, Jian and Wong (2010), and Liu and Lu (2003) have argued that the purpose of earning management is the main motive behind RPTs. Several other studies have found empirically that the corporate firms engage in RPTs for tunneling purposes (Du et al., 2013; Jiang et al., 2014), while some others have provided evidences of the transactions among the related parities which are initiated to prop the economically distressed firms (Gonenc & Hermes, 2008; Ying & Wang, 2013). In addition, it is observed from the case of Enron that some firms may sometimes engage into fabricated RPTs for the purpose of attaining targeted profits.

Therefore, RPTs may be abused which leads to the damage of business environment and it may be used candidly, which leads to several beneficial roles of RPTs. This beneficial effect of RPTs is possible as it saves the contract expenses and improves the working efficacy of a corporate firm. Otherwise stated, every RPTs are not abused or used honestly. In fact, there may be several cases of such

transactions which can be avoided since these transactions enable to develop commercial sense of the corporate firm. If corporate firms are proscribed from getting into such dealings, it may act upon contrary to the rationale of the maximization of the worth of the shareholders. For instance, group of companies can use RPTs for the achievement of the effective asset utilization as well as for the reduction in the transaction costs when they are operated within the context of institutional void and integrate for strategic purposes (Khanna and Palepu, 2000; Khanna and Rivkin, 2001; Chang and Hong, 2002; Mahmood and Mitchell, 2004; Belenzon and Berkovitz, 2010). Furthermore, these transactions allow the member firms to share the risks through the transfer of the flows of incomes and reallocation of fund from one to another associate wherever needed (Lincoln et al., 1996; Fisman and Wang, 2010).

Keister (1998) has found that the affiliation to the group enables to develop the productivity and performance in the sphere of finance for some Chinese firms during 1980s. A considerable number of multinational enterprises operating in the hosting countries have different models of business based upon some RPTs. The parent companies provide new technology and know-how as well as assist their subsidiaries financially whenever required (Khanna and Yafeh, 2005). Firms may commence a new-fangled business concern, to be exact, essential to the company through a diverse unit so as to restrain the peril of the financing concern. Lincoln et al.

(1996) has found on the basis of the examples of the corporate firms in Japan that attachment to business group helps the member firms to reduce the risks of bankruptcy and the performances of the group-affiliated are less volatile than that of independent firms.

The rise in productivity and several other factors may influence the revenues and profits of an entity³. In this study we try scrutinize these beneficial impacts of RPTs on the revenues and profits earnings of the entities. For this purpose we use the financial statements of all corporate companies published in the Nifty Index for which AS 18 is fully operative for consecutive seven years starting from 2009-10⁴. To execute the objective of this study we invoke the panel data regression method which is ideal for this analysis.

The rest of this paper is prepared as follows. The second section describes the data source and methodology used to execute the objective of this study. The third section discusses the econometric results and fourth section concludes.

Data source and methodology

Data source

This study is conducted by using the circulated annual financial reports of all the firms in the Nifty Index in respect of accounting years 2009-10, 2010-11, 2011-12, 2012-13, 2013-14, 2014-15 & 2015 - 16. The Nifty is a glowing differentiated

50 stock index accounting for more than 20 sectors of the economy. The NIFTY 50 is the leading guide on the National Stock Exchange of India Ltd. (NSE). The Index roads the doings of a portfolio of blue-chip stock, the biggest and utmost limpid Indian securities. It comprises 50 of the roughly 1600 companies recorded on the NSE, enchants almost 65 per cent of its float-adjusted market capitalization and is a real image of the Indian stock market. The NIFTY 50 broods foremost segments of the Indian economy and extends investment managers experience to the Indian market in one well-organized portfolio. For the purpose of conducting this current study we have reclassified 20 sectors and developed 13 broad sectors, such as Automobile, Cement & Cement Products, Construction, Consumer Goods, Energy, Financial Services, Industrial Manufacturing, Information Technology (IT), Media & Entertainment, Mining & Metals, Pharmaceutical, Services and Telecom.

We have used the financial statements in respect of the aforementioned accounting years because those were the latest available published financial statements at the time data collection was started. The Nifty index-related companies represent the largest listed companies in India and as such they constitute an indicative sample in the matter of investigation of RPT disclosure practices. The empirical study will let us

³ These other factors are creation of new value, increase in sale, reduction in cost through efficient utilization of resources, etc.

⁴ We use the annual financial reports for 2010, 2011, 2012, 2013, 2014, 2015, and 2016 of the respective companies.

make general conclusions as to the extent and the way of compliance with AS 18 of Indian companies and as to the quality of related party information disclosures. It is the quality of information disclosed that constitutes the principal determinant of the extent to which the information would be useful to financial statement users. Our examination of the related party disclosure practices of companies will also allow us to make comparative analysis between companies operating in different sectors/industries.

Methodology

For analyzing the beneficial impacts of RPTs on revenue and profit earnings of the entity we have taken four variables, such as average total revenue of an entity (REV), average RPT revenue of the entity (RPTR), average net profit of the entity (NPR), average transaction with key management personnel of different companies (TKMP). Actually we are considering each of the earlier mentioned sectors as a unit (or entity) and use the dynamic panel data regression to examine the impacts of RPTR on REV, impacts of RPTR on NPR, and impacts of TKMP on NPR.

The dynamic panel models are categorized as follows, where all symbols follow their usual meanings:

$$\dots \dots \dots_{it} = \alpha_{1it} + \beta_{11} \text{REV}_{it-1} + \beta_{12} \text{RPTR}_{it} + \varepsilon_{1it} \dots \dots \dots (1)$$

$$(2) \text{NPR}_{it} = \alpha_{2it} + \beta_{21} \text{NPR}_{it-1} + \beta_{22} \text{RPTR}_{it} + \varepsilon_{2it} \dots \dots \dots (2)$$

$$(3) \text{NPR}_{it} = \alpha_{3it} + \beta_{31} \text{NPR}_{it-1} + \beta_{32} \text{TKMP}_{it} + \varepsilon_{3it} \dots \dots \dots (3)$$

Equation (1) represents the dependence of REV in the current period on the REV of the last period and RPTR of the current period. Equation (2) explains the dependence of NPR in the current period on the NPR of just preceding period and RPTR of the current period. The third equation represents the causal linkage between NPR in the current period on the NPR in the last period and TKMP of the current period. Therefore, these equations enable us to observe the dynamic impacts of RPTR on REV, RPTR on NPR and TKMP on NPR. This study employs the approach of generalized method of moments (GMM) developed by Arellano and Bond (1991) which is applicable for dynamic panel data and control the endogeneity in regression equations which are estimated. Panel data models contain more information since these models are having more efficiency and more degrees of freedom. The panel data model allows us to manage the heterogeneity among the individual units, and enables us to recognize the results which cannot be recognized in the case of time series regression or cross section regression.

Before estimating the aforementioned dynamic panel regression equation, for scrutinizing the stochastic properties of the variables we invoke the unit root tests for panel data models which have been proposed by Levin-Lin and Chu (LLC; 2002) and Im-Pesaran-Shin (IPS; 2003). The unit root tests applied for panel data models are not identical with the unit root tests used in the case of time series models where there is only one series, but the purpose of their application is quite

similar. For testing the panel unit root the equation of panel data regression according to the ADF unit root test is,

$$\Delta y_{it} = \rho y_{i,t-1} + \sum_{j=1}^p \eta_{ij} \Delta y_{i,t-j} + X'_{it} \delta + \varepsilon_{it} \eta_{ij} \dots (4)$$

According to the statistical properties of the LLC test, intercepts, time trends, variances of the residual and the order of autocorrelation may be freely varied across the cross section units. However, application of LLC test requires common autocorrelation coefficient for all independently generated time series with identical sample size, and for all individual Autoregressive order one series (AR(1)). The lag order(p) can be varied across individual corporate companies. The suitable order of the lag is selected by allowing the maximum order of lag, and then by applying the t-statistics for y_{ij} . The estimation of the coefficient of autocorrelation (ρ), cannot be directly obtained by estimating the third equation (3). Moreover, the proxies for Δy_{it} and y_{it} used in the analysis are standardised and free of deterministic components and autocorrelations.

Arellano and Bond (1991) have proposed the GMM estimator for the dynamic panel regression. There are two steps of this approach. At first the fixed effects in the equations are removed through the introduction of the first difference form of the variables in the equations used for estimation instead of the level forms of variables. After this conversion of the forms of the variables the equations comprising the difference forms of the variables are estimated by introducing

instrumental variables for all difference form variables included in the equations. As there is correlation between the lagged values of the difference forms of the endogenous variable or any other variable/s and error term in differenced term, and we use instruments for the former, all the levels of lags of the variables are used, starting from the lag two, then potentially go backside to the point of the beginning of the sample. The Sargan test of over-identifying restrictions is used to examine the overall strength of the instruments used for the variables of the analysis.

The equation of the simplest form of the dynamic panel model having one period lag can be written in the following way:

$$y_{it} = \alpha_i + \theta_t + \beta y_{i,t-1} + x'_{it} \eta + \varepsilon_{it} \dots (5)$$

The fixed effect is represented by α_i , time dummy is represented by θ_t , x_{it} is a vector having order $(k-1) \times 1$ of the exogenous regressors, where $\varepsilon_{it} \sim N(0, \sigma^2)$ is the random disturbance. It is important to state that the fixed effect model is relatively more appropriate compared to the random effect model in the panel frame, since in macro panel analysis most of the sectors are included for consideration, which reduces the likelihood of randomness of the sample.

The fundamental estimators in the GMM panel estimation method, $\delta = (z'x)^{-1}z'y$, are based on moments of the form,

$$g(\delta) = \sum_{i=1}^N g_i(\delta) = \sum_{i=1}^N z'_i \varepsilon_i(\delta) \dots (6)$$

Where, z_i is a $T_i \times p$ matrix of instruments for cross-section, i , and,

$$\varepsilon_i(\delta) = (y_i - f(x_i, \delta)) \quad \dots(7)$$

GMM estimation minimizes the quadratic form:

$$S(\delta) = \left(\sum_{i=1}^N z_i' \varepsilon_i(\delta) \right) H \left(\sum_{i=1}^N z_i' \varepsilon_i(\delta) \right) \quad \dots(8)$$

With respect to δ for the weighting matrix H suitably chosen.

Thus, the fundamental of the GMM estimation method is to identify the instruments of Z s, and the selection of the weighting matrix 'H', and the determination of an estimator.

Estimation Results

In this study the LLC (2002) and IPS (2003) tests for stationarity or unit root are used, and the results are displayed in Table 1. The tests statistic of the unit root test are calculated for all underlying panel variables. The lengths of the lags are selected on the basis of *Akaike (1969) information criterion* (AIC). The individual effects and linear trends are incorporated in the estimated as exogenous variables. We observe that the series of values of the variables of interest are non-stationary at their level forms, i.e., the series are having unit roots. However, series of values of the variables at the first difference forms are stationary.

We invoke the technique developed by Arellano and Bond (1991), i.e., the first difference GMM technique, to control the unobserved heterogeneities involved in the estimated relationships. We estimate the aforementioned three dynamic panel equations in order to find out the impact of RPTR on REV, RPTR on NPR and TKMP on NPR; and the results of estimations of these equations are presented in Tables 2, 3 and 4 respectively. The presence of lagged dependent variable in the equations inserts the dynamic sense in the analysis. We also incorporate some relevant instruments in the estimated equations. The J-statistic representing the Sargan statistic and also instrument rank are reported for all specified models, which validate our outcomes.

The results of the dynamic panel regression reveal that RPTR is positively influencing REV. However, the result is significant at 10 per cent level. The study also observes that RPTR has significant positive impact on NPR. Finally it is also found from the results that NPR is significantly affected by TKMP. It is worth noting to state that the associations between the variables have been detected at the first-differenced forms of these variables.

Table 1: Results of the tests of Panel Unit Root

Series	LLC (2002)		IPS (2003)	
	At level form	At first difference form	At level form	At first difference form
REV	-1.71	-8.47**	-1.88	-8.61**
RPTR	1.92	-6.12**	1.72	-7.58**
NPR	-1.69	-7.11**	-1.90	-7.32**
TKMP	-2.01	-8.66**	-2.11	-8.73**

Source: Financial reports of the respective companies from 2010 to 2016.

Note: ** means significant at 5% level. The null hypothesis is - there is unit root, and the alternative hypothesis is - there is no unit root.

Table 2: Impact of RPTR on REV (Results of Panel GMM Estimation)

Regressand : Δ REV (1, it)			
Total Observations (Balanced Panel): 91			
Variables	Estimated values of the Coefficients	t-Values	p- value
Δ REV (1, i(t-1))	0.21***	11.38	0.0000
Δ RPTR (it)	0.07*	4.91	0.0810
Value of J-statistic	11.29 (0.0000)	Instrument Rank	13

Source: Financial reports of the respective companies from 2010 to 2016.

Note: *** indicates significant at 1% level; ** indicates at 5% level; and * indicates significant at 10%.

Table 3: Impact of RPTR on NPR (Results of Panel GMM Estimation)

Regressand : Δ NPR (1, it)			
Total Observations (Balanced Panel): 91			
Variables	Estimated values of the Coefficients	t-Values	p- value
Δ NPR (1, i(t-1))	0.22***	12.01	0.0000
Δ RPTR (it)	0.11***	9.23	0.0001
Value of J-statistic	12.14 (0.0000)	Instrument Rank	13

Source: Financial reports of the respective companies from 2010 to 2016.

Note: *** indicates significant at 1% level; ** indicates at 5% level; and * indicates significant at 10%.

Table 4: Impact of TKMP on NPR (Results of Panel GMM Estimation)

Regressand: Δ NPR (1, it)			
Total Observations (Balanced Panel): 91			
Variables	Estimated values of the Coefficients	t-Values	p- value
Δ NPR (1, i(t-1))	0.18***	11.79	0.0000
Δ TKMP (it)	0.09***	9.87	0.0001
Value of J-statistic	12.02 (0.0000)	Instrument Rank	13

Source: Financial reports of the respective companies from 2010 to 2016.

Note: *** indicates significant at 1% level; ** indicates at 5% level; and * indicates significant at 10%.

Concluding Remarks

This current study is an attempt to scrutinize the impact of RPT revenue (RPTR) on revenue (REV) and net profit (NPR). There exists a controversy on the impact of RPTs on overall business environment and business condition. RPTs may generate or destroy value. It can be frequently observed that several business firms abuse RPTs, which may distort the overall business environment and condition of the nation. We have already mentioned the possibilities of these type of abuses of RPTs, and we have also referred several studies which have found this type of outcome.

However, some studies have also proved that there are some positive impact of RPTs on the business condition through its influences on revenues and net profit of the companies across the companies from the thirteen broad sectors in India. Findings reveal that RPTR can influence the REV significantly positively; RPTR can influence NPR of the concerns positively significantly; and transaction of key management personnel (TKMP) can also have a noteworthy direct influence on the net profits (NPR) of the concerns. Therefore, the findings of this study don't suggest preventing the transactions among the related parties. However, the results of all studies on the same topic or related topics conducted during last one and half decades, and the findings of this current study it can be concluded that the

transaction among the parties related to each other is one of the necessary instruments for the prosperity of the business, but it should be applied properly by stringent governance.

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