

**Research Article**

**The relationship between related party transactions and financial performance of companies listed in Tehran Stock Exchange**

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**ABSTRACT**

The study aimed to investigate the Related party transactions and financial performance of the companies listed in Tehran Stock Exchange. It involved the companies listed in Tehran Stock Exchange between 2009 and 2013 and space domain is of all companies listed in Tehran Stock Exchange. The independent variable deals with the transaction with the related parties, and dependent variable, with financial performance (return on assets). This research is of descriptive and correlative kind, in terms of objective, and of the nature and methods, respectively. Also, 78 companies using Morgan Table were selected as sample. In this study, to measure variables of related-party transactions, Choanal et al's method was used. In order to analyze research data, it was used ordinary least squares regression method with the software EVIEWS 7. The research results showed a significant relationship between related-party transactions and financial performance of companies listed in Tehran Stock Exchange.

**Keywords:** Related party transactions, financial performance, Tehran Stock Exchange

**1. INTRODUCTION**

Related party transactions can be considered as one of the most common opportunistic behavior by management, while commercial activities' common features are held, it can also dramatically affect the performance of a firm. The little research has been done in this area; all indicate that there is an inverse relationship between these transactions and management performance in line with value creation for shareholders. Experts know trading with related parties and its coverage through financial statements one reason for the financial crisis in companies (McTagoure, 2004). One of the basic assumptions of agency theory is that management to maximize its own personal benefits will take advantage of the company resources and Related party transactions, often in

favor of the managers and detriment of shareholders, is a kind of resource consumption of company (kahbalak and Bryan, 2004). Such abuses by the management, in addition to disrupting value creation, can also threaten job security of administrators, so administrators to protect against the bad effects of these transactions may distort the financial statements that it also will obscure of the process of value creation in the long run, because it will expropriate them to make an informed decision due to distorted information (Henry et al, 2007). Another mechanism that owners utilize in dealing with Related party transactions would be the audit tool because the audit can lead to a decrease in the motivation of managers to carry out Related party transactions, or distortion of

financial statements to cover the effects of such transactions (Kahbalak and Bryan, 2004). Given the above, it seems related-party transactions can cause improvement in performance and strengthening the company's competitive situation and consume to have taken the managers' own interests, hence it can be expected that these transactions have negative effects on the performance of the companies' management and finally the process of value creation at the companies. The main theme of this study was to investigate the relationship between Related party transactions and financial performance of the companies listed in Tehran Stock Exchange.

## 2. Literature

Cheung and co-scholars (2008) examined issue on related-party transactions within the company listed in the Stock Exchange of Hong Kong. Their research results indicate that on average, the companies, when announcing Related party transactions and within 12 months after it, received negative excess returns. This return compared with fairly similar transactions returns would be less significantly. Chen and Su investigated a relationship between Related party transactions and the company's performance and also whether corporate governance has positive impact on the relationship between Related party transactions and the company's performance, the results showed that corporate governance mechanisms alter these transactions from the opportunistic trading into efficient transactions and independence of the board in these transactions plays the role of moderator. Choanal and Tower, Rosmin and Mitchell (2010) investigated the relationships between Related party transactions and earnings management. The study was conducted based on a sample of fifty Indonesian companies during 2004 and 2009. They developed the research hypothesis based on the agency theory and conflict of interest. Their results showed no statistically significant

evidence about the relationship between Related party transactions and profit management.

Munir Joushen Gell (2010) investigated a relationship between Related party transactions and the financial performance of the family companies. They using regression tested 462 companies in Malaysia. They found that Related party transactions would be negatively correlated with corporate performance.

Mounir et al investigated the relationship between ownership, Related party transactions and the quality on profits. Their sample included 236 companies in Malaysia. They found that there is no linear relationship between family ownership and quality on profit after accounting related party transactions. Activities of expropriation have negative impact on the quality of corporate profits.

Pouzaly and Venouty investigated the relationship between Related party transactions and the company's financial performance presented in Italy during the period 2008-2011. According to their regression test, the results indicate that there is no correlation between the Related party transactions and the company's financial performance.

## 3. Methodology

### 3.1. Hypothesis

There is a significant relationship between Related party transactions and financial performance of companies listed in Tehran Stock Exchange.

### 3.2. Statistical population and sample

The population is of all companies listed in Tehran stock exchange. In this section, there are 442 stock companies and information was collected for the years 2009 to 2012 until the following limitations for these companies were taken to get the samples: In this study, to measure the variables we use to measure return on assets as the ratio of net profit to total assets are measured.

1. Listed in Tehran Stock Exchange since beginning the year and end of 2013.
2. Fiscal year ends on March; the companies should not change their fiscal year during this time.
3. The companies considered have had active during the study and their stock were traded.
4. Not belonging to insurance institutes, banks and financial institutes (investing companies, financial intermediation, holding companies and leasing companies), because nature and classification of financial statements items to this group differs from other companies.
5. Not get lost, during the years under study.

According to mentioned considerations, the companies who didn't have the above conditions were removed systematically (remained 366 companies) and 78 companies using Morgan table were sampled.

### 3.3. Regression Model

$$\text{Performance}_{it} = a_0 + a_1 \text{ related party transactions}_{it} + a_2 \text{ Size}_{it} + a_3 \text{ Industry}_{it} + a_4 \text{ Age}_{it} + \varepsilon_{it}$$

**Performance<sub>it</sub>:** In this study, to measure the variable, we use an indicator from return on assets measured by net profit ratio to total assets (Ghalibaph et al, 2012).

**Related-party transactions<sub>it</sub>:** in study, to measure independent variable, in accordance with the index applied by Coan et al (2010) it was used the total amount of Related party transactions getting disclosed in the notes accompanying the annual financial statements of the companies listed in Tehran Stock Exchange, divided by total assets basic course (Heshmati et al, 2010).

**Size<sub>it</sub>:** The natural logarithm of the book value of the assets of the company (Yeganeh, et al 2008)

**Age<sub>it</sub>:** Based on the number of years being listed in Tehran Stock Exchange (Yeganeh et al, 2008)

**Industry<sub>it</sub>:** Based on classification by Tehran Stock Exchange (Yeganeh et al 2008)

### 3.4 Data analysis method

In this study, in order to estimate the efficiency of a regression model using a combined data, one of the common-effects, random-effects models was selected using suitable tests. First, to determine whether time series  $x_t$  is a stationary process (accumulation rank up to zero) or divergent (accumulation rank up to 1), we use the generalized Dickey-Fuller test. Like evaluating variables' stationary we here need to use the appropriate method for combined data. We use modified Wald test for investigating variance heterogeneity between residuals of fixed-effects regression models. Also we use two F and Hausman tests to determine one of two methods: fixed-effect and random-effect. To illustrate the explanatory power of the explaining variables and to investigate the variables' significance and to assess the overall adequacy of the model, it was used the adjusted determination coefficient (Adjusted R<sup>2</sup>), t-statistic and F-statistics, respectively. The statistical analysis will be done using Excel and EVIWS 7 software.

## 4- RESULTS

### 4-1- Evaluation of the variance heterogeneity

To evaluate variance heterogeneity presence, Arch-LM-test disturbing statements were conducted in the study; the results are as follows in the table.

**Table 1-1:** result of Arch-LM-test disturbing statements

Description	Statistic value	Probability
F-statistic	0.926521	0.241
Obs* R-squared	1.141489	0.241

According to table 1-1, f-statistic is not significant less than 5%, so the hypothesis on variance homogeneity is confirmed and

disturbing statements of variance heterogeneity rejected.

### 4-2- Testing fixed-effect method to be significant

**Table 2-1:** F-Lymer and Huassman tests

F-Lymer test			
Description	Statistic value	Freedom degree	Probability
Cross-section F	2.036225	77	0.008*
Cross-section Chi-square	158.625849	77	0.000*
Huassman test			
Description	Statistic value	Freedom degree	Probability
Cross-section F	7.401692	21	0.012

\* 5% error level

According to Table 2-1, two test results obtained in both tests (F, Huassman) the probability is obtained less than %5 and so it should be used

fixed effects methods in the relevant regression model.

#### 4-3- The data normality

**Table 3-1:** Jourk-bera test

Variable name	Statistic	Significance level
Financial performance	1.487	0.096
Related party transactions	2.069	0.087
Firm size	2.335	0.086
Firm age	1.189	0.106
Type of industry	1.672	0.092

\* 5% error level

According to Table 3-1, because the significance level at 5% error level is not significant,

so we can conclude that research data are normal.

#### 4-4 Lin-Levine test

**Table 4-1:** collective unit root test on the variables in Lynn-Levine methods

Variables	Statistic	Probability
Financial performance	6.333	0.029*
Related party transactions	9.154	0.012*
Firm size	5.625	0.038*
Firm age	5.896	0.032*
Type of industry	7.013	0.026*

\* 5% error level

According to Table 4.1, evaluating values of calculated statistics and probability of accepting them show that the null hypothesis is rejected based on non- static for all variables and all variables in the study are in static level.

**H<sub>0</sub>:** There is no significant relationship between the Related party transactions and financial performance of companies listed in Tehran Stock Exchange.

**H<sub>1</sub>:** There is a significant relationship between the Related party transactions and financial performance of companies listed in Tehran Stock Exchange.

#### 4-5- Hypothesis testing

**Table 5.1:** regression test and model significance

Variable name	Estimated coefficient	Deviation on estimation	t-statistic	Significance level
Fix	1.114	0.264	4.219	0.024*
Related party transactions	0.426	0.112	3.805	0.035*
Firm size	2.115	0.374	5.655	0.002*
Firm age	2.265	0.497	5.281	0.009*
Type of industry	0.491	0.134	3.664	0.031*

Watson-Durbin	2.225
F-statistic	59.326
Significance level	0.000**
Adjusted determination coefficient	0.242

\* 5% error level, 1% error level

According to table 5-1, Watson-Durbin is put between 1.5 and 2.5, therefore, there is no correlation between the errors and the regression can be used. The independent variable related to Related party transactions has an adverse impact on the dependent variable financial performance with respect to estimation coefficient of 426. This means that the higher the Related party transactions of the company, the lower level the financial performance level (ROA) gets. This relationship is significant according to the t-statistic of significance level at the 5% error level. Thus it can be said there is a significant relationship between the Related party transactions and financial performance of companies listed in Tehran Stock Exchange. Independent and control variables can predict about 24.2% of the dependent variable's changes and F-statistic also shows a significant level, the research model is significant at %1 error level. The research empirical model can be written as:  

$$\text{Performance}_{it} = 1.114 - 0.426 \text{ related party transactions}_{it} + 2.115 \text{ size}_{it} + 0.491 \text{ industry}_{it} + 2.625 \text{ Age}_{it} + \epsilon_{it}$$

## 5. CONCLUSIONS AND RECOMMENDATIONS

The results showed that there is a significant relationship between the Related party transactions and financial performance of companies listed in Tehran Stock Exchange. Therefore, Mounir and Jushen Gel (2010) recognized that Related party transactions are negatively correlated with company performance. Chen and Sue (2010) there is a significant relationship between the Related party transactions and companies' financial function. Cheung's and co-scholars' research results showed that there is negative relationship

between the Related party transactions and companies' returns. Accordingly, it can be said that companies that make Related party transactions their priority are less return on assets than others and it should consider that investors and shareholders are able to show negative trends to this issue and stock prices also reduced due to increased supply. According to the result, the following suggestions can be stated:

- 1- The managers are recommended to reduce the volume of Related party transactions so that to achieve a greater return on assets.
- 2- The investors are recommended when investing in companies to pay attention top related-party transactions by companies because it can reduce their investment risk.
- 3- The concerned organizations are recommended by developing required standards for performing the disclosure of Related party transactions to provide a ground to more transparency.
- 4- The board of directors of the companies is recommended by settling the audit committee with experienced staff and exerting stronger internal controls, to provide ground for a reduction of Related party transactions.

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