Investigating the Relation between Family Control and Profit Management Actions Using Modified Jones Model and K-S Model

Mahdiyeh Fallah
Department of Accounting, Yazd Branch, Islamic Azad University, Yazd, Iran

Forough Heirany *
Department of Accounting, Yazd Branch, Islamic Azad University, Yazd, Iran

*Corresponding Author: Heirany@iauyazd.ac.ir

Abstract

This study aims at investigating the effects of family control on the profit management action in the firms accepted in Tehran Stock Exchange. In this research, the profit management and firm control are defined as dependent and independent variables, respectively. To evaluate the profit management, the modified models of Jones and K-S were utilized and to evaluate the firm control, a pre-designed variable was employed. The population of the study includes the firms accepted in the Tehran Stock Exchange and the sample contains 32 family firms which were chosen through a systematic sampling technique. The time period of the study is between 2007 and 2012. The research hypotheses were analyzed using correlations among variables and multiple regression technique through panel data. The results of the research illustrate that family relation in the board of directors had a significant effect on profit management of models (modified models of Jones and k-s).

Keywords: family firms, family control, family business, discretionary accruals, profit management actions.
1. Introduction

The main feature of joint-stock companies is separating ownership from their management. In the last thirty years, many situations have been presented by the economists with regard to the clash of profits between the groups and how the firms cope with these clashes. Broadly speaking, such situations are presented under the head of "agency theory" in accounting management. According to Jensen and Mac Ling, the agency relation is arbitrary with which the owner chooses another person on behalf of him/herself and the representative is granted the decision rights. In the agency theory, the aim of the owners is to maximize the wealth; thus, to achieve this goal they supervise the representative and evaluate its performance. The net profit is also listed in the financial statements which greatly affects the decisions of users of financial statements and has received much attention. Of the main groups of users of financial statements mentions could be made of shareholders (Esta, 2011). The shareholders of a firm are composed of a verity of spectrums. Some are legal persons while others are natural persons. The legal shareholders involve firms, institutes, sharing companies, the government and so on. The natural shareholders are persons who individually buy shares. In case these people succeed in buying the major portion of the shares, they will be able to control the firm decisions. As a result, these people could easily choose the managers of the firm in particular those whom they are familiar with. In addition to the aforementioned aspects, it is possible to imagine that some relatives with their cooperation have bought the shares of a firm which was accepted in Tehran Stock Exchange and by that they can have considerable influence and control in the firm (Mohammadi, 2009). In family firms, most portion of the share is granted to some main natural shareholders from the members of one family, and the family members begin to work in some managing and operational positions. Due to the special ownership structure of these firms, the family interests may be prioritized over the shareholders' interests (Mehrazin et al., 2013). Consequently, the family members may change the flow of interest transfer toward themselves and other shareholders suffer damage or loss (Akbari Ghoroghachi, 2011). Thus, the managers of the business companies try to manipulate the profit of the financial period through different tools and ways so that they could project a better state of the firm and present a positive picture of the firm performance (Mahmoudzadeh Baghban and Pourghafar Dastjerdi, 2015). Therefore, the managers' tendency to applying profit management and misusing it and consequently, presenting wrong information to the shareholders could drastically damage the trust between the shareholders and them. This can make the shareholders lose their profit and escape from the stock exchange. This situation, at last, could bring about many negative economic consequences (Esta, 2011). On the whole, this study attempts to address this research question whether family control affects the profit management actions.
2. Theoretical Foundation and Literature Review

2.1. Family Business

Family business is as an organization in which the most significant operational decisions and planning for transferring or substituting the leadership are under the control of the members of the family as they play a pivotal role in ownership and management of the organization (Zarei, 2011). Different members of the family which are connected to the family through other relatives or marriage and as owners, managers or board of directors contribute to the firm either in a synchronic way or a diachronic way which is called family business (Lopez Deigado & Dieguez Soto, 2015).

2.1.1. Abilities and Potential Points of Family Business

Many studies have shown that family business in selling, profit and other growth indexes have a better performance compared to non-family firms. This performance is positive and is as a result of intrinsic abilities that the family businesses have in comparison with the other competitors. Some of these abilities and potential points are discussed as follow:

**Obligation**

Family (as the owner of the business) displays more interest for the growth and development of the business and its transfer to the future generations. Consequently, many of the family members' identity are defined based on the firm and are eager to work hard and can invest part of their profit in the same work so that the firm could be developed.

**Continuance of the Knowledge**

Families tend to prioritize transferring knowledge, experiences, and skills to other generations in their business. Most of their family members and relatives started working in the firm from the very early ages. This could increase their obligations level and provide appropriate tools for managing the family business.
Trust and Pride of the Family

Since the family business relates the name and reputation of the family to the production and service they offer, they try to promote the quality of their productions and create a good relation with the beneficiary (customers, providers, clerks, society and so on).

2.1.2. The Weak Points of Family Business

Perhaps, one of the common features of family business to which sometime it is referred is that most of them could not have permanent life. The high ranges of risks and instability in family business carry many reasons. Some of these weak points (International Finance Corporation of the World Bank, 2011) are as follow:

Complexity

Family business is usually more complicated as opposed to its competitors; this is because of the new variable which is family. Adding the problems and emotions of the family to the business could make the issues with which the firm is dealing more complicated.

Non-recognition

Since most families themselves run the business (at least the first and second generations), they usually show less tendency towards administrative procedures and techniques of certain official business. As the family and its business grow, this state of situation could lead to internal oppositions and inefficacy and this threatens the business.

Lack of Order

Most of family businesses do not pay attention key, strategic and important concepts such as planning succession of executive officer and other managing positions, employing the family members in the firm, attracting the experts alongside the directors. Lack of attention to these strategic subjects could face the family firms with failure.

2.1.3. A Description of the Family Business

Researchers of family business believe that the effect of family on the business makes it distinctive from other firms and no family firm could be free of the effects. The three-circle
model (Figure 1), is a famous model of family business which is composed of three elements which are business, family, and ownership. These three social systems hold internal communications and interact with each other and the strategy of the firm is reliant on these interactions.

![Diagram of Family Business Model]

**Figure 1. The Model of Family Business**

Since in the family business there are three main roles which are family (father, mother, son, nephew, uncle or permanent relatives), ownership (partner and shareholder) and job (manager, clerk or worker), these roles may change during the time and persons may hold opposing roles which can create disruptions in process of the work. To solve this problem, one should have a system attitude towards the family business. The system attitude presents a clear understating of the effects of family, ownership and business on each other and the environment. The present people in the system have different goals and expectations (Zarei, 2011).

**2.2. The Foundation of Profit Management**

The main role of financial reporting is transferring the financial information to persons outside the organization in an appropriate and on time way. In doing so, the managers have opportunities in the financial reporting to judge. The managers could make use of their knowledge about the financial activities to promote the efficacy of financial statements as a tool to transfer information to the shareholders and potential creditors. Notwithstanding this, if the managers intend to mislead the users of financial statements (inside or outside the organization) through using their power in the accounting selections in financial statements, profit management may occur (Naderi Niri, 2013). Hilly and Helen (1999) state that the profit management occurs only when the managers make use of their subjective judgments in the financial reporting and manipulate the structure of transactions for the aim of changing the financial reporting. This aim is either to mislead some of the profit owners concerning the
economic performance of the firm or to affect the results of transactions whose conclusions depend on achieving personal profit (Royai and Mohammadi, 2011).

2.3. Family Firm Control and its Effect on the Profit Management

Yang and Tesay (2008) assert that ownership of at least 10 percent of the shares by the family members is a pre-requisite for family firms. For them, those firms are called family firms in that the shareholders controlling the firm are the members of a certain family and should possess at least ten percent of the firm shareholders' wages or the family members and the legal representatives in other family firms mutually constitute more than 50 percent of the board of directors. Family firms hold special characteristics which make them distinctive from other types of firms (Abdul-Manafet al., 2003). One of the main features of these firms is that control has been monopolized to a certain family (Almeida–Santos et al, 2013). According to Ho and Wang (2001), the board of directors is considered “under the control” when at least two or more members of the family controlling the firm are selected as the directors (Jagg & et al, 2009). Jegi et al (2009) points out that family control through assets and appointing the members of the family in the board of directors could bring interventions in the management of the profit and income (Almeida–Santos et al, 2013). As the owners have control over the financial statements, this might make them manage the numbers and figures for their personal aims. As a result, the shareholders do not trust the reported profits as they assume that the owners have manipulated them; consequently, this issue weakens the value of the profits and the value of the information (Abdul-Manafet et al., 2013). By considering the aforementioned foundations, to achieve the objectives of the study, these hypotheses were presented and examined:

H1: Familial relation in the board of directors significantly affects the profit management (the modified model of Jones).

H2: Familial relation in the board of directors significantly affects the profit management (K-S model).

2.4. A Review of the Previous Research

Wang et al., (2010) conducted research entitled “Profit Management via Selling the Properties”. The objective of this study was to examine the relation between profit management, selling the long-term properties and investing in firms listed in Taiwan. This shows that selling the properties is a way to manipulate the reported profits for 12484 firms and for the period of 1984 to 2006. The obtained results showed that around 54-57 percent of the companies in Taiwan with little loss manipulated the reported profits to show that the profit is positive. Swang
et al. (2013) in a study investigated “the Relation between the Profit Management and Embezzlement of Assets”. The data for this study were gathered from the 173 firms which were proven to have conducted embezzlement between 2006 and 2010. To examine the hypotheses, the linear and logistic regressions were utilized. The reported results showed that there was a significant and positive association between embezzlements of the assets and discretionary accruals. The accrual accounting basis not only provides cues to discover the embezzlement of the profits, but also plays an important role in decreasing information asymmetry. Chi et al, (2015) carried out research with the aim of investigating the relation between family firms and profit management with the consideration of the effects of undependability of the board of directors. In this study, 379 firms with more than seven years of technology were chosen in Taiwan. The findings illustrated that there is a positive association between the family firms and profit management. In addition, the researcher also found out that: 1) the ratio of independent directors is associated with the decrease of profit management in family firms. 2) the duality of obligations of the directors is associated with the increase of the profit management in the family firms. The independency of the board of directors for a new generating market to reduce the profit management behaviour from the family firms is important.

Habash and Al-Ghamadi (2015) in an article examined the motivations of the profit management in general firms in Saudi Arabia. In doing so, the researcher employed interviews and questionnaires. The results indicated that increasing the amount of rewards, an acceptable report of profit, averting losses, obtaining the bank loans, and increasing the price of the share are among the motivations for Saudi directors to exercise profit management. Mehr Azi et al. (2013) did a study entitled “Familial Ownership, Non-family Firms and Profit Management”. In this study, after analyzing all the firms accepted in the stock exchange, 31 firms found to be family based. Then, they were separated to different industries. Next, following the same number of firms and the same industries, other firms were randomly chosen and were categorized as non-family firms. The modified model of Jones was taken into consideration for examining the research hypotheses as well as calculating the profit management. The overall results showed that there was a significant relation between the structure of the firm ownership and profit management and the non-family firms exercise more profit management.

3. Method

Research Design

Methodologically speaking, this study is applied. The research is also naturalistic as it examines the relation between the variables in their natural forms and without any manipulation. Thus, it puts the study in the category of correctional study.
**Population and Sample**

To gather information related to the literature, a library research approach was used. The population of this study involves all the firms accepted in Tehran Stock Exchange and to select the samples a systematic sampling technique was employed. The sample of the study, by considering, the said limitations and the variable of control of the firm (through examining the board of directors and the board of supervisors), 32 firms were selected from the firms accepted in Tehran Stock Exchange.

**Data Collection**

To collect the data, the Rahavard Novin and the official website of Tehran Stock Exchanges were taken into account. To computerize the data, the Eviews software program was employed and to test the hypotheses of the study, the correlation and regression analyses through the Panel Data were used. In what follows, the research models and variables are introduced.

**Evaluating the Variables**

**The Model Determining the Relation between the Discretionary Accruals (Profit Management) and Firm Control**

In the current study, the multiple regression, which is the main model of study, was employed to examine the effects of family control on profit management actions.

Model (1)

\[ ACD_{i,t} = \alpha_1 + \alpha_1 CCO_{i,t} + \alpha_2 SIZE_{i,t} + \alpha_3 LEV_{i,t} + \alpha_4 ROE_{i,t} + \alpha_5 ROA_{i,t} - \alpha_6 AGE_{i,t} + \epsilon_{i,t} \]

In that:
- \( \alpha_1, \ldots, \alpha_6 \) : The estimated coefficient of the model
- \( \epsilon_{i,t} \) : estimating the error of the model

In Table 1, the variables of the model are presented:

<table>
<thead>
<tr>
<th>The variable symbol</th>
<th>The type of variable</th>
<th>The evaluation method</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACD</td>
<td>Dependent</td>
<td>Managing the profit with manipulating discretionary accruals are evaluated via the modified model of Jones and Model of K-S.</td>
<td>(Etemadi and Shafa Khibari, 1390) (Almeida–Santos etal,2013)</td>
</tr>
</tbody>
</table>

http://www.ijhcs.com/index.php/ijhcs/index
| CCO | Independent | Family firm control is conducted through the investigation of the board of directors and board of supervisors. If the last name of the two are the same, this firm is under the control of the family which is evaluated by the designed variable. If the firm is under the control of family, number 1 is considered otherwise number 0 is given. | (Almeida–Santos et al., 2013) |
| SIZE | The size of the firm is evaluated by the natural logarithm of the whole assets of the firm i in the year of t. | (Rahnamy Roudposhti et al., 2012) |
| LEV | Financial leverage is evaluated based on the ratio of the whole debts to the whole assets of the firm i in the year of t. | (Mahdavi et al., 2013) |
| ROE | The rate of return of shareholders' wage is obtained from the division of net profit to shareholders' wage of firm i in the year of t. | (Rahnamy Roudposhti et al., 2012) |
| ROA | Return on assets is obtained from the ratio of the net profit to the whole assets of firm i in the year t. | (Nayebzadeh et al., 2011) |
| AGE | The life span of the firm is evaluated based on the difference between the year of t and year of establishment. | (Karami and Omrani, 2010). |

**The Modified Model of Jones**

To evaluate the total accruals in the modified model of Jones, the following equation was employed.

Model (2)

\[
T_{A_{i,t}} = \Delta CA_{i,t} - \Delta CL_{i,t} - \Delta Cash_{i,t} + \Delta STD_{i,t} - DEP_{i,t}
\]

\(T_{A_{i,t}}\): The total accruals of the firm i in the year of t.

\(\Delta CA_{i,t}\): A change in the present assets of the firm i between the years of t and t-1.

\(\Delta Cash_{i,t}\): A change in the cash of the firm i between the years of t and t-1.

\(\Delta STD_{i,t}\): A change in the current maturing portion of long term debt of the firm i between t and t-1.

\(DEP_{i,t}\): Betterment of the intangible assets of the firm i in the year of t.

After the calculation of the total accruals, \(\alpha_2\), \(\alpha_3\), \(\alpha_4\) are the particular parameters of the firm which are evaluated based on the following equation:

---

http://www.ijhcs.com/index.php/ijhcs/index
Model (3):
\[ \frac{TA_{i,t}}{A_{i,t-1}} = \alpha_1 \left( \frac{1}{A_{i,t-1}} \right) + \alpha_2 \left( \frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{A_{i,t-1}} \right) + \alpha_3 \left( \frac{PPE_{i,t}}{A_{i,t-1}} \right) + \varepsilon_{i,t} \]

- \( TA_{i,t} \): The total accruals of firm \( i \) in the year of \( t \).
- \( \Delta REV_{i,t} \): A change in the selling wage of the firm \( i \) between the year of \( t \) and \( t-1 \).
- \( \Delta REC_{i,t} \): A change in the net accounts and notes receivable of firm \( i \) between the year \( t \) and \( t-1 \).
- \( PPE_{i,t} \): The amount of assets, machinery and equipment of the company \( i \) in the year of \( t \).
- \( A_{i,t-1} \): The total book value of assets of firm \( i \) in the year of \( t-1 \).
- \( \varepsilon_{i,t} \): The unclear effects of random factors.
- \( \alpha_2, \alpha_3, \alpha_4 \): Evaluated parameters of firm \( i \).

After calculating the parameters \( \alpha_2, \beta_3, \alpha_4 \) through the least squares approach, the non-discretionary accruals are evaluated based on the following equation:

Model (4):
\[ NDA_{i,t} = \alpha_1 \left( \frac{1}{A_{i,t-1}} \right) + \alpha_2 \left( \frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{A_{i,t-1}} \right) + \alpha_3 \left( \frac{PPE_{i,t}}{A_{i,t-1}} \right) + \varepsilon_{i,t} \]

- \( NDA_{i,t} \): Non-discretionary accruals of the firm \( i \) in the year of \( t \).

At last the discretionary accruals, after determining the non-discretionary accruals, were evaluated according to the following equation:

Model (5):
\[ DA_{i,t} = \frac{TA_{i,t} - NDA_{i,t}}{A_{i,t}} \]

**Model K-S**

This model was proposed by Kang and Syurama (1995) and focuses on the profit management. To calculate the discretionary accruals, the total accruals should be first calculated. The model (6) shows the total accruals.

Model (6):
\[ ACT_{i,t} = \alpha_0 + \left[ \alpha_1 \times \left( \delta_1 \times REV_{i,t} \right) \right] + \alpha_2 \times \left( \delta_2 \times EXP_{i,t} \right) + \alpha_3 \times \left( \delta_3 \times PIE_{i,t} \right) + \varepsilon_{i,t} \]

As a result, by employing the model (6) in the model (7), the discretionary accruals are calculated as follow:

Model (7)
ACD_{i,t} = AT_{i,t} - \alpha_0 + \left( \alpha_1 \times \left[ \delta_1 \times \text{REV}_{i,t} \right] + \alpha_2 \times \left[ \delta_2 \times \text{EXP}_{i,t} \right] + \alpha_3 \times \left[ \delta_3 \times \text{PIE}_{i,t} \right] \right) + \epsilon_{i,t}

\alpha_0: \text{It shows that the model is fixed.}
: \alpha_1, ..., \alpha_3: \text{The estimated coefficient model}
ACT_{i,t}: \text{The total accruals (a change in working net investment- betterment of the intangible and tangible assets) the firm i in the year of t.}
REV_{i,t}: \text{The net income before the finalized cost of the sold products or the presented services for the firm i in the year of t.}
EXP_{i,t}: \text{The finalized cost of the sold products, the general and administrative expenses, distribution and selling.}
PIE_{i,t}: \text{The assets, machinery and equipment of the firm i in the year of t.}
AR_{i,t-1}/REV_{i,t-1} = \delta_1: \text{AR The net accounts and the commercial notes receivable in the firm I in the period of t-1.}
= \delta_2 \times \text{EXP}_{i,t-1} / \left( \text{NWC}_{i,t-1}/\text{AR}_{i,t-1} \right): \text{NWC it shows the working net investment in the period of t-1, which includes the cash, short term financing and stored tax of the firm.}
: \text{DEPR}_{i,t-1}/\text{PIE}_{i,t-1} = \delta_3 \text{ DEPR: It shows the betterment of tangible and intangible properties in the period of t-1.}
\epsilon_{i,t}: \text{The estimation of the error of model}

4. Findings
4.1. The Analysis of the Hypotheses

Hypothesis 1 (H1)

To test the hypothesis, it is necessary to perform the pre-tests and in this study the Chav test was used to determine the cross-sectional fixed effects and periodical fixed effects, and the probability was considered less than 0.05. Since in this article the probability was considered less than 0.05, the cross-sectional fixed effects were confirmed and the periodical fixed effects were rejected. In determining the random effects and fixed effects, the Hausman test was utilized, in case the probability is less than 0.05, the random effects are rejected and the fixed effects are confirmed and by considering the probability of the conducted test, the fixed effects are accepted. The results of the hypothesis test 1 are presented in Table 2.
Table 2. The Analysis of the Hypothesis 1 (Estimation of the Profit Management Using the Modified Model of Jones)

<table>
<thead>
<tr>
<th>Explanatory Variable</th>
<th>Coefficient</th>
<th>Standard Deviation</th>
<th>t-test</th>
<th>Prob</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCO</td>
<td>0.107948</td>
<td>0.026955</td>
<td>4.004676</td>
<td>0.0002</td>
<td>%99</td>
</tr>
<tr>
<td>AGE</td>
<td>0.109099</td>
<td>0.012645</td>
<td>8.627839</td>
<td>0</td>
<td>%99</td>
</tr>
<tr>
<td>LEV</td>
<td>-0.63444</td>
<td>0.106652</td>
<td>-5.94869</td>
<td>0</td>
<td>%99</td>
</tr>
<tr>
<td>ROA</td>
<td>-0.00106</td>
<td>0.002182</td>
<td>-0.48504</td>
<td>0.6295</td>
<td>No Sig.</td>
</tr>
<tr>
<td>ROE</td>
<td>-0.00043</td>
<td>0.000194</td>
<td>-2.19642</td>
<td>0.0321</td>
<td>%95</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.40267</td>
<td>0.221982</td>
<td>1.813976</td>
<td>0.0749</td>
<td>No. Sig.</td>
</tr>
<tr>
<td>C</td>
<td>-6.00793</td>
<td>1.469915</td>
<td>-4.08726</td>
<td>0.0001</td>
<td>%99</td>
</tr>
</tbody>
</table>

According to the f-test and the probability related to it, it can be concluded that the level of probability of %99 for the regression is significant. The results of the Durbin-Watson-test (the lack of serial correlation) for the model depict the relative independency of data. Adjusted R^2 of the model shows the relation between the independent variables and dependent variables (profit management). According to Table 2, the Adjusted R^2 of the model is 0.75; thus, on average 75 percent of the change of the dependent variables are determined by this model. Considering the findings of the test of probability about the variables, the control firm variable has a probability less than 0.01. As a result, this variable is significant on the level of 99 percent. Also, among the slack variables, the age variable and the financial leverage variable have a probability less than 0.01, and return on equity has a probability less than 0.05. Therefore, these variables are significant on the level of 99 and 95, respectively. But the variables, size and return on asset have a probability more than 0.05 and the level of significance is not 95 percent. Thus, based on the significance, the firm control variable which is the main variable of the model in confirming and rejecting the hypothesis, it could be claimed that the family relation in the board of directors affects the profit management (the modified model of Jones); hence, according to the model, the first hypothesis is confirmed.

**Hypothesis 2 (H2)**

The results about the test of this hypothesis are presented in Table 3.
Table 3. The Analysis and of the Hypothesis 2 (Estimation of the Profit Management using K-S Model)

<table>
<thead>
<tr>
<th>(Adjusted R^2 )</th>
<th>0.959476</th>
</tr>
</thead>
<tbody>
<tr>
<td>f-test</td>
<td>61.79101</td>
</tr>
<tr>
<td>Prob</td>
<td>0</td>
</tr>
<tr>
<td>Durbin-Watson-test</td>
<td>2.051309</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Explanatory Variable</th>
<th>Coefficient</th>
<th>Standard Deviation</th>
<th>t-test</th>
<th>Prob</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>CCO</td>
<td>5.007422</td>
<td>0.802496</td>
<td>6.239811</td>
<td>0</td>
<td>99%</td>
</tr>
<tr>
<td>AGE</td>
<td>0.05682</td>
<td>0.406258</td>
<td>0.139862</td>
<td>0.8893</td>
<td>No Sig.</td>
</tr>
<tr>
<td>LEV</td>
<td>14.21462</td>
<td>1.839075</td>
<td>7.729225</td>
<td>0</td>
<td>99%</td>
</tr>
<tr>
<td>ROA</td>
<td>0.167311</td>
<td>0.018364</td>
<td>9.110647</td>
<td>0</td>
<td>99%</td>
</tr>
<tr>
<td>ROE</td>
<td>-0.02575</td>
<td>0.005723</td>
<td>-4.4993</td>
<td>0</td>
<td>99%</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.955287</td>
<td>1.998401</td>
<td>0.478026</td>
<td>0.6344</td>
<td>No. Sig.</td>
</tr>
<tr>
<td>C</td>
<td>-56.9938</td>
<td>5.428905</td>
<td>-10.4982</td>
<td>0</td>
<td>99%</td>
</tr>
</tbody>
</table>

According to the f-test and the probability related to it, it can be concluded that the level of probability of %99 for the regression is significant. The results of the Durbin-Watson-test (the lack of serial correlation) for the model depict the relative independency of data. Adjusted R^2 of the model shows the relation between the independent variables and dependent variables (profit management). According to Table 3, the Adjusted R^2 of the model is 0.95; thus, on average 95 percent of the change of the dependent variables are determined by this model. Considering the findings of the test of probability about the variables, the control firm variable has a probability less than 0.01. As a result, this variable is significant on the level of 99 percent. Also, among the slack variables, the return of assets variable, the financial leverage and return of equity variables have a probability less than 0.01, and return on equity has a probability less than 0.05. Therefore, these variables are significant on the level of 99. But the variables, age and size of the firm have a probability more than 0.05 and the level of significant is not 95 percent. Thus, based on the significance, the firm control variable which is the main variable of the model in confirming and rejecting the hypothesis, it could be claimed that the family relation in the board of directors affects the profit management (the K-S model).

Discussion and Conclusion

The results of the first hypothesis show that family relation in the board of directors affects the profit management (the modified model of Jones). The directors hold enough power and
ability to choose the accounting approaches and the calculation of the discretionary accruals and determining the time to identify these accruals. Perhaps, the reason for the effects of family relation on the profit management (modified model of Jones) is that such a management can let the directors to easily make use of the accounts receivable to manipulate the profit. The results of this hypothesis are in line with those of Mehrazin (2013), Setya Ajamaja (2011) and Chi et al. (2015). The motivations of the directors to increase the income and profit in the present period push the directors towards charge sales and transferring the accounts receivable to the future periods. Therefore, the accounts receivable and allowance for doubtful accounts and the effects of the change of the two on the future profits are of importance. However, identifying the costs concerning initiating the upcoming year in the present year helps to better identify the current year so that the given profit decreases or in the year they intend to report more profit a reverse situation would happen. Also, the directors could decide in scheduling sale of the assets, machinery and equipment to accelerate or postpone the recognition of the profit and loss. Thus, the motivations of the directors in presenting an appropriate image of the financial state of the firm could manage the profit in the family firms and they follow their own interests and ignore the interest of the shareholders. The findings of this hypothesis confirm the results of the study by Almida Santous et al. (2013).

It is suggested to the market decision makers and potential shareholders that they consider the effects of the family ownership on the quality of the information when examining transparency of financial reporting of the firms. The directors of the family firms are also recommended to avoid exercising the management profit actions since this issue is understood by the market in long term and can bring about negative consequences for the firm. To have a better use of the findings and to clarify the effects of family control on profit management actions, it is suggested that researcher devote more attention not only to the effects of the family control, the independency of the board of directors and profit management in the family firms but also the effects of family control on the quality of financial reporting in the family firms, the effects of domination of the firm and profit management in the family and non-family firms. The future research should also replicate this study with a different population and with the involvement of more years so that the external validly of the study is enhanced not only in the Tehran Stock Exchange but also in the international stock exchange and a deep and comprehensive understanding of this issue is obtained. The future research might take into account comparative studies between the family and non-family firms in Tehran Stock Exchange or other international stock exchange.
References


Nayebzadehm Shahnaz, Moeinanding, Mahmoud and Gheysari, Zahra, Investigating the relation between extended market orientation (EMO) with refined economic value added (REVA) and return on asset (ROA) in the Production Firms, Marketing Management Research Journal, N. 12, Autumn, 2011, 113-133.


Zarei, Mohammad Reza, 2011, Investigating the significance of the effective factors in transferring the familial business to the next generations form the perspective of the owners: A case study of industrial companies in Alborz Province, Unpublished MA thesis, University of Science and Culture.