Examining Factors Affecting Profit Smoothing of Companies Listed in Tehran Stock Exchange

Masoume Biari¹, Mansur Garkaz²*

¹Department of Management, Aliabad Katoul Branch, Islamic Azad University, Aliabad Katoul, Iran
²Department of Management, Gorgan Branch, Islamic Azad University, Gorgan, Iran

*Corresponding Author Email: m_garkaz2011@yahoo.com

ABSTRACT: The purpose of this study was to identify factors affecting profit smoothing of companies listed on Tehran Stock Exchange. The research method was descriptive, correlation type. There were participated 127 companies in the study as sample. Regression model was used to analyze data. The results showed that factors such as company's ownership structure, risk and growth have a direct relationship with smoothing; while there is no significant relationship between profit smoothing and its parameter of information asymmetry.

Keywords: Profit Smoothing, Information Asymmetry, Company Risk, Company Growth, Ownership Structure.

INTRODUCTION

The reported profit is one of important financial information that people consider it when decision-making. Generally, financial analysts consider the reported profit as a prominent factor in their investigation and judgments. Profit smoothing is one of important issues in its management. Managers can use their knowledge on business activities to improve the effectiveness of financial statements as a tool to transfer information to potential investors and creditors. If managers are motivated to mislead users of financial statements through applying their powers in areas of accounting choices and financial reporting, it will be possible to occur profit management (Healy & Wahlen, 1999). The phenomenon of profit smoothing can affect behavior of users of financial statements. Most investors prefer to invest in companies with a constant profit process because companies with high fluctuations in their profit have a higher risk than companies with smooth profit (Tucker & Zarvyn, 2006).

According the theory of life cycle, companies usually prefer to distribute lower profit between their shareholders in the early years of establishing because of profitable investment opportunities (Dyanjylv, 2006). Profit smoothing is an informed action that managers consider it to reduce periodic profit fluctuations by considering common methods of accounting principles. Profit smoothing follows specific purpose: creating a stable stream of profit growth. Profit smoothing is one of approaches in profit management. Previous researches introduce profit smoothing as management efforts to adjust fluctuations of the reported profit in a business unit that its main objective is to create a stable stream of profit (Bydlmn, 1973).

Profit smoothing is a tool to influence decisions of users of financial reports that could affect users’ behaviors potentially and cause consequences particularly in capital market. Weak governance of companies will increase agency costs considerably, so the great companies with poor management consider profit smoothing to reduce their costs. Companies with high growth opportunities should retain a higher proportion of their income to support their invested projects because of paying dividend to transfer information outside of company. It means balancing their needs, which companies with high growth likely have more sensitivity on requirements of profit and dividend costs, while the sensitive is decreased in companies with low growth.
Therefore, companies with high growth potential tend to profit smoothing (Matsumoto, 2002). Generally, investors pay special attention to profit number. They consider profits without fluctuation or with low-fluctuation as profits with higher-quality, in other words, they tend to invest in companies with more stable process in their profit. Therefore, the reported profits have special value as measures of financial decision-making and financial analysts unanimously consider profit as a key factor in their investigation and judgment. So the companies are more suitable place for investors (Wild et al, 2001). Thus, identifying different aspects of smoothing behaviors and providing a theoretical framework for the phenomenon can be a useful step to improve quality of profit reporting. The present research discussed on the factors affecting dividend smoothing, size, risk, growth and ownership of large firms listed on Tehran Stock Exchange and sought to answer the question whether there is a relationship between profit smoothing and factors affecting it.

METHODOLOGY

The research method was descriptive, correlation type. Its population included all companies listed in Tehran Stock Exchange from 2008 to 2013. There were selected 127 companies, according Morgan Table. Inclusion criteria of the research were as follow:

1. The companies should not change their fiscal year during the research period;
2. They should not be investment companies, financial intermediaries, holding, leasing and bank;
3. The companies’ financial statements should be available;
4. They should be attended in the Stock from 2008 to 2013;
5. Their fiscal year should not be ended on March.

In this study, profit smoothing was considered as dependent variable that was calculated using the following equation:

$$DDS_{it} = \Delta D_{it} = a_i + b_{1i} EPS_{it} + b_{2i} D_{it-1} + u_{it}$$

The considered independent variables for the research were firm’s size (logarithm of market value of equity rights), history (the listed years in the stock exchange), ownership (how much percent of total shares is controlled by shareholders?), risk (standard deviation of profit of per share in a period) and growth (growth rate of total assets in a period). The following regression equation was used to study the relationship between the variables:

$$DDS_{it} = \beta_0 + \beta_1 \text{Size} + \beta_2 \text{History} + \beta_3 \text{Large} + \beta_4 \text{Ev} + \beta_5 \text{Growth}$$

The combined data was used to estimate regression model in the research. In the method, there were combined data of time series and cross-section. In order to estimate efficiency of a regression model using data combination, there is selected one of common effects, fixed effects or random effects using appropriate tests. The Fischer F test is used to select one of the above models, whether common effects or fixed effects models, which Housman test will be used to select the fixed effects or random effects models, if there is selected the fixed effects model. There was reviewed autocorrelation except model disruption, variance dissimilarity and data normality. Statistical analyses were conducted using EXCEL and EVIEWS 7 software and there were considered P≤ 0.05 as significant level.

RESULTS

Table 1 shows mean and standard deviation of the variables.

<table>
<thead>
<tr>
<th></th>
<th>Profit smoothing (DDS)</th>
<th>Assets’ natural logarithm (SIZE)</th>
<th>Years of listing in the stock (HISTORY)</th>
<th>Shareholders’ ownership (LARGE)</th>
<th>Standard deviation of dividend (EV)</th>
<th>Growth rate of total assets (GROWTH)</th>
<th>Dividend (EPS)</th>
<th>Attributable profit in previous year (D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>100524.8</td>
<td>6.025525</td>
<td>13.00394</td>
<td>75.22381</td>
<td>223.1089</td>
<td>0.186627</td>
<td>1030.625</td>
<td>848043.7</td>
</tr>
<tr>
<td>Middle</td>
<td>64.44061</td>
<td>5.900000</td>
<td>12.00000</td>
<td>79.00500</td>
<td>118.0000</td>
<td>0.140000</td>
<td>641.000</td>
<td>95.373.50</td>
</tr>
<tr>
<td>Max</td>
<td>22919226</td>
<td>8.170000</td>
<td>45.00000</td>
<td>100.0000</td>
<td>2987.0000</td>
<td>2.170000</td>
<td>9276.000</td>
<td>25776802</td>
</tr>
<tr>
<td>Min</td>
<td>-955530.</td>
<td>4.320000</td>
<td>1.000000</td>
<td>0.100000</td>
<td>0.200000</td>
<td>-0.400000</td>
<td>-3891.000</td>
<td>-3671301</td>
</tr>
<tr>
<td>SD</td>
<td>1440251.</td>
<td>0.704550</td>
<td>7.861230</td>
<td>16.50000</td>
<td>1329.6558</td>
<td>0.261157</td>
<td>1832.959</td>
<td>2884222</td>
</tr>
<tr>
<td>Skewness coefficient</td>
<td>5.015269</td>
<td>0.803322</td>
<td>1.473597</td>
<td>-1.579752</td>
<td>3.831962</td>
<td>2.396775</td>
<td>2.604252</td>
<td>5.196087</td>
</tr>
</tbody>
</table>
Table 2 presents the analysis results. According possibility of the calculated statistics F (35.09901), it can be argued that the fitness regression model is significant. With respect to the coefficient of determination in the fitness model, it can be claimed that independent variables explain about 60% of variations in the dependent variable of the models (profit smoothing). Estimation coefficient of independent variable SIZE in the Table 2 indicates lack of a significant positive correlation between assets’ natural logarithm with profit smoothing at level error 0.05 because the calculated p-value for coefficient of the independent variable in the research is obtained more than 0.05.

Therefore, it can be said that there is no significant relationship between assets’ natural logarithm with profit smoothing at the level 95%. The estimated coefficient of the independent variable HISTORY in the Table shows lack of a significant relationship between years of listing in the stock with profit smoothing in level error 0.05 because the calculated p-value for this independent variable of the research is more than 0.05. Therefore, it can be said that there is no significant relationship between years of listing in the stock with profit smoothing at the level 95%. The estimated coefficient of the independent variable LARGE in the Table shows a significant relationship between shareholders’ ownership with profit smoothing in level error 0.05 because the calculated p-value for this independent variable of the research is less than 0.05. Therefore, it can be said that there is a significant relationship between shareholders’ ownership with profit smoothing at the level 95%.

The estimated coefficient of the independent variable EV in the Table shows a positive significant relationship between standard deviation of dividends with profit smoothing in level error 0.05 because the calculated p-value for this independent variable of the research is less than 0.05. Therefore, it can be said that there is a significant relationship between standard deviation of dividends with profit smoothing at the level 95%. The estimated coefficient of the independent variable GROWTH in the Table shows a significant relationship between growth rate of total assets with profit smoothing in level error 0.05 because the calculated p-value for this independent variable of the research is less than 0.05. Therefore, it can be said that there is a significant relationship between growth rate of total assets with profit smoothing at the level 95%.

Table 2. Summary of statistical results.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficients</th>
<th>SD</th>
<th>t</th>
<th>Sig.</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept (C)</td>
<td>-1701.206</td>
<td>107352.1</td>
<td>-1.584697</td>
<td>0.1135</td>
<td>---</td>
</tr>
<tr>
<td>Assets’ natural logarithm (SIZE)</td>
<td>27215.70</td>
<td>20552.19</td>
<td>1.324224</td>
<td>0.1858</td>
<td>1.04</td>
</tr>
<tr>
<td>Years of listing in the stock (HISTORY)</td>
<td>-184.4892</td>
<td>434.0321</td>
<td>-0.425059</td>
<td>0.6709</td>
<td>1.01</td>
</tr>
<tr>
<td>Shareholders’ ownership (LARGE)</td>
<td>406.4938</td>
<td>180.2536</td>
<td>2.255122</td>
<td>0.0244</td>
<td>1.01</td>
</tr>
<tr>
<td>Standard deviation of dividend (EV)</td>
<td>177.8841</td>
<td>18.26613</td>
<td>9.738465</td>
<td>0.0000</td>
<td>1.05</td>
</tr>
<tr>
<td>Growth rate of total assets (GROWTH)</td>
<td>190402.7</td>
<td>14649.22</td>
<td>12.99746</td>
<td>0.0000</td>
<td>1.04</td>
</tr>
<tr>
<td>Fisher F Statistics (significance level)</td>
<td>30.09901 (0.000000)</td>
<td>Watson-Durbin statistic</td>
<td>1.627258</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

DISCUSSION AND CONCLUSION

The purpose of this study was to identify factors affecting profit smoothing of companies listed on Tehran Stock Exchange. The results showed no significant relationship between profits smoothing with information asymmetry. This means that larger and older companies will not smooth their profit through information asymmetry. As investors pay special attention to profit figure, as one of important factors for decision-making and as variability of managers prediction has special economic value from viewpoint of investors, managers will interest that their prediction on profit is realized. If the matter is not applied, they will smooth profit using other tools.

Market reaction to dividend changes is not a function of degree of information asymmetry and degree of information asymmetry is not related to degree of dividend smoothing. There were used variables of firm size and the years of listing on the stock board to calculate information asymmetry. Other results showed no significant relationship between assets’ natural logarithm with profit smoothing. There was also no significant relationship between years of listing on the stock board with profit smoothing. The finding is consistent with the obtained results by Chen (2010). There is a positive significant relationship between profit smoothing and ownership structure of company. This means that the wider ownership of a company, the more interest profit smoothing, as which stable dividend is considered as an optimal solution for a company with dispersed share ownership.

The results are consistent with the obtained findings by Matsumoto (2002). There is also a positive significant relationship between profits smoothing with companies’ risk. This means that high-risk companies are more willing to smooth dividends. The companies use profit smoothing gain reputation because there are many fluctuations in revenues caused by systemic risk. There is a significant positive relationship between company growth with profit smoothing. This means that companies with growth potential are more willing to profit smoothing and managers in large companies have more responsibility against stakeholders, so that they will use the obtained profits for more developing their assets.
When continuous growth of such companies is stopped, value of their shares will be fallen. For companies with continuous growth, the matter will provide more motivation to run profit and the reported profits smoothly. The results are consistent with the obtained results by Beatty et al (2002). By considering the results, it is suggested that Stock Exchange Organization should manage financial reporting of the listed companies in the stock. The research results can help the organization to focus its supervision on companies with more possibility of profit smoothing. The organization can also provide conditions for attending financial analysts and marketers to enhance financial reporting.

REFERENCES