The Influence of Ownership Structures, Financial Distress, and Tax Loss Carry Forward on Tax Avoidance (Study on Manufacturing Company Listed in Indonesia Stock Exchange)

Dr. Mulia Saputra *1  Dr. Nadirsyah1  Miss. Hilfi Hanifah2
1. Accounting Department of Economy and Business, Syiah Kuala University, Banda Aceh, Indonesia
2. Graduate Program of Accounting, Syiah Kuala University, Banda Aceh, Indonesia

Abstract
Tax avoidance is an interesting strategy option taken by management which aims to increase profitability through the reduction of corporate tax expense. This research has a purpose to examine the influence of ownership structures financial distress, and tax loss carry forward on tax avoidance using secondary data from financial statement of manufacturing companies listed on Indonesian Stock Exchange year 2012-2014. The study type used in this study is hypothesis testing. The results of this study show that ownership structures which are proxied by foreign ownership and institutional ownership has partially influence the tax avoidance. Other results show that financial distress also has partially influence the tax avoidance, while tax loss carry forward has no influence on tax avoidance. However, all the independent variables has simultaneously influence the tax avoidance. The limitations of this study are focused in the manufacturing companies on IDX as samples and only used two variables as the proxy for ownership structures which are foreign ownership and institutional ownership. Therefore, this study suggests to adding new variables that expected have effect to tax avoidance with different sectors of company.

Keywords: tax avoidance, ownership structures, financial distress, tax loss carry forward.

1. Introduction
In globalization era, all sectors have a significant changing, especially in economic and business sectors. Some changes require companies to improve and enhance their performance by increasing profit to attract the investor (Annisa, 2011). However, it is undeniable that profit is always related to the tax, when companies have higher profit, then they should pay higher tax. Tax is the most potential source revenue for Indonesia. It is proven by total revenue from tax sector is the highest percentage compared to other revenue sources and the role of tax in state revenue is dominant and reached more than 70% annually (Dewi & Sari, 2015).

According to Pohan (2013), one of the company's objectives is to maximize the welfare of shareholders or investors in maximizing the value of the company by obtaining the maximum profit. For the company tax is a matter of critical concern because it would reduce net income (Kurniasih and Sari, 2013). Therefore, the company will take the effort to pay lower tax. One of the common ways in reduce tax is tax avoidance. Desai and Dharmapala (2006) in Rego (2003) stated that tax avoidance is an integral part of the capital management company’s strategies. It includes the structuring of arrangements or transaction to take the advantage of deficiencies in tax laws and regulations of a jurisdiction (Lisowsky, 2010; Wilson, 2009) or differences in tax law between jurisdictions (Atwood et al., 2012; Desai and Hines, 2009) to significantly reduce the amount of corporate taxes payable. Because corporate taxes signify a major expense item for the company, management could be motivated to develop strategies to reduce the amount of corporate taxes payable (Richardson et al., 2015).

The practice of tax avoidance is an interesting strategy option taken by management which aims to increase profitability through the reduction of corporate tax expense. Nevertheless, not all of companies are willing to take the strategy due to some risks in the form sanctions which will be given if the company failed to provide good tax avoidance practice. Implication coming from these risks always becomes a reason for a company which has its ownership structure concentrated in small scope of investor to not implement the tax avoidance (Rusyidi and Martani, 2014). This is because most of the investors in this type have a bigger interest in the reputation of company.

Ownership structure is able to influence the company’s activities in term of its performance in maximizing the corporate value. The fact that taxes take away a greater proportion of the company’s pre-tax earnings and subsequently reduce their distributable profits could be a reason for the endless war against corporate tax avoidance (Angrawirin, 2011). As stated by Anggraini (2011), one of the largest ownership structures in a company is the ownership that is owned by institutions (insurance companies, banks, investment companies, asset management and other institutional) which called institutional ownership. As the largest stockholders in a company, it could be the tool to monitor manager’s performance (Djakman and Machmud, 2008). Institutional ownership is expected to encourage company as a taxpayer in committing the tax obligation. On the other hand, the company does not want to pay higher tax and try to minimizing the income tax
perceive the potential costs of tax avoidance, for example penalties and reputation damage to be minimal business operations. Richardson et al., (2015) found that there is positive relationship between financial distress period, where company reports losses on a tax return up to five years after the loss occurred. As stated by prevail for five years. Then the company should devise the method how to reduce or avoid the future taxes. Because of that condition, the companies that face an increased risk of bankruptcy could perceive the potential costs of tax avoidance, for example penalties and reputation damage to be minimal compared with potential gains, however if the potential costs of bankruptcy are higher enough, the companies may be willing to pursue aggressive tax avoidance practices regardless of the risk of being audited by the tax authority (Brondolo, 2009, Campello et al., 2011).

Besides ownership structure and financial distress, tax loss carry forward could be a factor that is affecting tax avoidance. Tax loss carry forward is the process of transforming loss from one period to another period, where company reports losses on a tax return up to five years after the loss occurred. As stated by Kurniasih and Sari (2013) that tax loss carry forward has significant influence on tax avoidance. Since every transaction and condition which caused the fiscal losses will not recur in the future periods, as known that it only prevail for five years. Then the company should devise the method how to reduce or avoid the future taxes. Today, a phenomenon of tax avoidance has come into question. Based on the data submitted by the Indonesian Directorate General of Taxation Fuad Rahmany, there are 4000 Foreign Direct Investment (FDI) reported that the tax was nil in 2012 (Dewi and Sari, 2015). The company is known there were losses for seven consecutive years. The company generally engaged in manufacturing and processing of raw materials (Pranata et al., 2013). Another thing that supports the allegations of tax avoidance which are research data revealed that the company PT. Darya VariaLaboratoriaTbk and PT Merck Tbk, which has a turnover of 1.1 Trillion, reported tax payments 58 billion and 57 billion. However, other companies such as PT. Sekar Bumi Tbk and kedawung Setia Industrial Tbk, which has a turnover of 1.2 trillion and 1.3 trillion, reported lower tax payments from the company PT. Darya VariaLaboratoriaTbk and PT Merck Tbk., Which is only some 2.3 billion and 13.4 billion (Dewi and Sari, 2015).

2. Literature Review, Theoretical Framework And Hypotheses
2.1 Tax Avoidance
Tax avoidance is the action of management to minimize income tax through tax planning activities. According to Suandy (2008; 7), tax avoidance defined as follow:

“Tax avoidance is a term used to describe the legal arrangements of tax payer’s affairs so as to reduce his tax liability. It’s often to pejorative overtones, for example it is use to describe avoidance achieved by artificial arrangements of personal and business affair to take advantage of loopholes, ambiguities, anomalies or other deficiencies of tax law. Legislation designed to counter avoidance has become more commonplace and often involves highly complex provision (Lyons Susan M., 1996)”.

This definition is in line with Utami (2013) that describe tax avoidance is a transaction scheme which is aimed to reduce tax expense to take the advantage of the tax provision loopholes in a state so that the tax experts declared as legal way since it does not violate the tax regulation.

2.2 Ownership Structures
According to Apriada (2013), ownership structures are classified as institutional ownership, managerial ownership and individual/public ownership such as family, foreign, and government. One of the largest ownership structures in a company is the ownership that is owned by institutions (insurance companies, banks, investment companies, asset management and other institutional) which called institutional ownership (Anggraini, 2011). As the largest stockholders in a company, it could be the tool to monitor manager’s performance (Djakman and Machmud, 2008). Institutional ownership is expected to encourage company as a taxpayer in committing the tax obligation.

In the past two decades, foreign ownership in Indonesia has increased significantly, and it would be influencing the economic growth and also the system of competition (Anggraini, 2011). As stated by Christensen and Murphy (2004) in Annuar et al. (2014), foreign ownership of shares has been related with high profitability and efficiency which is the presence of foreign ownership is associated to practice tax avoidance. As argued by
previous researchers, this study proposes to investigate the associations of two forms of ownership with tax avoidance in Indonesia. These are foreign ownership and institutional ownership. The reasons for these forms of ownership are detailed out as follows.

2.2.1 Foreign Ownership
According to the law No. 25 of 2007 Article 1 paragraph (8) states that foreign capital is a capital that is owned by foreign state, foreign individuals, Indonesian Legal Entity which is partly or wholly owned by foreign parties. Referring to that article it could be conclude that foreign ownership is a proportion of the company’s common stock owned by an individual, corporation, legal entity, government and all its aspect which is related to abroad (Aggraini, 2011). Regarding to Rusydi and Martini (2014), foreign ownership is parties that considered focus on the reputation of the state or its company, is also what makes multinational companies (MNC) start changing their behavior in operation in order to maintain the legitimacy and reputation of the company. Generally, foreign ownership occurs when MNC, which are companies that organize economic activities in more than one countries, capitalize long-term investments in a foreign country, usually in the form of foreign direct investment or acquisition. The controlling of foreign shareholder in a company that has concentrated ownership structure will be more concerned to the welfare (Jatiningrum and Roﬁqoh, 2004). Therefore, tax avoidance will be one of the company’s ways to preserve the investor.

2.2.2 Institutional Ownership
Institutional ownership is the ownership of company shares which is owned by the institution that founded in Indonesia, such as insurance companies, banks, pension funds, and investment banking (Permanasari, 2010; Lifitian, 2014). Institutional shareholder who has a large stock has a potential ability to monitor every decision that may be affecting company’s performance. As stated by Desai and Dharmapala (2009) the level of institutional ownership is the key measure of the quality of shareholder activism and the basic motivation for institutional investors to have a greater incentives and capacity to monitor managerial.

2.3 Financial Distress
Financial distress is a condition which is the operating cash flow in the company cannot repay its current liabilities such as accounts payable or interest expense (Husein and Pambekti, 2014). Luciana (2006) stated financial distress occurs when company’s net operating profit is being negative for several years and did not pay dividends or eliminate the payment of dividends.

The failure occurs when a company's cash flow is actually far below the expected cash flows or income level of the historical cost and a smaller investment than the cost of capital incurred for an investment, whereas financial distress, means the difficulty of funds to cover the company's obligations or liquidity, it is begins with a lower difficulties until the condition more serious, that if debt is greater than assets.

2.4 Tax Loss Carry Forward
Tax loss carry forward is the process where a company reports losses on a tax return up to five years after the loss occurred. In Law No. 36 of 2008 concerning amendments to the Law No. 17 of 2000 on income tax, there are few important points in terms of compensation for these losses as follow (Rinaldi and Cheisviyanny, 2015);

a) Tax loss carry forward incurred for the previous tax year has ﬁscal loss (Annual Tax Return is reported nil/overpaid and had any losses).

b) Tax loss carry forward incurred if the gross income is reduced by the ﬁscal correction and got any losses.

c) Tax loss carry forward could be used for the next 5 years consecutively

d) Losses on foreign enterprises cannot be offset against the income of the country.

e) The provision period of ﬁscal compensation prevail for the tax years beginning in 2009, for previous years are prevailed the provision of Law No. 17 of 2000 on income tax.

Based on that article the losses could be compensated for the next five years and company’s proﬁt will be used to reduce total amount of the losses or to reduce the tax expense during a year. Consequently, over these five years, the company will be spared from higher taxes. Regarding to Kurniashidan Sari (2013) this compensation could be utilized as tax avoidance because the company will be avoid from advanced tax expense.
3. Methodology

3.1 Data and Sample

The data of this research used secondary data that obtained from Indonesian Stock Exchange (IDX) website, involves all listed manufacturing companies covering the 2011-2014 period. Sample is a subset of the population, which comprises only some portion of the total population (Sekaran and Bougie, 2010:263). Then, the sample is chosen by using purposive sampling.

Based on these criteria, the number of the sample used in this study are as shown in Table 3.1

Table 1 Research Criteria

<table>
<thead>
<tr>
<th>No.</th>
<th>Criteria</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Manufacturing companies that listed on the Indonesia Stock Exchange (IDX) for the consecutive period of 2012-2014.</td>
<td>127</td>
</tr>
<tr>
<td>2</td>
<td>Manufacturing companies that do not present Rupiah as currency in financial report for the consecutive period of 2012-2014.</td>
<td>20</td>
</tr>
<tr>
<td>3</td>
<td>Manufacturing companies that do not have positive net income for the consecutive period of 2012-2014</td>
<td>41</td>
</tr>
<tr>
<td>4</td>
<td>Manufacturing companies that do not have foreign ownership for the consecutive period of 2012-2014.</td>
<td>17</td>
</tr>
<tr>
<td>5</td>
<td>Manufacturing companies that do not have foreign ownership for the consecutive period of 2012-2014.</td>
<td>10</td>
</tr>
</tbody>
</table>

| Total | 39 |

Source: Data Processed (2016)

3.2 Variables

3.2.1 Tax Avoidance

The dependent variable of this research is tax avoidance. The effective tax rate is the ratio of tax expense to pretax income. This formula used as well as the research of Chen et al., (2008), Dyreng et al., (2008), also Rusydi and Martani, (2014). The effective tax rate for a given company i for year t (ETRi,t) is given by (Dyreng et al., 2008):

\[
ETR_{i,t} = \frac{Tax\ Expense_{i,t}}{Pretax - Tax\ Income_{i,t}}
\]

Description:

ETRi,t : Effective cash rate of company i year t

3.2.2 Foreign Ownership

According to Farooque et al., (2007), foreign ownership is a proportion of outstanding shares owned by investors or foreign investors that the companies owned by individuals, legal entities, government and the status of its parts abroad against the total number of the outstanding share capital which is measured by:

\[
Foreign\ Ownership = \frac{Total\ of\ Foreign\ Shares}{Total\ Outstanding\ Shares} \times 100\%
\]

The total of foreign shares is the total of shares’ percentage which is owned by foreign investors, while the total of outstanding shares is the total of the entire shares that is issued by companies in recent year.
3.2.3 Institutional Ownership
Ujiyanto and Pramuka, (2007) in their research stated that institutional ownership is the proportion of ownership shares by institutions such as Non-Governmental Organization (NGO), private companies, investment companies. Institutional ownership is measured by using a ratio between the numbers of shares held by institutions against the total number of outstanding shares of the company.

\[
\text{Institutional Ownership} = \frac{\text{Total of Institutional Shares}}{\text{Total Outstanding Shares}} \times 100\% 
\]

3.2.4 Financial distress
According to Whitaker (1999), financial distress can be realized when the company’s cash flow is less than the long term debts’ expenses. It could be measure by cash flow coverage ratio and indicated a company’s ability to repay its liabilities from operating cash flow (Kieso et al., 2011: 211). The equation as follow;

\[
\text{Cash Flow Coverage Ratio} = \frac{\text{Operating Cash flow}}{\text{Average Total Liabilities}}
\]

The higher this ratio, the less likely company will experience difficulty in meeting its obligations as they come due. It could be a signal whether the company can pay its debts and survive if external sources of funds become limited. In this study, financial distress is categorized when the score is < 1.00. While if the score is > 1.00, its means that the companies are in a safe zone.

3.2.5 Tax Loss Carry Forward
Tax loss carry forward is a disadvantage of a company which is could be compensated for five years consecutively. This study used dummy variable to measure tax loss carry forward by given the code of (1) or (0). Code (1) is assigned if tax loss carry forward exists, while code (0) is assigned if tax loss carry forward not exist in the beginning year t. This measurement used as well as the research of Rinaldi and Cheisviyanny (2015).

3.3 Research Model

Therefore, the linear regression model in this research is:

\[
Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + \varepsilon
\]

Description:

- \( Y \) = Tax Avoidance
- \( a \) = Constant
- \( b_1, b_2, b_3, b_4 \) = Regression Coefficients
- \( FO \) = Foreign Ownership
- \( IO \) = Institutional Ownership
- \( FD \) = Financial Distress
- \( TLCF \) = Tax Loss Carry Forward
- \( \varepsilon \) = Error term

4. Findings And Discussion

Table 2 F-Statistic Test

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1,050</td>
<td>4</td>
<td>.262</td>
<td>18,906</td>
<td>.000a</td>
</tr>
<tr>
<td>Residual</td>
<td>1,555</td>
<td>112</td>
<td>.014</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>2,605</td>
<td>116</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), FD, TLCF, IO, FO
b. Dependent Variable: ETR
Table 3-T-Statistic Test

<table>
<thead>
<tr>
<th>Coefficientsa</th>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td>.999</td>
<td>.320</td>
</tr>
<tr>
<td>Model (Constant)</td>
<td>1</td>
<td>.035</td>
<td>.035</td>
<td></td>
<td>.948</td>
<td>1.055</td>
</tr>
<tr>
<td>FO</td>
<td>2</td>
<td>.303</td>
<td>.066</td>
<td>.344</td>
<td>4.592</td>
<td>0.000</td>
</tr>
<tr>
<td>IO</td>
<td>3</td>
<td>.411</td>
<td>.058</td>
<td>.524</td>
<td>7.073</td>
<td>0.000</td>
</tr>
<tr>
<td>TLCF</td>
<td>4</td>
<td>.008</td>
<td>.026</td>
<td>.021</td>
<td>.291</td>
<td>.772</td>
</tr>
<tr>
<td>FD</td>
<td>5</td>
<td>.094</td>
<td>.035</td>
<td>.197</td>
<td>2.663</td>
<td>0.009</td>
</tr>
</tbody>
</table>

a. Dependent Variable: ETR

As shown in Table 2, it can be seen that the significant value is 0.000 and lower than the significance level of 0.05 (5%). As the results, the first hypothesis (H1) is accepted because the independent variables are simultaneously affected the tax avoidance. The result of T-test each variable can be seen in Table 3 and it can be describe as follows:

1) The foreign ownership variable (X1) has a value of t 4.592 with the significance level of 0.000. The significance values lower than the significance level of 0.05 (5%). Therefore, it shows that the foreign ownership have effect on tax avoidance. Thus, the second hypothesis (H2) is accepted.

2) The institutional ownership variable (X2) has a value of t 7.073 with the significance level of 0.000. The significance values lower than the significance level of 0.05 (5%). Therefore, it shows that the institutional ownership have effect on tax avoidance. Thus, the third hypothesis (H3) is accepted.

3) The financial distress variable (X3) has a value of t 2.663 with the significance level of 0.009. The significance values lower than the significance level of 0.05 (5%). Therefore, it shows that the financial distress have effect on tax avoidance. Thus, the fourth hypothesis (H4) is accepted.

4) The tax loss carry forward variable (X4) has a value of t 0.291 with the significance level of 0.772. The significance values higher than the significance level of 0.05 (5%). Therefore, it shows that the tax loss carry forward does not have effect on tax avoidance. Thus, the fifth hypothesis (H5) is accepted.

5. Conclusion And Implication

5.1 Conclusion

Based on the discussions of the research that previously have been explained, it can be concluded that:

1. The foreign ownership, institutional ownership, financial distress, and tax loss carry forward simultaneously influence the tax avoidance in manufacturing companies listed on IDX year 2012-2014.
2. The foreign ownership influences the tax avoidance in manufacturing companies listed on IDX year 2012-2014.
3. The institutional ownership influences the tax avoidance in manufacturing companies listed on IDX year 2012-2014.
4. The financial distress influences the tax avoidance in manufacturing companies listed on IDX year 2012-2014.
5. The tax loss carry forward does not influence the tax avoidance in manufacturing companies listed on IDX year 2012-2014.

5.2 Implication

Based on findings of this study, it is recommended that:

1. The research can be conducted in different sectors or broaden the research subjects to get more representative data from the population and the findings can be generalized to all types of companies.
2. The research can be conducted by increasing other independent variables that exist.
3. The research can be used cash effective tax rate (CETR) or Book Tax Different (BTD) as the proxy for tax avoidance.
4. The research can be done in the longer period to give more accurate and valid results.

References


Richardson, Grant., Taylor, Grantly, & Lanis, Roman. 2015. The impact of financial distress on corporate tax avoidance spanning the global financial crisis: Evidence from Australia. Economic Modelling. 44-53


SNA 17 Mataram, Lombok Universitas Mataram 24-27 Sept 2014


### Appendix A. Differences and Similarities of Current Research with Previous Research

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tax Avoidance</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Family Ownership</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>Foreign Ownership</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Government Ownership</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Institutional Ownership</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>Financial Distress</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>✓</td>
</tr>
<tr>
<td>Leverage</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Firm Size</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>✓</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Tax loss carry forward</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Corporate Governance</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>ROA</td>
<td>x</td>
<td>x</td>
<td>✓</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

#### Research Methodology

| Sample                    | ✓                    | ✓                         | ✓                         | ✓                              | ✓                         | ✓            |
| Population                | ✓                    | ✓                         | ✓                         | x                              | x                         | x            |

#### Statistical Method

| Generalized Method Moment (GMM) | ✓                    | x                         | x                         | x                              | x                         | x            |
| Multiple Linier Regression    | x                    | x                         | ✓                         | ✓                              | ✓                         | ✓            |
| Ordinary Least Squares (OLS)  | x                    | ✓                         | x                         | x                              | x                         | x            |

Source: Data Processed (2016)

### Appendix B. Descriptive Statistics Test Results

#### Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>FO</td>
<td>117</td>
<td>.000</td>
<td>.980</td>
<td>.29757</td>
<td>.170456</td>
</tr>
<tr>
<td>IO</td>
<td>117</td>
<td>.000</td>
<td>.986</td>
<td>.37444</td>
<td>.183399</td>
</tr>
<tr>
<td>TLCF</td>
<td>117</td>
<td>0</td>
<td>1</td>
<td>.22</td>
<td>.418</td>
</tr>
<tr>
<td>FD</td>
<td>117</td>
<td>.022</td>
<td>1.759</td>
<td>.38429</td>
<td>.314778</td>
</tr>
<tr>
<td>ETR</td>
<td>117</td>
<td>.106</td>
<td>.775</td>
<td>.31771</td>
<td>.149845</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>117</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Appendix C. Normality Test Results

One-Sample Kolmogorov-Smirnov Test

<table>
<thead>
<tr>
<th>N</th>
<th>Normal Parameters</th>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>a,b</td>
<td>117</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Most Extreme Differences</th>
<th>Absolute</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.068</td>
<td>.068</td>
<td>-.045</td>
</tr>
</tbody>
</table>

| Kolmogorov-Smirnov Z    | .740     |
| Asymp. Sig. (2-tailed)  | .645     |

a. Test distribution is Normal.
b. Calculated from data.

Source: Output SPSS 21.0 (2016)

Appendix D. Multicollinearity Test Results

Multicollinearity Test Results

Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>.035</td>
<td>.035</td>
</tr>
<tr>
<td>FO</td>
<td>.303</td>
<td>.066</td>
<td>.344</td>
</tr>
<tr>
<td>IO</td>
<td>.411</td>
<td>.058</td>
<td>.524</td>
</tr>
<tr>
<td>TLCF</td>
<td>.008</td>
<td>.026</td>
<td>.021</td>
</tr>
<tr>
<td>FD</td>
<td>.094</td>
<td>.035</td>
<td>.197</td>
</tr>
</tbody>
</table>

a. Dependent Variable: ETR

Source: Output SPSS 21.0 (2016)

Appendix E. Heteroscedasticity Test Results

Source: Output SPSS 21.0 (2016)
Appendix F. Autocorrelation Test Results

**Durbin-Watson Test Result**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.635 a</td>
<td>.403</td>
<td>.382</td>
<td>.117822</td>
<td>1.976</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), FD, TLCF, IO, FO  
b. Dependent Variable: ETR  

Source: Output SPSS 21.0 (2016)

Appendix G. Coefficient of Determination (R²)

**Coefficient Determination Result**

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.635 a</td>
<td>.403</td>
<td>.382</td>
<td>.117822</td>
<td>1.976</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), FD, TLCF, IO, FO  
b. Dependent Variable: ETR  

Source: Output SPSS 21.0 (2016)