The Effect of Financial Reporting and Debt Maturity Quality of Investment Efficiency with Litigation Risk as Moderated Variables

Yani Permatasari* a, Ana Vebri Rahmadini Nengtyas b, a,b Accounting Department, Faculty of Economics and Business, Universitas Airlangga, Email: feb.unair.ac.id, Email: *yanipermatasari@feb.unair.ac.id

The purpose of this study is to analyse whether the quality of financial reporting and debt maturity can improve the efficiency of corporate investment by using the moderating variable of litigation risk. This study uses observations from 428 companies listed on the Indonesia Stock Exchange during three periods from 2014 to 2016. The Ordinary Least Square Regression analysis method was used to examine whether financial reporting quality and debt maturity can improve the efficiency of corporate investment. This study found that companies that have higher financial reporting quality are positively and significantly related to the efficiency of corporate investment and low debt maturity is negatively and significantly related to investment efficiency. Research was conducted using litigation risk moderation variables, and results show that the relationship between financial reporting quality and investment efficiency is weakened by the presence of litigation risk while debt maturity does not moderate the debt maturity relationship to investment efficiency. This research has implications for investors as a consideration in assessing investment management carried out by company management. The results of this study show that companies that have higher financial reporting quality can improve investment efficiency.

Key words: Financial reporting quality, debt maturity, litigation risk, investment efficiency.
Introduction

One way that companies can grow and develop is by doing an Initial Public Offering (IPO). This is more commonly referred to as going public where the company will have easy access to funding in order to increase company activity. A company that has gone public requires additional funding to increase capital in order to develop its business and to finance operational and non-operational activities. Fulfillment of these funding efforts can come from various sources and through different forms. All available sources can be classified into two categories, namely debt and equity. (Brigham et al., 1999).

Along with the increase in operational activities within the company, a company’s funding needs will increase which then calls for external funding needs. Increased operational activities will also have an impact on increasing investment in capital goods in companies, so companies must be able to plan investments appropriately in order to obtain profitable results. This suggests that planning for investment efficiency in companies is crucial. Investment efficiency is the optimal level of investment of the company, where the investment is a type of investment that generates a positive or profitable NPV for the company to increase the production of goods and services in the future. In order for an investment to be efficient, the company should be able to avoid an over- or under-investment situation.

To produce satisfactory performance, the auditor must have an independent attitude in reporting the audit results on the financial statements (Trisnaningsih, 2007). In accordance with the Indonesian Accountant Code of Ethics, Article 1 Paragraph 2, the auditor must maintain integrity, objectivity and independence in carrying out his or her duties. Independence is an important factor for the professionalism of public accountants in forming high personal integrity. This is because accountant services are strongly influenced by the trust of clients and the public with different interests.

A company’s success in achieving investment efficiency is influenced by several factors, including the quality of financial reporting and debt maturity (Sari and Suaryana, 2014; Rahmawati and Harto, 2014). The quality of financial reporting involves information that consists of financial statements and other information that is used in making decisions and policies of a company and the information meets the characteristics of information quality. Research by Biddle and Hilary, 2006; McNichols and Stubben, 2008; Biddle et al., 2009; Chen et al, 2011 suggests that good quality financial reporting can reduce adverse selection and moral hazards while enabling managers to identify good investment opportunities. Higher quality financial reporting will therefore improve overall investment efficiency.

Another factor that can improve investment efficiency is debt maturity. Debt maturity is a policy carried out by companies in determining the maturity period of debt to be used
Debt maturity is divided into two periods or timeframes, namely short-term and long-term debt. Short-term debt has a maturity of less than one year, so the use of short-term debt will be better in increasing investment efficiency because lenders and borrowers will more often communicate in determining the value of debt (Childs, Mauer, and Ott, 2003; in Sakti, 2015).

High quality financial reporting and short-term debt maturity will reflect that a company is protected from information asymmetry, which can potentially lead to litigation risks (Awalia, 2014). Litigation risk is defined as the risk inherent in a company that allows the threat of litigation by interested parties (such as creditors, investors or regulators) who are harmed by the company (Juanda, 2007). According to the research by Biddle and Hilary (2006), litigation risk alleviates agency problems and promotes greater quality of accounting in financial statements. Higher quality accounting can then increase the efficiency of capital allocation.

Based on these ideas, the authors of this study are motivated to conduct research to determine whether litigation risks can moderate the effect of financial reporting quality and debt maturity on investment efficiency in manufacturing companies in Indonesia.

**Literature Review**

**Agency Theory**

Agency theory is the basis of practice in running a company and is used to explain the relationship between management (agent) and principal (business owner). Management refers to the party authorised to manage and control the use of capital and to make decisions that are beneficial to the interests of shareholders. The principal is the party that evaluates management performance information on the management and control of its economic resources. Agency relationships occur when one or more individuals delegate the authority to contract with individuals or other entities to perform various services and make decisions for major benefits (Jensen and Meckling, 1976).

According to Messier, et al., (2006) agency relationships result in two problems: (1) the occurrence of information asymmetry wherein management generally has more information about the actual financial and operating positions of the entity from the owner, and (2) conflict of interest due to unequal goals, wherein management does not always act in accordance with the interests of the owner due to different preferences held by the owner or deliberately cheating of the company by the owner.
Quality of Financial Reporting

The main purpose of financial reporting is to support shareholders and other parties in determining financial decisions by helping them predict the company’s cash flow (Breda and Hendriksen, 2001). The quality of financial reporting can be seen from the qualitative characteristics of financial statements listed in SFAC No. 2, including relevance and reliability. The Indonesian Accounting Association (IAI) also emphasizes the importance of these qualitative characteristics of financial information generated so that the information is truly useful for decision making.

Debt Maturity

Debt maturity is a policy carried out by companies to determine the maturity of debt that will be used by the company (Christine and Yanti, 2017). Short-term, or current, debt has a maturity of less than one year or a maximum of one year, and long-term debt has a maturity of more than one year. Monitoring associated with debt can be used to reduce agency conflicts between managers and shareholders (Jensen and Meckling, 1976). A study conducted by Myers (1977) and Barclay and Smith (1995) states that in addition to debt levels, debt maturity can play a significant role in reducing agency costs. Myers also suggested that more short-term debt maturity can alleviate the problem of under-investment. Short-term debt can also increase the frequency of monitoring of managerial actions (Rajan and Winton, 1995; Stulz, 2000)

Investment Efficiency

Investments made by a company must be in accordance with the needs and expectations of that company so as to create investment efficiency. According to Sari and Suaryawan (2014), efficiency is an action which utilises resources appropriately while eliminating waste of available resources. Companies aim to generate efficiency to reduce costs and facilitate optimal management in order to achieve company goals. Investments made by a company must be efficient in order to create substantial benefits (Sari and Suaryawan, 2014). To achieve efficient investment, companies should be able to avoid the conditions of over-investment and under-investment.

Litigation Risk

Litigation is a third-party claim addressed to the manager or company. Every company is at risk of litigation from injured parties. Litigation is caused by acts that violate or are not appropriate with the company’s reputation or services. Litigation risk increases with heavier law enforcement in capital market environments. According to Juanda (2008), the emergence of errors due to non-compliance with accounting standards and the delay in negative
information can easily become material charges as financial statements are the main basis of lawsuits. Johnson et al. (quoted from Chrisnoventie, 2012) added that with the existence of legal obligations for high-tech companies, encouraging such companies to disclose their reports is relatively more complete. From this explanation, it can be concluded that litigation risk has the potential to cause significant losses due to the likelihood of dealing with costly legal issues.

Hypotheses Development

**Effect of Quality of Financial Reporting on Investment Efficiency**

A good quality financial report will present an accurate account of a company’s condition so that information bias on the financial position can be minimised. Good quality financial reporting enables managers to make investment decisions by identifying good and profitable project opportunities. Reports that present appropriate numbers in financial reports can also reduce problems of over-investment and under-investment (Bushman and Smith, 2001; McNichols and Stubben, 2008).

Research conducted by Biddle et al. (2009) and Chen et al. (2011) examined the effect of financial reporting quality on investment inefficiency. Biddle et al. (2009) and Chen et al. (2011) provide empirical evidence that the quality of financial reporting helps companies that experience under-investment and over-investment problems. From the description above, the following hypothesis can be formulated for this study:

**H1:** Companies with high quality financial statements will have high investment efficiency.

**Effect of Debt Maturity on Investment Efficiency**

Debt maturity can be used to reduce the problem of over-investment and under-investment. Myers (1997) argues that when there is a project with a positive NPV, the company can finance that project using its short-term debt and can reduce issues of under-investment. This is because the debt will be liquidated in a short time and profitability will fully belong to the company. Barclay and Smith (1995) state that debt holders can monitor borrowers better and can reduce agency conflicts between creditors and borrowers arising from investment opportunities due to short-term debt that continues to revolve. Childs et al. (2005) argue that high flexibility of short-term debt can reduce agency conflict between shareholders and creditors. Thus, the problem of over-investment and under-investment can be reduced so that it will lead to efficient investment in a company.

**H2:** Companies with high short-term debt usage (low debt maturity) will show high investment efficiency.
Effect of Financial Reporting Quality on Investment Efficiency with Litigation Risk as a Moderation Variable

Research conducted by Biddle and Hilary (2006) states that litigation risk will reduce information asymmetry and improve accounting quality where the greater the accounting quality will increase the efficiency of capital allocation. Litigation risk occurs when there are irregularities or discrepancies in agreements made by the company with third parties that can negatively affect the company’s reputation. Litigation risk prevention can be done through improving the quality of financial statements.

Chung et al. (2013) state that the low risk of litigation can make managers careless in presenting financial statements, which may reduce the quality of financial statements and thus hamper the company’s capital allocation.

H3: Litigation risk strengthens the effect of the quality of financial statements on investment efficiency.

Effect of Debt Maturity on Investment Efficiency with Litigation Risk as a Moderation Variable

Conflict between shareholders and managers will create legal claims to the manager, so that the manager will make more efforts to provide satisfaction to shareholders. Existing claims create an increased litigation risk for company managers. This encourages company managers to put more effort to create satisfaction to the shareholders by considering investing more to increase the company’s profits in the future. A large litigation risk will encourage managers to further increase the maturity of short-term debt to finance existing investment activities, so as to provide satisfaction to shareholders. The amount of litigation risk faced by managers will result in managers’ decisions to plan investments more efficiently.

H4: Litigation risk will strengthen the effect of debt maturity on investment efficiency

Conceptual Framework

To understand the factors that can affect auditor performance, a conceptual framework is needed. Such a framework can explain the relationship between variables used in research based on the theoretical basis that has been described as well as the hypotheses that have been put forward. The conceptual framework for this study has been formulated as follows:
Figure 1. Conceptual Framework

Research Methodology

Samples and Data Sources

The population in this study are all manufacturing companies listed on the Indonesia Stock Exchange in the period 2014-2016. Sampling in this study was conducted using the purposive sampling method. From the sample data of 428 manufacturing companies that published financial statements on the Indonesia Stock Exchange from 2014 to 2016, there were 139 companies that met established criteria. Secondary data was collected by carrying out the documentation method. Data was obtained from annual reports published by the Indonesia Stock Exchange. From these data sources, quantitative data was obtained in the form of financial statements of manufacturing companies listed on the Indonesia Stock Exchange in 2014 and 2016.

Variable Definition

Investment Efficiency

The dependent variable in this study is investment efficiency, which can be interpreted as the positive NPV elicited from successful company projects (Biddle et al., 2009). Investment efficiency will be created when there is no deviation from the level of investment expected by the company. The efficiency of investment in this study was measured by Biddle et al.’s model (2009) in which the level of investment expected by company in year t was measured based on the company’s growth opportunities. The following investment efficiency models:

\[ \text{Investment}_{i,t} = \beta_0 + \beta_1 \text{Sales Growth}_{i,t-1} + \epsilon_{i,t} \]
Information:
Investmenti, t = Total investment of company i in year t, calculated from the increase in tangible and intangible assets divided by lagged total assets.
SalesGrowthi, t-1 = The rate of change in sales of company i from t-2 to t-1.
Ɛi, t = Error term i in the period t

The residual value of the regression model reflects the deviation from the level of investment expected by the company, which is then used as a proxy for investment inefficiency. Positive residual value indicates that the company makes investments that are higher than those expected by the company in accordance with sales growth, leading the company to experience over-investment. The negative residual value indicates that the company makes investments that are lower than those expected by the company in accordance with sales growth, leading to under-investment. The dependent variable in this study is the absolute value of the residual multiplied by -1, meaning that the highest value indicates high efficiency.

Quality of Financial Reporting

The first independent variable in this study is the quality of financial reporting. The quality of financial statements is a report that can provide information about the and is measured using standards achieved through inspection. Variable quality of financial reporting is proxied by accrual quality. In order to measure the value of the accruals, this study follows the discretionary accrual model developed by Kasznik (1999) based on the research model conducted by Jones (1991), namely:

\[ TAi, t = \beta_0 + \beta_1 \Delta Sales_{i,t} + \beta_2 PPE_{i,t} + \beta_3 \Delta CFO_{i,t} + \varepsilon_{i,t} \]

Information:
TAi, t = Total accruals, calculated from changes in non-liquid current assets less changes in current debt plus changes in short-term bank loans less depreciation.
AlSalesi, t = Change in net sales of company i in period t
PPEi, t = Property, Plant, and Equipment of company i in period t
ΔCFOi, t = Changes in the company's operating cash flow i in period t
β1, β2, β3 = Parameters obtained from the regression equation
Ɛi, t = Error term i in the period t

All variables are divided by total assets of company i in period t. Proxy measurement of financial reporting quality is the absolute value of the residual multiplied by -1, so the higher value will indicate a higher quality of financial reporting.
Debt Maturity

The second independent variable is debt maturity, which is a policy carried out by companies to determine the maturity of debt that will be used (Christine and Yanti, 2017). The measurement of debt maturity is conducted with the formula used in the research of Gomariz and Ballesta (2013):

\[
\text{STDebt} = \frac{\text{Hutang Jangka Pendek}}{\text{Total Hutang}}
\]

Litigation Risk

According to Utami (2011), litigation risk is defined as the risk inherent in the company that allows the threat of litigation by parties concerned with companies that feel disadvantaged. Parties may include creditors, investors and regulators. Litigation risk can be measured from various financial indicators that are determinants of possible litigation. Litigation risk measurement refers to research conducted by Juanda (2007), Qiang (2003) and Johnson et. al (2001), which measure the cost or risk of litigation from the ex-ante side as an indicator that can lead to litigation.

Data Analysis Techniques

This study uses multiple linear regression analysis techniques using SPSS V.24. The regression model used to test the hypothesis will be formulated as follows:

\[
\text{INV} = \alpha + \beta_1 \text{KPL}_{i,t} + \beta_2 \text{DEBT}_{i,t} + \beta_3 \text{Tang} + \beta_4 \text{Rli}_{i,t} + \beta_5 \text{KPL}^*\text{RL} + \beta_6 \text{DEBT}^*\text{RL} + \epsilon_{i,t}
\]

Results and Discussion

Descriptive statistics are used to provide information about the variables used in the study, namely audit quality, labour unions, audit fees, internal control weaknesses and company size. Descriptive statistics provide a description of the mean, minimum, maximum and standard deviation of each of these variables. Descriptive statistics of this study can be seen in the table below.
Table 1: T-Test Results

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>Sig.</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>-1,351</td>
<td>0,179</td>
<td></td>
</tr>
<tr>
<td>Quality of Financial Report</td>
<td>7,502</td>
<td>0,000</td>
<td>H₀ Accepted</td>
</tr>
<tr>
<td>Debt Maturity</td>
<td>-2,750</td>
<td>0,007</td>
<td>H₀ Rejected</td>
</tr>
<tr>
<td>Quality of Financial Report * Litigation Risk</td>
<td>-4,330</td>
<td>0,000</td>
<td>H₀ Rejected</td>
</tr>
<tr>
<td>Debt Maturity * Litigation Risk</td>
<td>1,256</td>
<td>0,211</td>
<td>H₀ Rejected</td>
</tr>
<tr>
<td>Tang</td>
<td>-0,789</td>
<td>0,431</td>
<td>H₀ Rejected</td>
</tr>
</tbody>
</table>

To determine the effect of independent variables (financial reporting quality and debt maturity) and moderation variables, namely litigation risk with control variables namely tangibility ratios, related to the dependent variable of investment efficiency can be seen in the t-test. This test is used to determine the effect of individual independent variables on the dependent variable. Provided that the t-test produces a significant value <0.05 (α = 5%), H₀ is accepted, meaning that there is a significant influence between one independent variable on the dependent variable. The results of the regression model analysis between the quality of financial reporting have a significant positive effect on investment efficiency, and debt maturity has a significant negative effect on investment efficiency. Labour unions and internal control weaknesses have no significant effect on audit quality, however, meaning that audit fees and KAP size affect how well the quality of audit results produced by an independent auditor of a company. Finally, trade unions and internal control weaknesses do not affect how well the audit quality is produced by independent auditors.

Conclusions

Based on the research conducted, it can be concluded that the quality of financial reporting has a significant positive effect on investment efficiency. This shows that higher quality financial statements can improve investment efficiency by reducing information asymmetry. Short-term debt maturity was found to have a significant negative effect on investment efficiency. This shows that higher use of short-term debt (low maturity) can reduce investment efficiency. Litigation risk was found to moderate the effect of financial reporting quality on investment
efficiency, meaning that litigation risk will weaken the relationship between financial reporting quality and investment efficiency. Finally, litigation risk does not moderate the effect of debt maturity on investment efficiency. This shows that the risk of litigation will not affect the relationship between the quality of financial reporting and investment efficiency.

Suggestions

Based on the limitations of the existing research, this study suggests an increase in the number of samples for further research and advises academics to add other variables that affect investment efficiency as well as other control variables. Sample variable can also be expanded to involve companies from other industrial sectors and other countries. Finally, future studies could broaden the time span of research so that results can be generalised more easily.
REFERENCES


www.finance.yahoo.com
www.idx.co.id