

# The Effect of Corporate Social Responsibility on Financial Performance of Banks in Indonesia: The Role of Intellectual Capital and Bankruptcy Risk

Nony Kezia Marchyta<sup>1\*</sup>, Devie<sup>2</sup>, Hatane Samuel<sup>3</sup>

**Abstract:** Banking subsector is an institution that relies heavily on public trust, reputation and corporate image, so companies in the banking sub-sector are expected to be more likely to engage in CSR activities to maintain the company's sustainability. There are gaps related to the concept of CSR and it is quite controversial. This research aims to observe the direct impact of CSR towards financial performance, and indirect impact of CSR towards financial performance through intellectual capital and bankruptcy risk as mediating variables from banking subsector. This study is a quantitative form and the data is obtained from annual report of banking companies listed in IDX from 2011 to 2015. The results show positive impact of CSR towards financial performance and intellectual capital, and intellectual capital towards financial performance. This research also shows negative impact of intellectual capital and CSR towards bankruptcy risk, and bankruptcy risk towards financial performance. Finally, banking subsector companies need to increase the intensity of CSR activities and the development of intellectual capital should be a concern as a strategy to achieve competitive advantage in the face of increasingly tight business competition.

**Keywords:** Corporate social responsibility, intellectual capital, bankruptcy risk, financial performance

---

## I. INTRODUCTION

In the era of globalization with uncertain business environment conditions, companies need to determine management decisions that are able to maintain the company's continuity, and even strengthen its position in the market. However, practices such as waste pollution, illegal logging and unlawful labor treatment, which may provide short-term profits can result in an imbalance between firms, stakeholders, and surrounding environment. Those can impact on the company's long-term sustainability. CSR becomes one of the keys to solve the problems.

CSR was understood as a developing concept whereby companies integrate social, environmental, and economic aspects of corporate strategy and decision making [1]. The measurement of CSR itself is very diverse, it can be through surveys, questionnaires, or awards by a particular institution, Fortune Reputation Rating, and Kinder Lydenberg Domini. This study used CSDI (Corporate Social Disclosure Index) measurement based on GRI (Global Reporting Initiative), obtained through GRI official website.

Currently, there are gaps related to the concept of CSR, so the concept of CSR is quite controversial. Persons opposing CSR activities argue that if the company is too focused on

---

<sup>1</sup> Nony Kezia Marchyta\*, Petra Christian University, Jl.Siwalankerto 121-131 Surabaya 60236, Indonesia.

<sup>2</sup> Devie, Petra Christian University, Jl.Siwalankerto 121-131 Surabaya 60236, Indonesia.

<sup>3</sup> Hatane Samuel, Petra Christian University, Jl.Siwalankerto 121-131 Surabaya 60236, Indonesia.

\*Correspondence Email: [nony.kezya94@petra.ac.id](mailto:nony.kezya94@petra.ac.id)

social responsibility rather than maximizing profits, it will lead to a decrease in the efficiency of market mechanisms and lead to failure in optimizing the allocation of company resources [2]. Conversely, for those who support CSR activities, CSR provides benefits. CSR was believed to bring long-term benefits to the company, one of which improves financial performance [2,3].

Financial performance is reflected in the value of the company which is the result of evaluation from investors [4]. This study uses Tobin's Q and stock return as an indicator of financial performance measurement. Financial performance of the company is also influenced by intellectual capital [5]. Based on the results of research conducted by Chen, Cheng, & Hwang [6], the development of intellectual capital is as important as the development of capital investment to create sustainable value and profit for the company.

The development in the last few decades shows the transformation of the industrial era leading to a knowledge-based era [6]. It is assumed that CSR has an effect on intellectual capital, there is a shift which result in the increase of intellectual capital significance as a company competitive advantage in achieving sustainable performance [3,5]. This is in line with the concept of Resource Based Theory (RBT) which emphasizes the company's hard-to-copy attributes as a source of superior performance and corporate competitive advantage [7].

Proxy measurement of intellectual capital can vary, it can be measured by Skandia's IC Navigator, Economic Value Added or Balance Scorecard. In this study Value Added Intellectual Coefficient (VAIC<sup>TM</sup>) is used as an indicator of intellectual capital measurement introduced by Pulic [8]. If the company ignores intellectual capital, it is expected to affect the bankruptcy risk of the company [9].

CSR is also believed to have an effect on bankruptcy risk [10,11]. Indicators that can be used to measure bankruptcy risk are net income ratio, liquidity ratio or solvency ratio [12]. This study uses the Altman Z-Score which is a series of financial ratios combined in a discriminant analysis approach to predict corporate bankruptcy issues [13]. Bankruptcy risk will affect the company's financial performance, which is indicated by the existence of poor company performance [14].

This study is conducted to examine the effect of CSR on financial performance with intellectual capital and bankruptcy risk as a mediating variable. The populations in this study are companies classified in the banking subsector listed on the Indonesia Stock Exchange (IDX) in 2011 - 2015. Banking subsector is selected in this study because, the banking subsector is an institution that relies heavily on public trust, reputation and corporate image, so companies in the banking subsector are expected to be more likely to engage in CSR activities to maintain the company's sustainability.

Banking subsector also face greater risk because they operate in highly innovative sectors, with a lot of increasing pressure to gain profit for product or service development

aimed at satisfying customers [15]. The service industry in the banking sub-sector is also characterized by intellectually intensive and knowledge intensive sectors, which uses the largest human capital resources and emphasizes the knowledge and potential of employees to achieve competitive advantage [16].

## **II. LITERATURE REVIEW**

### **2.1 Signalling Theory**

The incentives to voluntarily disclose information about sustainability or even incentives to publish an information guarantee report can be classified in the context of signaling theory [17]. The basic assumption of signaling theory is based on the existence of transaction cost, the economic agent is considered a rational individual. Therefore, signalling theory is based on the existence of information asymmetry between managers and investors, managers with good news have an incentive to disclose information to the market [17].

### **2.2 Stakeholder Theory**

According to Pirsch, Gupta & Grau [18], stakeholder theory states that an organization can be sustainable and successful on condition that it meets the economic objectives (maximizing corporate profits) and non-economic goals (such as corporate social performance) through meeting the needs of various stakeholders. According to Zhang [19], stakeholder theory has a concept that aims to maximize the value of all stakeholders.

According to Chen & Wang [2], Freeman developed a stakeholder theory that expanded the community's understanding of CSR. Nowadays, more and more companies are actively conducting CSR measures and consider the interests of the stakeholders as a strategic perspective of the company [2].

### **2.3 Resource Based Theory**

The company's resources consist of tangible assets and intangible assets and are used effectively and efficiently to be implemented in a competitive and profitable strategy [20]. Intangible asset in the company exist in form of intellectual capital. According to Riahi-Belkaoui [20], Resources Based Theory is the main source of controlling performance and competitiveness of the company, so as to create corporate value and can be used in preparing and implementing company strategy.

Company performance varies depending on the ownership of resources and the unique capabilities each company has [3]. The valuable, scarce, inimitable, and nonrefundable corporate resources are the main source of sustainable competitive advantage to achieve a firm and sustainable performance [21]. Resource Based Theory (RBT) emphasizes the concept of a company's attributes that are difficult to emulate as a source of superior performance and competitive advantage [7].

Surroca, Tribó, & Waddock [3] learned that resource intangible such as innovation, human resources, reputation of the company [22], and organizational culture [23], and its relationship to the different dimensions of the CSR. RBT confirms that the company's financial performance compared to its competitors need to develop different resources,

valuable, not easily imitated, and not easily replaced [3]. Resources that meet these criteria are intangibles resource [24].

## **2.4 Legitimacy Theory**

According to Guthrie, Petty & Ricceri [25] legitimacy theory relies on the assumption that there is a "social contract" between the company and the society in which it operates. Social contracts are a way of describing people's expectations of how companies operate [25]. This society's expectations are not fixed and change over time. Therefore, companies should be sensitive to the environmental conditions surrounding the place of operation [26].

## **2.5 Corporate Social Responsibility**

Elkington [27] developed the concept of CSR that was originally only a single bottom line (profit) into a concept known as "The Triple Bottom Line" consisting of 3P (profit, people, planets). Companies not only pursue profit for the interests of shareholders, but also must pay attention to the interests of stakeholders, which is involved in the fulfillment of people's welfare (people), and actively conserve the environment (planet) [27].

In Indonesia, the practice of CSR is regulated in Law Number 40 Year 2007 regarding Limited Liability Company Article 74 and Law Number 25 Year 2007 regarding Capital Investment. If the investor does not undertake an obligation to perform social and environmental responsibility, then under Article 34 of Law Number 25 Year 2007, the investor will be subject to administrative sanctions in the form of a written warning; restrictions on business activities; freezing of business activities and / or investment facilities; and revocation of business activities and / or investment facilities.

The CSR in this study used the assessment criteria in GRI Index 3.1. According to the sustainability report guidelines, the GRI reporting framework is a general framework that can be used to report on the economic, environmental, and social performance of an organization with different sizes, sectors, and locations. GRI is said to be the most popular guideline for measuring corporate social performance [28].

## **2.6 Intellectual Capital**

Pulic [29] argues that the main goal in a knowledge-based economy is to create value added. To create value added, intellectual capital is required with physical capital (financial capital) [29]. Intellectual capital consists of two components, namely human capital and structural capital [29]. Human capital includes all expenses for employees and such expenditures are not considered by the company as a cost but as an investment [29]. Structural capital is the value added created by the company after being deducted by the proportion of human capital [29]. This shows the greater the proportion of human capital in the creation of value added, the smaller the structural capital proportion will be [29].

Pulic developed the concept of a broader method of measuring value-added intellectual capital symbolized by VAIC<sup>TM</sup> [29]. Pulic defines VAIC<sup>TM</sup> as a universal indicator that demonstrates the company's ability to create value and represents a measure of business efficiency in economics-based science [8].

The advantages of VAIC<sup>TM</sup> compared to the existing IC measurement are that it is objective and verifiable, since it is calculated from the result of the audited information [8].

VAIC<sup>TM</sup> also has the advantage of being able to help managers improve the company's potential based on the company's current performance [29]. Considering the advantages of the VAIC<sup>TM</sup> indicator, this study use VAIC<sup>TM</sup> as an indicator of intellectual capital measurement.

Pulic [29] describes VAIC<sup>TM</sup> using the company's financial statements to calculate efficiency coefficients in three main components:

1. Capital Employed Efficiency (CEE)  
Capital Employed Efficiency is an efficiency indicator of the added value created by each unit of company capital.
2. Human Capital Efficiency (CEE)  
HCE indicates the efficiency of the added value that can be created by every fund spent on labor.
3. Structural Capital Efficiency (CEE)  
SCE demonstrates the contribution and success of structural capital in value creation.

## **2.7 Bankruptcy Risk**

According to Audu [30], risk is generally classified into two major groups, diversified risk and non-diversified risk. Altman [13] theorize that a company with low profitability or a low level of solvency may potentially go bankrupt. Altman [13] suggests a series of financial ratios combined in a discriminant analysis approach to predict corporate bankruptcy problems.

Altman [31] redeveloped the Z-score model indicator for non-manufacturing firms classified as emerging markets. The redeveloped Z-score is used in this study. The redeveloped Z-score model that is considered more suitable as an indicator to measure the risk of bankruptcy of a company, such as banking, which has a tendency of higher current liabilities [31].

## **2.8 Financial Performance**

Indicators to measure the financial performance of a company in general can be classified into two, namely accounting-based and market-based. There are drawbacks to the measurement of accounting-based financial performance, such as profit margin ratio, return on asset, or return on equity derived solely from financial statements [32]. This is because the financial statements are very vulnerable to be manipulated by the management, for example to obtain a large net income, then the management increase sales or hold expenses that should have been recognized [32].

To overcome these weaknesses, market performance measurements are introduced, one of them is Tobin's Q ratio. Tobin's Q ratio is better than profit margin, ROA, or other financial indicators which are based on historical accounting performance. It is able to reflect market expectations, making it relatively free from possible manipulation by company's management [32].

Financial performance of a company is also reflected through the stock price [33]. The better the company's financial, the greater the increase of the stock price on the capital market. Therefore, the management tries to improve the financial performance to

encourage the increase of company stock price [33]. According to Nichols & Wahlen[34], stock return is a measure used by investors in the capital market to assess the company's financial performance.

## **2.9 Research Hypotheses**

According to Chen & Wang [2], companies that actively engage in CSR actions and consider stakeholder interests as a corporate strategic perspective will benefit from stakeholder attention to corporate interests, thus reducing cost of opportunism behaviors, incentives and supervision costs. Companies that implement CSR will not only improve their current financial performance, but also their future financial performance. Under signalling theory, CSR reporting can be used to reduce conflicts of interest arising between managers and shareholders [17]. The disclosure of CSR will form transparency of information to the public. For investors, information disclosure of CSR will be seen as a good signal from the company, so that investors are interested to buy shares of the company. Increased stock demand will be followed by an increase in stock prices and financial performance. Chen & Wang [2] found a positive influence of CSR on financial performance. The same results were also found by Tahir & Razali [32].

If the company is too focused on social responsibility rather than maximizing profits, it will cause a decrease in the efficiency of market mechanisms and cause failure to optimize the allocation of company resources [2]. From corporate governance perspective, managers are legal agent of shareholders, the manager's job is to maximize shareholder wealth. If managers spend shareholder's money by pursuing public interest and performing social responsibility, such acts are like their own public interest [35]. This is in accordance with the concept of shareholder theory. Negative effects between CSR and financial performance are also found in the research results [36].

H1: There is an influence between CSR on financial performance.

The development of close relationships with stakeholders through CSR activities can increase intellectual capital that can encourage the use of company assets efficiently and competitively and can create a competitive advantage among its competitors [37]. CSR activities improve relationships between companies and employees through increased employee motivation and loyalty. CSR can also improve the process of product and service formation as an instrument in generating high commitment and caring culture [3]. CSR activity is thought to have a positive influence on the dimensions of intellectual capital [3,38].

According to the results of research conducted by Aras, Aybars, & Kutlu [5] there is no significant result between the influence of VAIC<sup>TM</sup> on CSR caused by the existence of concept and theory of heterogeneous CSR. The lack of managerial awareness regarding CSR reporting techniques also results in distortions in CSR measurements between one company and another [5]. In addition, there are external factors that are also suspected to affect [5]. For example, the financial crisis in 2008 caused a high cost of borrowing and financial market instability [5]. The high cost of investment related to corporate social responsibility (cost of socially responsible) also exacerbates the existing situation [5]. The results of this research by Aras, Aybars, & Kutlu [5] can also be influenced by the fact that

there are increasing number of companies that do not want to do CSR due to unreachable cost.

H2: There is influence between CSR on intellectual capital.

Research conducted by Zéghal & Maaloul [39] at 300 high-tech UK companies, traditional companies and services in 2005, found a positive and significant influence between VAIC<sup>TM</sup> and financial performance. Positive influences were also shown in studies conducted by Chen, Cheng, & Hwang [6] and Mavridis [40]. The positive influence of intellectual capital and financial performance is in line with the concept of resource-based theory, which explains that firms that manage and utilize good intellectual resources can achieve competitive advantage [20]. Companies that have good intellectual capital will be able to maximize the potential use of resources owned, because it is supported by human capital and good structural capital. It shows that companies have added value compared to other companies, so investors will place a higher value for companies with good intellectual capital [20].

Firer & Williams [16] found that HCE had a negative and significant effect on asset turnover and market to book ratio, indicating that the efficiency that firms use in terms of human resources negatively impacts the company's performance. Firer & Williams [16] concluded that firms and more investors are placing larger sections for physical capital and financial capital than the intellectual capital (human capital and structural capital) in South Africa and Hong Kong.

H3: There is influence between intellectual capital on financial performance.

Intellectual capital has a negative influence on bankruptcy risk. This result is in line with the findings of Bontis [41] and Mollabashi & Sendani [9]. Similar results were also found by Ardalan & Askarian [42]. Companies with skilled employees, proper organizational structure, good management, good culture, and a conducive working environment will have lower bankruptcy risk [42]. The increase of intellectual capital will increase profitability of the company that can reduce its bankruptcy risk [42].

H4: There is influence between intellectual capital on bankruptcy risk.

The results of research conducted by Karaibrahimolu [10] show the existence of negative influence of CSR on bankruptcy risk. The results of Jo & Na's research [11] show that CSR is able to reduce various risk characteristics of the company. Companies that adopt a code of ethics in the form of corporate social responsibility may reduce the risk of the company on unwanted events, such as lawsuits or strikes that can significantly affect the profitability of the company [43]. If the company's profitability decreases, then the company will potentially experience bankruptcy [13].

The positive influence of CSR on bankruptcy risk is also demonstrated when companies engaged in controversial industries (such as alcohol industry, weapons, cigarettes, adult hiduran, etc.) try to do window dressing through CSR activities, in order to build corporate reputation [11]. When investors find the true intent of a company doing CSR solely to build a company's reputation, it tends to avoid the stock of the company, which in turn will increase the risk of a company doing CSR activities [11].

H5: There is influence between CSR on bankruptcy risk.

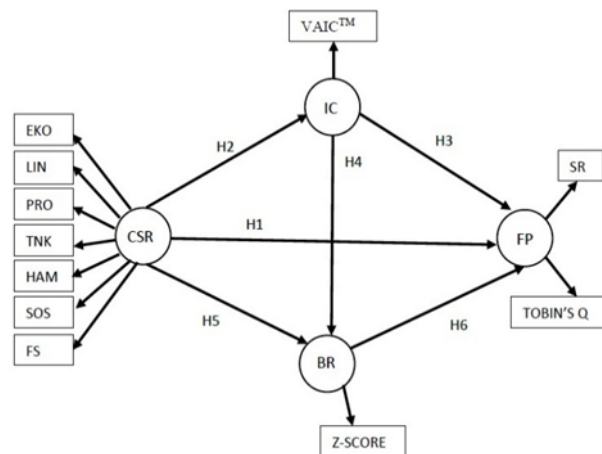
There is a negative effect of bankruptcy risk on financial performance [14]. The same results were found by Oluwafemi, Israel, & Simeon [15]. Hotchkiss [44] explains that

companies that have gone bankrupt have a poor performance due to weak accounting performance, high debt ratio, and often require debt restructuring. Before investing in a company, a rational investor will first see the company's financial condition, liquidity, solvency, and leverage. Liquidity and leverage are known to predict corporate bankruptcy and provide the greatest contribution in detecting bankruptcy of a company [13]. If corporate risk is high, its company value will be lower [11]. The higher the risk of the company, the more the creditor will ask for higher interest, so the cost of the company will increase. The higher the risk of the company, the more the investor will also demand the capital gains or dividends to be distributed increasingly.

H6: There is influence between bankruptcy risk on financial performance.

## 2.10 Conceptual Model

Based on the six hypotheses above, here is the developed model can be seen in Figure 1.



**Figure 1.** Conceptual Model with Hypotheses

Financial performance will increase when the company considers CSR as a corporate strategy. The influence will be greater if the company increases their intellectual capital and reduces bankruptcy risk.

## 4. METHODS

### 3.1 Sampling

The type of research used is quantitative research and according to its purpose, this research is classified as causal research. This study uses secondary data with the populations being companies from banking subsector whose shares are listed on the IDX from 2011 to 2015. Sampling method that is used in this research is purposive sampling with selected sample that is 27 companies with 135 observation period.

### 3.2 Data Collection Methods



Annual financial statement data is obtained from the website of each company. Stock price data, total share (outstanding share), and dividends are obtained from annual reports of corresponding companies The GRI Standard Index 3.1.

### 3.3 Measures

The independent variable used in this research is CSR. This study uses CSR activity disclosure in the company's annual report based on GRI Index 3.1 standard, consisting of six categories of disclosure focus, namely economy, society, environment, labor, human rights, and product. GRI Index 3.1 introduced in 2011 comprised of 84 disclosures and further 16 disclosures specifically for companies classified as the financial sector.

$$CSDI_j = \frac{\sum X_{ij}}{n_j}$$

Notes

CSDI<sub>j</sub>: Corporate Social Disclosure Index company j

N<sub>j</sub>: number of items for company j

X<sub>ij</sub>: item I disclosure

Thus, 0 < CSDI<sub>j</sub> < 1

Intellectual capital and bankruptcy risk are mediation variables. Intellectual capital in this study is measured using VAIC™, the following is the calculation steps of VAIC™ [29]:  
First step: Calculating Value Added (VA), which is the difference of output and input.

1. Output (OUT) - Total sales and other revenue
2. Input (IN) - Sales charges and other expenses (other than salary and allowances)
3. Value Added (VA) - Difference between output and input
4. Operating (OP) - Total operating income
5. Employee Cost (EC)
6. Depreciation (D)
7. Amortization (A)

$$VA = OUT - IN$$

$$VA = OP + EC + D + A$$

The second step: Calculating the Capital Employed Efficiency (CEE)

8. Human Capital (HC) - Employee Expense
9. Capital Employed (CE) - Available funds
10. Capital Employed Efficiency (CEE)

$$CEE = VA / CE$$

Third step: Calculating Human Capital Efficiency (HCE)

11. Human Capital Efficiency (HCE)

$$HCE = VA / HC$$

The fourth step: Calculating Structural Capital Efficiency (SCE)

12. Structural Capital Efficiency (SCE)

$$SC = VA - HC$$

$$SCE = SC / VA$$

The fifth step: Calculating the Value-Added Intellectual Coefficient (VAIC™)

### 13. Value Added Intellectual Coefficient (VAIC™)

The higher VAIC™ coefficients indicate the higher value creation of a company in its use of its resources, including intellectual capital.

$$VAIC^{\text{TM}} = CEE + HCE + SCE$$

VAIC™ values are classified into 4 [45], namely:

- VAIC™ > 3 : Top performers
- 2.0 ≤ VAIC™ ≤ 2.99 : Good performers
- 1.5 ≤ VAIC™ ≤ 1.99 : Common performers
- VAIC™ < 1.5 : Bad performers

Bankruptcy risk in this study is measured using Altman Z-Score, the higher the Altman Z-Score value the lower the bankruptcy risk. The following here is an Altman Z-Score formula [31]:

$$Z = 3.25 + 6.56 X1 + 3.26 X2 + 6.72 X3 + 1.05 X4$$

Notes:

- X1 = working capital / total assets
- X2 = retained earnings / total assets
- X3 = earnings before interest and taxes / total assets
- X4 = *net worth / total liabilities*
- Z = *overall index*

Dependent variable in this research is financial performance. Financial performance indicators used are Tobin's Q and stock return. The following is the formula of Tobin's Q [3]:

$$\text{Tobin's } Q = \frac{(TMV + TL)}{(TA)}$$

Notes:

- TMV: *Total Market Value (Total outstanding share x current share's price)*
- TL: *Total Book Value of Liabilities*
- TA: *Total Book Value of Assets*

Stock returns can be obtained by calculating the difference in the share price of the current period with the previous period plus the paid dividend [46].

$$\text{Stock return} = \frac{P_t - P_{t-1} + D_t}{P_{t-1}}$$

Notes:

- P<sub>t</sub>: share price t period

$P_{t-1}$ : share price-1 periode

$D_t$ : dividen periode t

### 3.4 Data Analysis

This research uses Partial Least Square (PLS) analysis to test the research hypothesis. Partial Least Square Analysis (PLS) is a multivariate statistical technique comparing between multiple dependent variables and multiple independent variables [47]. According to Jogiyanto & Abdillah [47], PLS is part and alternative of Structural Equation Modelling (SEM). PLS is able to overcome the limitations of SEM methods that require large data, no missing values, must be a normal distribution, and should not have multicollinearity [47].

The result of descriptive data shows that the highest average value among the CSR variable indicators of 0.483 is found in the economic category with the standard deviation of 0.130. This suggests that companies belonging to banking subsectors emphasize the organizational impact on economic state for stakeholders and economic systems at local, national, and global levels. Banking subsector companies tend to pay attention to capital flows among different stakeholders and major economic impacts across the community. The maximum value of the economy category is 0.778.

The subcategory of product responsibilities is also a special concern for banking subsector companies, with an average value of 0.452 and a standard deviation of 0.141. This indicates that the banking subsector companies are very concerned about the products and services provided to customers, related to the appropriate information on procedures, marketing, and customer satisfaction. The maximum value on the product responsibility subcategory is 0.889. Additional indicators in the GRI specific to financial firms are also researched in this study. The subcategory financial service is in the third order and has an average value of 0.300. The maximum value of the subcategory financial service is 0.813. The spread of data is reflected from the standard deviation value of 0.133.

The subcategory of labor practice has an average value of 0.280. This shows the magnitude of subcategory disclosure of labor practices on the annual report based on the standard GRI Index 3.1 by 28%. The maximum value on a subcategory of labor practices is 0.600. The spread of data is reflected from the standard deviation value of 0.109. The subcategory of communities has an average value of 0.270. This shows the magnitude of subcategory disclosure of communities on annual reports based on the GRI Index 3.1 standard of 27%. The maximum value on community subcategories is 0.500. The spread of data is reflected from the standard deviation value of 0.125.

The subcategory of human rights has an average value of 0.113. This shows the magnitude of the subcategory disclosure of human rights on annual reports based on the GRI Index 3.1 standard of 11.3%. The maximum value of subcategory of human rights is 0.455. The spread of data is reflected from the standard deviation value of 0.101. The subcategory of environment has an average value of 0.094. This shows the magnitude of the disclosure of environmental categories on annual reports based on the GRI Index 3.1 standard of 9.4%. The maximum value of subcategory of environment is 0.333. The spread of data is reflected from the standard deviation value of 0.062.

The average value of VAIC<sup>TM</sup> the company's banking subsector amounted to 2.814 with a standard deviation of 1.218. This shows the average of banking subsectors that

become samples of this research belongs to the good performers, because it has a value of VAIC<sup>TM</sup> between 2.0 to 2.99. The maximum value of 8.776 is categorized as top performers (VAIC<sup>TM</sup> > 3.0). The biggest contribution of the VAIC<sup>TM</sup> value in the sample company in the study was influenced by human capital efficiency (HCE) with an average of 2.0. This indicates the average of the companies in the banking subsector in this research sample can contribute value added of 2.0 from each fund issued to the company's human capital. A minimum value of -1.547 is categorized as bad performers (VAIC<sup>TM</sup> > 1.5).

Companies that have a Z-score of more than 2.60 are considered to be safe and said to be financially healthy (safe zone), whereas if Z-score under 1.1 is said to be a potentially strong indication that the company will experience bankruptcy (distress zone). The higher the Z-score value shows the lower level of bankruptcy risk, therefore in order to be an indicator of bankruptcy risk of each Z-score value multiplied by minus 1 (-1), which aims to make the result of the analysis PLS have no reverse result. The average value of Z-score of banking subsectors is 4.485 with a standard deviation of 0.594. This shows the average sample of the companies of the banking's subsectors in this research belong to the safe zone. The maximum value of Z-score is 6.138. The minimum value of Z-score is 2.801, indicating the company is still in the safe zone.

The average value of Tobin's Q of banking subsector amounted to 1.056 with a standard deviation of 0.110. This shows the average banking subsector companies that become samples of these research assessed higher on the market than the company's value noted (overvalued). The maximum value of Tobin's Q is 1.432. The minimum value of Tobin's Q is 0.874 indicating the value of the company in the market is lower than that of the registered value (undervalued). The average value of the company's stock return of the banking subsector amounted to 0.057 with a standard deviation of 0.254. Maximum stock return value of 0.873. Stock return minimum value of -0.434. A positive stock return shows the increased yield received by the investor over the shares owned, and vice versa.

## **5. RESULTS**

### **4.1 Outer Model Evaluation**

Outer model evaluation is done to test the validity and reliability. Validity testing with convergent validity is assessed by loading factor indicators that measure the construct. The rule of thumb used for convergent validity is outer loading > 0.5 with t-statistic > 1.96, indicating a valid indicator at 5% significance level. All indicators have outer loading greater than 0.5 with t-statistic greater than 1.96, it shows that each indicator is valid for each variable in this study.

Discriminant validity test is used to see the correlation of different construct gauges, because there should be no high correlation between different construct gauges. The discriminant validity test is based on cross loading measurement with its construct and by comparing the AVE (average variance extracted) root of each construct with the correlation between constructs with other constructs in the model. The rule of thumb used for discriminant validity is the value of the loading factor indicator is the greatest value when compared with other variables and the AVE value of the variable greater than 0.5 indicates the construct has a good discriminant validity value. Each indicator has good discriminant validity, which is indicated by the loading factor value of each indicator is the largest value in the variable itself compared with other variables. Each variable in this study has an AVE

value above 0.5, and the AVE root value of each variable has a larger value when compared to the correlation between variables with other variables in the model, which indicates that each variable in this study has good discriminant validity.

Reliability test can be done by looking at the value of composite reliability and Cronbach's alpha. The value of composite reliability or Cronbach's alpha is more than 0.7 although a value of 0.6 is still acceptable and said to have qualified reliability testing. Each variable has a composite reliability value greater than 0.7 while the value of Cronbach's alpha is 0.6, which means that the research variable is reliable.

#### 4.2 Inner Model Evaluation

The result of PLS path model can be seen in Figure 2.

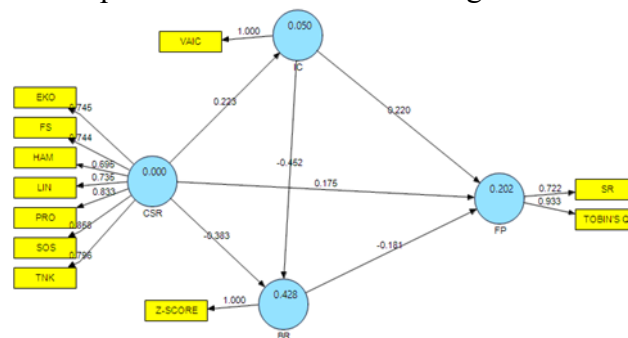


Figure 2. PLS Path Model

The value of R2 shows the magnitude of the influence of the dependent variable which can be explained by the independent variable.

Table 1. R<sup>2</sup> Value

Latent Variable	R-square (R <sup>2</sup> )
CSR	
Intellectual Capital	0.050
Bankruptcy Risk	0.428
Financial Performance	0.202

Q2 predictive relevance is used to measure the construct model, by measuring how well the observed value generated by the model and its parameter estimation. The Q2 value is more than zero indicating the model has predictive relevance. The value of  $Q^2 = 1 - ((1 - 0.050) \times (1 - 0) \times (1 - 0.202) \times (1 - 0.428)) = 0.566$ . The value of Q2 in this study is 0.566 which shows the structural model of this study has a good predictive relevance of 56.6%, while the remaining 43.4% is explained by other variables outside the research model.

#### 4.3 Results of Hypotheses Testing

Hypothesis testing is done by comparing t-statistic and t-table, with t-statistic value of 1.96 or higher indicate significant correlation on 0.05 significance level.

Table 2. Path Coefficient and T-Values

	Path Coefficient	Std. Deviation	T-statistic
CSR→FP	0.175**	0.086	2.028
CSR→IC	0.223**	0.077	2.918
IC→FP	0.220**	0.107	2.055

IC→BR	-0.452**	0.063	7.113
CSR→BR	-0.383**	0.065	5.881
BR→FP	-0.181**	0.092	1.966

Based on table 2, hypothesis 1 show significant result which indicate that CSR have significant positive impact on financial performance, which can be seen from t-statistic  $2.028 > 1.96$  and the value of path coefficient of 0.175. Hypothesis 2 show significant result, indicating CSR have significant positive impact on intellectual capital, this can be seen from the value of t-statistic  $2.918 > 1.96$  and the value of path coefficient of 0.223. Hypothesis 3 show significant result, indicating intellectual capital have significant positive impact on financial performance, this can be seen from the value of t-statistic  $2.055 > 1.96$  and the value of path coefficient of 0.220. Hypothesis 4 show significant result, indicating that intellectual capital has significant negative impact on bankruptcy risk, it can be seen from the value of t-statistic  $7.113 > 1.96$  and the value of the path coefficient of -0.452. Hypothesis 5 show significant result, indicating that CSR have significant negative impact on bankruptcy risk, this can be seen from the t-statistic value of  $5.881 > 1.96$  and the value of the path coefficient of -0.383. Hypothesis 6 shows significant results, indicating bankruptcy risk have significant negative impact on financial performance, this can be seen from the value of t-statistic  $1.966 > 1.96$  and the value of the path coefficient of -0.181.

**Table 3. Direct Effect and Indirect Effect**

	Direct Effect	Indirect Effect
Direct Effect <i>CSR→Financial Performance</i>	0.175	
Indirect Effect <i>CSR→Financial Performance through Intellectual Capital</i>		0.049
Indirect Effect <i>CSR→Financial Performance through Bankruptcy Risk</i>		0.069
Indirect Effect <i>CSR→Financial Performance through Intellectual Capital and Bankruptcy Risk</i>		0.018
Total Indirect Effect		0.137
Total Effect		0.312

Based on table 3, it can be seen that CSR has both significant direct influence and significant indirect influence on financial performance, in other words there is partial mediation effect. The direct impact of CSR on financial performance is 0.175. The indirect effect of CSR on financial performance through intellectual capital of 0.049. This proves intellectual capital as a good mediator of CSR's influence on financial performance, increasing CSR will increase intellectual capital, increasing intellectual capital will improve financial performance. The indirect effect of CSR on financial performance through bankruptcy risk of 0.069 shows bankruptcy risk as a good mediator of CSR influence on financial performance, increasing CSR will decrease bankruptcy risk, bankruptcy risk's decrease will increase financial performance. The indirect effect of CSR on financial performance through intellectual capital and bankruptcy risk is 0.018.

The direct impact of CSR on financial performance is greater than the indirect effect of CSR on financial performance, meaning that CSR has had a major impact on financial performance without the need for mediator. Nevertheless, the direct impact of CSR on financial performance does not cover all, but only partial effect of CSR on financial performance. Therefore, the effect of CSR on financial performance mediated by intellectual capital and bankruptcy risk of 0.137 cannot be ignored. The existence of mediating variables means the influence of CSR on financial performance is not only its direct effect which is 0.175 but increased to 0.312.

If mediating variables are not taken into account, the value of Q2 CSR to financial performance equals R2 value for the financial performance variable is only 20%. However, after including the mediating variables, the value of Q2 in this study was 57%. This shows that in the presence of mediation variables, the structural model of this study has better predictive relevance with reduced error rate.

## **6. DISCUSSION**

### **5.1 Summary of Findings**

Hypothesis 1 show significant result which indicate that CSR have significant positive impact on financial performance. The same results were found by Howard-Grenville & Hoffman [23], Chen & Wang [2], and Tahir & Razali [32]. According to Chen & Wang [2], a company that conducts CSR actions actively and considers the interests of stakeholders as a perspective of corporate strategy will get benefit, because the stakeholders will pay more attention to the interests of the company, thus lowering the cost of opportunism, incentives and supervision costs. Companies that implement CSR, will not only improve the current financial performance, but also the future period, through the positive influence of CSR [2]. Although the company needs resources when implementing CSR, but the profits earned satisfy every stakeholder [2]. Thus, internal stakeholders will dedicate more to being able to contribute to the company and external stakeholders will have a good impression for the company [2]. Customers will also buy more goods and services from companies that do CSR activities, so the company's profits will increase [2]. The company may consider establishing a long-term strategy to maximize stakeholder value for the establishment of sustainable development, rather than simply creating a strategy for short-term profits [2]. It is in accordance with stakeholder theory, legitimacy theory, and signaling theory.

Stakeholder mode seems to provide an invisible contract between companies, employees, suppliers, and communities. The stakeholder interest is invisible to the company, by encouraging stakeholders to place more specialized assets without worrying about being extorted if they cooperate with the company. This factor will assist the company in establishing stable cooperative relationships with stakeholders, which will lower transaction costs in large quantities [32]. Cormier, Ledoux, & Magnan [48] also explained that social and environmental disclosure can reduce information asymmetry in the stock market. Through CSR disclosure, transparency of information will be made public. Non-financial activities by the company will be additional information for investors, borrowers, and regulators. For investors, information disclosure of CSR is seen as a good signal from the company, so that investors are interested to buy shares of the

company. Increased stock demand will be followed by an increase in stock prices and financial performance.

Hypothesis 2 show significant result, indicating CSR have significant positive impact on intellectual capital. The results of this study are in line with the findings of Passetti, Tenucci, Cinquini, & Frey [38]; Aras, Aybars, & Kutlu [5]; and Surroca, Tribó, & Waddock [3]. The development of a close relationship with the stakeholders through CSR activities can increase the intellectual capital that can encourage efficient and competitive use of the company's assets and can create a competitive advantage among its competitors [37]. It is in line with resource-based theory. Companies committed to do CSR will attract many qualified job applicants, have ability to retain these applicants after being recruited, and those will impact on reducing employee turnover and recruitment [49]. CSR enhances the process of product and service formation as an instrument in generating high commitment and the formation of a caring culture [3]. Companies that conduct CSR will encourage their employees to provide the best solutions to customers, create a wise decision-making system, build good communication with stakeholders, and produce innovation in problem solving, which can reduce the cost of claims and increase the company's competitive advantage compared to its competitors [3]. Reduced cost demands can increase corporate profits, increased profits will increase the value added created by the company's intellectual capital [3]. According to Surroca, Tribó, & Waddock [3], a good system in the organizational process (information, communication, and decision making) will affect the productivity of output produced (services and products). CSR affects new customer acquisitions, enhances corporate reputation, attracts investors and financial analysts [5].

Hypothesis 3 show significant result, indicating intellectual capital have significant positive impact on financial performance. The results of this study are in line with the findings of Zéghal & Maaloul [39], Mavridis [40], Chen, Cheng, & Hwang [6]. The positive impact of intellectual capital and financial performance is in line with the concept of resource-based theory, which explains that companies that manage and utilize good intellectual resources can achieve a competitive advantage [20]. VAIC<sup>TM</sup> is a measure of company efficiency in using physical capital, financial capital, and intellectual capital to increase stakeholder value [20]. Companies that have good intellectual capital will be able to maximize the potential use of resources owned, because it is supported by human capital and structural capital (system) is good. According to signalling theory, companies that have good intellectual capital performance tend to express the intellectual capital of the company better [20]. In other words, in order to attract market attention, companies must be able to improve the management of intellectual capital performance [20]. It can show that companies have more value added compared to other companies, so investors will place a higher value for companies with large intellectual capital [20]. The higher the intellectual capital, the value of the company will increase, and the stock of the company will be much in demand by investors [20].

Hypothesis 4 show significant result, indicating that intellectual capital has significant negative impact on bankruptcy risk. The results of this study are consistent with the findings of Bontis [41] and Mollabashi & Sendani [9]. According to Mollabashi & Sendani [9] human capital has a negative influence on bankruptcy risk. Ardalan & Askarian [42] found the negative influence of intellectual capital (human capital) and physical capital of bankruptcy risk, while there was no significant influence on structural capital. Companies



that have skilled employees, proper organizational structure, good and effective management system, good culture, and conducive work environment, will be able to increase the profitability of the company so that it has a lesser bankruptcy risk [42]. According to Chen, Zhu, & Xie [50] structural capital can affect other resources, especially human capital. Structural capital which is non-human assets or organizational capabilities can be used to estimate market needs [42]. If a company has poor organizational system and work procedures, intellectual capital will not reach the maximum potential [42].

Hypothesis 5 show significant result, indicating that CSR have significant negative impact on bankruptcy risk. The results of this study are in line with the findings of Karaibrahimolu [10], Jo & Na [11], Cheng, Ioannis, & Serafeim [51], and Boutin-Dufresne & Savaria [43]. In line with stakeholder theory and legitimacy theory, the implementation of CSR is expected to reduce bankruptcy risk of the company [52]. CSR activities emphasize long-term benefits and sustainability that are critical to the company [10]. The advantages of CSR are increased shareholder wealth through insurance-like protection, enhancing corporate risk management, in a strategic approach that is as a company's attractiveness in the market, enhancing transparency, and easier access to financial markets [11]. Cheng, Ioannis, & Serafeim [51] explains that companies with better CSR performance will face lower capital constraint. This indicates a negative influence between CSR performance on capital constraint, due to increased trust and mutual cooperation, thereby reducing agency cost, by encouraging managers to implement a strategy that focuses on long-term orientation compared to strategies that are only short-term oriented [53,54]. In line with the signaling theory that explains voluntary, CSR reporting will reduce the conflicts of interest that arise when there is a separation between the owner and the party managing the company [17].

Hypothesis 6 shows significant results, indicating bankruptcy risk have significant negative impact on financial performance. The results of this study are in line with the findings of Choy, Munusamy, Chelliah, & Mandari [14] and Oluwafemi, Israel, & Simeon [15]. Hotchkiss [44] explained that the company that has been bankrupt has poor performance, due to weak accounting performance, high debt ratio, and often required debt restructuring. Before investing in a company, a rational investor will first see the company's financial condition, liquidity, solvency, and leverage. Liquidity and leverage are known to predict the company's bankruptcy and contribute the biggest contribution in detecting a company's bankruptcy [13]. When the company's risk is high, the company's value is getting lower [11]. The higher the company's risk, the creditor party will ask for higher interest rate, so that the company's costs will increase. The higher the company's risk, the investor will also demand a capital gain or dividend that is distributed is increasing. It is difficult for companies that have experienced financial distress to borrow money from banks / lenders, as it may lose the trust of lenders to lend more money [14]. Therefore, companies that have gone bankrupt need to reorganize well and regain creditor trust [14].

## **5.2 Managerial Implication**

Banking subsector companies need to increase the intensity of CSR activities. This is because CSR has a direct influence on financial performance, and CSR can increase intellectual capital and reduce the bankruptcy risk of the company. High intellectual capital and low bankruptcy risk have positive impact on increasing reputation and investor confidence in the company, thus increasing financial performance.

CSR provides long-term benefits for the company, while the development of intellectual capital should be a concern for banking sub-sector companies as a strategy to achieve competitive advantage in the face of increasingly tight business competition.

Bankruptcy risk of the companies have an influence on its financial performance, it means the companies need to understand and anticipate the factors that can increase bankruptcy risk. For example, to reduce the bankruptcy risk, good management of the cash flow of the company is required in making the company's operational payments, to prevent cash flow difficulties when revenue is not sufficient to meet the business costs incurred by the day-to-day operations of the company and the management of the capital structure such as short-term debt and long-term debt of the company.

### **5.3 Limitations and Directions for Future Research**

The results of this study are limited to the banking subsector companies listed on the IDX period 2011-2015, consisting of 27 companies from banking subsector that meet the criteria to be a research sample. The GRI used in this research is GRI Index 3.1 because the period of this research started in 2011 and most of the companies that become the research sample still use GRI Index 3.1. Future research can use newer GRI standard or focus on other financial subsectors. Future research may also develop indicators which are relevant for each variable, which consider the effect of time lag. The value of Q2 in this study only amounted to 56.6%, while the remaining 43.4% is explained by other variables outside the research model. Therefore, subsequent research can add additional exogenous factor (such as industrial growth) to test the effect of CSR to financial performance.

## **7. CONCLUSIONS**

CSR has a positive effect on financial performance, and also has an indirect effect that depends on the mediation effect of intellectual capital and bankruptcy risk. If CSR increases, then intellectual capital will also increase, it can be seen from the positive influence of CSR on intellectual capital. Increased intellectual capital will improve financial performance. However, if the company neglects the development of intellectual capital and does not engage in CSR activities, it will increase bankruptcy risk, as seen from the negative influence of intellectual capital and CSR on bankruptcy risk, which will result in the decrease of financial performance.

## **REFERENCES**

- [1] García-Benau, M. A., Sierra-Garcia, L., & Zorio, A. (2013). Financial Crisis Impact on Sustainability Reporting. *Management Decision*, 51(7), 1528–1542.
- [2] Chen, H., & Wang, X. (2011). Corporate Social Responsibility and Corporate Financial Performance in China: An Empirical Research from Chinese Firms. *Corporate Governance*, 11(4), 361–370.
- [3] Surroca, J., Tribó, J. A., & Waddock, S. (2010). Corporate Responsibility and Financial Performance: The Role of Intangible Resources. *Strategic Management Journal*, 31(5), 463–490.

- [4] Lourenco, I., Branco, M., Curto, J., & Eugénio, T. C. P. (2012). How Does the Market Value Corporate Sustainability Performance? *Journal of Business Ethics*, 108(4), 417–428.
- [5] Aras, G., Aybars, A., & Kutlu, O. (2011). The Interaction between Corporate Social Responsibility and Value Added Intellectual Capital: Empirical Evidence from Turkey. *Social Responsibility Journal*, 7(4), 622–637.
- [6] Chen, M., Cheng, S.-J., & Hwang, Y. (2005). An Empirical Investigation of The Relationship between Intellectual Capital and Firms' Market Value and Financial Performance. *Journal of Intellectual Capital*, 6(2), 159–176.
- [7] Hamel, G., & Prahalad, C. K. (1996). Competing for The Future. *Harvard Business Review*.
- [8] Pulic, A. (1998). Measuring The Performance of Intellectual Potential in The Knowledge Economy. *The 2nd" World Congress on the Management of Intellectual Capital"*, 1–20.
- [9] Mollabashi, D. F., & Sendani, J. (2014). The Impact of Intellectual Capital on The Risk of Bankruptcy of Listed Companies in Tehran Stock Exchange. *Applied Science Reports*, 4(3), 150–160.
- [10] Karaibrahimolu, Y. Z. (2010). Corporate Social Responsibility in Times of Financial Crisis. *African Journal of Business Management*, 4(4), 382–389.
- [11] Jo, H., & Na, H. (2012). Does CSR Reduce Firm Risk? Evidence from Controversial Industry Sectors. *Journal of Business Ethics*, 110(4), 441–456.
- [12] Beaver. (1966). Financial Ratios As Predictors of Failure, 4(1966), 71–111.
- [13] Altman, E. I. (1968). Financial Ratios, Discriminant Analysis and The Prediction of Corporate Bankruptcy. *The Journal of Finance*, 23(1), 193–194.
- [14] Choy, S., Munusamy, J., Chelliah, S., & Mandari, A. (2011). Effects of Financial Distress Condition on the Company Performance: A Malaysian Perspective. *Review of Economics & Finance*, 1(July 1997), 85–99.
- [15] Oluwafemi, S., Israel, N., & Simeon, O. (2013). Risk Management and Financial Performance Of Banks In Nigeria. *IOSR Journal of Business and Management*, 14(6), 2319–7668.
- [16] Firer, S., & Williams, S. M. (2003). Intellectual Capital and Traditional Measures of Corporate Performance. *Journal of Intellectual Capital*, 4(3), 348–360.
- [17] Connelly, B. L., Ketchen, D. J., & Slater, S. F. (2011). Toward a “Theoretical Toolbox” for Sustainability Research in Marketing. *Journal of the Academy of Marketing Science*, 39(1), 86–100.
- [18] Pirsch, J., Gupta, S., & Grau, S. L. (2007). An Exploratory Study Framework for Understanding Programs Social Responsibility as a Continuum: An Exploratory Study. *Journal of Business Ethics*, 70(2), 125–140.
- [19] Zhang, Y. (2011). The Analysis of Shareholder Theory and Stakeholder Theory. *Proceedings - 2011 4th International Conference on Business Intelligence and Financial Engineering, BIFE 2011*, 90–92.
- [20] Riahi-Belkaoui, A. (2003). Intellectual Capital and Firm Performance of US Multinational Firms. *Journal of Intellectual Capital Vol.*, 4(2), 215–226.
- [21] Madhani, P. M. (2010). Resource Based View (RBV) of Competitive Advantage: An Overview.
- [22] Strong KC, Ringer RC, & T. S. (2001). The Ruled of Stakeholder Satisfaction (Timeliness, Honesty, Empathy). *Journal of Business Ethics*.
- [23] Howard-Grenville, J. A., & Hoffman, A. J. (2003). The Importance of Cultural Framing to The Success of Social Initiatives in Business. *Academy of Management Executive*, 17(2), 70–84.

- [24] Sánchez, P., Chaminade, C., & Olea, M. (2000). Management of Intangibles – An Attempt to Build a Theory. *Journal of Intellectual Capital*, 1(4), 312–327.
- [25] Guthrie, J., Petty, R., & Ricceri, F. (2006). The Voluntary Reporting of Intellectual Capital: Comparing Evidence from Hong Kong and Australia. *Journal of Intellectual Capital*, 7(2), 254–271.
- [26] Deegan, C. (2000). *Financial Accounting Theory*.
- [27] Elkington, J. (1997). *Cannibals with Forks : The Triple Bottom Line of the 21st Century Business*. Capstone: Oxford.
- [28] Brown, H. S., de Jong, M., & Levy, D. L. (2009). Building Institutions Based on Information Disclosure: Lessons from GRI's Sustainability Reporting. *Journal of Cleaner Production*, 17(6), 571–580.
- [29] Pulic, A. (2004). Intellectual Capital – Does It Create or Destroy Value? *Measuring Business Excellence*, 8(1), 62–68.
- [30] Audu, I. (2014). Risk Management In Financial Service Industry.
- [31] Altman, E. I. (2005). An Emerging Market Credit Scoring System for Corporate Bonds. *Emerging Markets Review*, 6(4), 311–323.
- [32] Tahir, I. M., & Razali, A. R. (2011). the Relationship Between Enterprise Risk Management (Erm) and Firm Value: Evidence From Malaysian Public Listed Companies. *International Journal of Economics and Management Sciences*, 1(2), 32–41.
- [33] Puspitaningtyas, Z. (2017). Is Financial Performance Reflected in Stock Prices ?, *40(Icame)*, 17–28.
- [34] Nichols, D. C., & Wahlen, J. M. (2004). How do Earnings Numbers Relate to Stock Returns? A Review of Classic Accounting Research with Updated Evidence. *Accounting Horizons*, 18(4), 263–286.
- [35] Friedman, M. (1962). *Capitalism and Freedom*, University of Chicago Press, Chicago, II.
- [36] Becchetti, L., & Ciciretti, R. (2008). Corporate Social Responsibility and Stock Market Performance, (79), 31.
- [37] Orlitzky, M., Schmidt, F. L., & Rynes, S. L. (2003). *Corporate Social and Financial Performance: A Meta-Analysis*. *Organization Studies* (Vol. 24).
- [38] Passetti, E., Tenucci, A., Cinquini, L., & Frey, M. (2009). Intellectual Capital Communication: Evidence from Social and Sustainability Reporting, (1), 0–29.
- [39] Zéghal, D., & Maaloul, A. (2010). Analysing Value Added as An Indicator of Intellectual Capital and Its Consequences on Company Performance. *Journal of Intellectual Capital*, 11(1), 39–60.
- [40] Mavridis, D. G. (2004). The Intellectual Capital Performance of The Japanese Banking Sector. *Journal of Intellectual Capital*, 5(1), 92–115.
- [41] Bontis, N. (1998). Intellectual Capital : an Exploratory Study that Develops Measures and Models. *Management Decision*, 36 No.2, 63–76.
- [42] Ardalan, B., & Askarian, H. (2014). The Impact of Intellectual Capital on The Risk of Financial Distress of Listed Companies in Tehran Stock Exchange, Iran.
- [43] Boutin-Dufresne, F., & Savaria, P. (2004). Corporate Social Responsibility and Financial Risk. *The Journal of Portfolio Management*, 13(1), 57–66.
- [44] Hotchkiss, E. S. (1995). Hotchkiss - Postbankruptcy Performance and Management Turnover.pdf. *The Journal of Finance*, 50(1), 3–21.
- [45] Ulum, I. (2008). Intellectual Capital Performance Sektor Perbankan di Indonesia. *Jurnal Akuntansi dan Keuangan*, 10(2), 77-84.
- [46] Mayo, H. B. (2008). *Investments : an Introduction*. Mason: Thomson Higher Education.

- [47] Jogiyanto, H. M., & Abdillah, W. (2009). Konsep dan Aplikasi PLS (Partial Least Square) untuk Penelitian Empiris. Yogyakarta: BPFE-Yogyakarta.
- [48] Cormier, D., Ledoux, M.-J., & Magnan, M. (2011). The Informational Contribution of Social and Environmental Disclosures for Investors. *Management Decision*, 49(8), 1276–1304.
- [49] Albinger, H.S & Freeman, S. J. (2000). Corporate Social Performance and Attractiveness as an Employer to Different Job Seeking Populations. *Journal of Business Ethics*.
- [50] Chen, J., Zhu, Z., & Xie, H. Y. (2004). Measuring Intellectual Capital: A New Model and Empirical Study. *Journal of Intellectual Capital*, 5(1), 195–212.
- [51] Cheng, B., Ioannis, I., & Serafeim, G. (2014). Corporate Social Responsibility and Access to Finance. *Strategic Management Journal*, 35(1), 1–43.
- [52] Jones, T. M. (1995). Instrumental Stakeholder Theory : A Synthesis of Ethics and Economics, 20(2), 404–437.
- [53] Choi, J., & Wang, H. (2009). Research Notes and Commentaries: Stakeholder Relations and The Persistence of Corporate Financial Performance. *Strategic Management Journal*, 30(8), 895–907.
- [54] Jo, H., & Harjoto, M. (2011). Corporate Governance and Firm Value: The Impact of Corporate Social Responsibility. *Springer- Journal of Business Ethics*, 103(3), 351–383.