

The Influence Of Intellectual Capital On The Risk Of Bankruptcy In Bumn Companies That Go Public On The Indonesian Stock Exchange

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Abstract

The purpose of this research is to analyze the effect of intellectual capital on the risk of bankruptcy in state-owned companies that go public on the Indonesia Stock Exchange (IDX) for the period 2018-2022. This research uses a quantitative approach. Data analysis is quantitative / statistical, with the aim of testing the hypothesis that has been set. The population used in this study are state-owned companies that went public on the Indonesia Stock Exchange for the period 2018-2022. The research sample was taken by purposive sampling method. Data analysis using SEM with the AMOS Statistical program. The findings of this study are that Intellectual Capital affects the risk of bankruptcy in state-owned companies that go public on the Indonesia Stock Exchange.

Keywords: *Intellectual Capital; Risk Of Bankruptcy*

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I. INTRODUCTION

State-Owned Enterprises (SOEs) have a role in increasing state revenue through tax payments and corporate dividend deposits, but the problem faced today is that the debt owned by SOEs is increasing due to the government's commitment to corporate financing is less than optimal, allowing companies to be in financial distress (Gunawan and Nurfithriyani, 2019). The phenomenon of poor SOE performance colored the journey of SOEs in 2019 (Wicaksono, 2019; Putri 2019). In 2019, several BUMN companies were vulnerable to bankruptcy because they entered the red zone based on the results of the Altman Z-Score calculation. One of the causes of many SOEs being in the red zone is due to the lack of current assets in these SOE companies.

The concept of traditional performance measurement that has been using financial performance measures is no longer considered effective. Because performance measurements that only focus on financial measures do not reflect the overall condition of the company's strategy, where non-financial aspects are not taken into account. The use of intangible resources dominates the current business model, where these intangible resources are believed to have a much greater value than the value of tangible assets (Cohen and Kaimenakis, 2007). Intangible resources are factors other than financial and physical assets that contribute to firm value, but are not reflected in financial statements.

Intangible assets and human resources that have quality and knowledge are the most important competitive advantages for organizations. Nowadays knowledge-based economic resources play an important role in evaluating the financial success of the company and its tendency towards financial difficulties (Ardalan and Askarian, 2014).

Intellectual capital is one of the most important components of organizational assets where organizational success is largely rooted in the intellectual capabilities of the organization (Ardalan and Askarian, 2014). Investments in resources usually incur high costs that lower short-term profits but contribute to the long-term success of the company (Fijałkowska, 2014). Intellectual capital is seen as a key resource for value creation. Intellectual capital is seen as a key resource for value creation. *It is important for innovation and strategic renewal aimed at achieving future profits* (Bontis et al., 2000).

Bankruptcy prediction models that include *intellectual capital* performance have superior predictive ability compared to standard bankruptcy prediction models. Intellectual capital indicators can play a key role in

assessing a company's future solvency (Cenciarelli et al, 2018).

Bankruptcy is a condition in which a company experiences insufficient funds to run its business including the company's inability to meet current obligations when due. The continuous inability to pay debts will lead the company to a real bankruptcy condition even though it has not been legally declared bankrupt. If the condition is not handled properly, it can become a bigger economic failure and may also be the initial stage towards financial disaster. Financial distress is a situation that can be experienced by various companies, be it large-scale companies or small-scale companies from various industrial sectors.

Potential bankruptcy needs to be predicted accurately to be used as a basis for determining steps, policies and important decisions in saving the company. Bankruptcy prediction serves to provide guidance for parties with an interest in the company's performance to assess whether or not the company will experience financial difficulties in the future. Many parties are interested in information on the financial difficulties experienced by a company. The company's internal parties, namely management, have an interest in the management of the company, employees have an interest in the survival of the company. The external parties of the company, namely creditors, are interested in the company's ability to pay their debts, while investors are interested in the investment made. To avoid losses to various parties due to the bankruptcy of a company, an analysis is needed to predict the possibility of bankruptcy so that preventive action can be taken before greater and more widespread losses occur.

The phenomenon of financial difficulties that have occurred in SOEs to date is an interesting theme to study. Financial distress is a condition that can be experienced by various companies, be it large-scale companies or small-scale companies from various industrial sectors. Financial difficulties that threaten the operations of SOEs are very important because these companies absorb government funding.

II. THEORY AND METHODS

Resource Based Theory (RBT) posits that firms will gain competitive advantage and optimal performance by acquiring, combining, and using assets and resources optimally. The firm's resources are valuable, rare, incomparable and irreplaceable (Barney, 1991). This is what makes intellectual capital a key resource for companies to create *value added* for the company and later will achieve the company's competitive advantage.

There are three basic dimensions of intellectual capital: human capital, structural capital and relational capital (Sveiby, 2001). Human capital includes the experience, knowledge and skills of employees. Structural capital consists of the company's internal organizational processes and routines, systems, databases and corporate culture that support the business. Relational capital includes relationships with customers and suppliers, as well as the company's reputation and image. Intellectual capital is a resource in the form of knowledge available to the company that will ultimately bring future benefits to the company. This knowledge will become intellectual capital if it is created, maintained and transformed and properly organized.

According to Ulum (2009), human capital includes the individual knowledge of an organization that exists in its employees generated through competence, attitude and intellectual intelligence. Human capital treatment is related to salary, training, career opportunities and so on. The measurement method is known as "value added human capital" or more commonly known as VAHU. The relationship between HC and VAHU indicates the ability of HC to form value in a company, in other words, it shows the contribution made by every dollar invested in HC to the company's VA.

The calculation formula is ;

$$VAHU = VA / HC$$

Where:

- VAHU (Value Added Human capital): the ratio of VA to HC. VA (value added): Value added
- HC (Human capital) : labor expenses (total salaries, wages and income) employee).

Structural capital is the facilities and infrastructure that support employees to create optimum performance, including the organization's ability to reach the market, hardware, software, databases, organizational structure, patents, trademarks, and all organizational capabilities to support employee productivity (Bontis, 2000). Similar to human capital, structural capital will also have added value and benefit if activities are carried out on it. The measurement of structural capital is done by the ratio of structural capital needed to produce Rp 1 of VA, better known as "structural capital value added" or abbreviated as STVA.

The calculation formula is:

$$STVA = SC / VA$$

Where:

- STVA (Structural Capital Value Added): ratio of SC to VA.
- SC (Structural Capital): VA – HC

- VA (value added): Value added.

Relationship capital is the company's ability to maintain good relationships with internal and external companies. Customer capital, is the knowledge of a series of markets, customers, suppliers, good relations between government and industry or good relations with outsiders. In order for physical assets to have added value, of course, someone must carry out activities on them. If physical assets are not carried out, it is certain that the existing value will decrease or even be completely worthless. In this case, how the company's ability to use IC through the contribution of capital employees (CE) in order to add value is known as "value added capital employee" abbreviated as VACA. So VACA is an indicator for the VA created by one unit of physical capital. In other words, VACA is the ratio between value added (VA) and capital employed (CE) or physical capital used or referred to as the book value of net assets.

The calculation formula is :

$$VACA = VA/CE$$

Where:

- VA (Value added): Value added
- CE = (Capital Employed) : available funds (sum of equity and profit). clean).

So intellectual capital is measured based on the measurement of the value added model which is proxied by human capital, structural capital and relational capital, According to Ulum (2009), the measurement of value added from intellectual capital formula is as follows:

$$VAIC = VACA + VAHU + STVA$$

Bankruptcy prediction models are usually built using accounting ratios from financial statements (Altman and Sabato 2007). The classic study by Altman (2000), used discriminant analysis and financial ratios to predict bankruptcy. Bankruptcy risk refers to the likelihood or potential that a company is unable to meet its financial obligations and pay its debts (Altman and Hotchkiss, 2005).

Bankruptcy is a broad concept that is a series of situations where a company faces financial difficulties. Common terms to describe these situations are *financial distress*, failure, inability to repay debt, and *default*. *Insolvency* in bankruptcy indicates negative net worth. Inability to repay debt indicates negative performance and indicates liquidity problems.

In predicting bankruptcy this study uses the Springate model as follows:

$$S\text{-Score} = 1.03X1 + 3.07X2 + 0.66X3 + 0.4X4$$

Description:

- X1 = Working capital / total assets
- X2 = Net profit before interest and taxes / total assets
- X3 = Net profit before taxes / current liability
- X4 = Sales / total assets

According to Springate (1978), the company will be classified as bankrupt if it has a score of less than 0.862 ($S < 0.862$). Conversely, if the result of the S-Score calculation exceeds or is equal to 0.862 ($S \geq 0.862$), then the company is classified as a financially healthy company.

III. RESULTS

Research on the effect of Intellectual capital on the Risk of Bankruptcy of the company can see the extent to which the existence and management of Intellectual capital can affect the company's ability to face financial risks that may cause bankruptcy. Strong intellectual capital can give companies a competitive advantage in facing challenges and minimizing the risk of bankruptcy. RBT theory can explain why Intellectual capital can affect Bankruptcy Risk. If a company has unique and inimitable intellectual resources, such as deep knowledge, employee skills, or complex systems and procedures, then the company can have an advantage in managing financial risks and avoiding bankruptcy.

Based on the results of data processing, the CR value is -1.985 and the P value is 0.036 with a negative or opposite direction of the relationship. Where the CR value is above 1.96 and the P value is below 0.05. Therefore, it can be concluded that Intellectual Capital affects Risk of Bankruptcy, has a negative and significant effect on Risk of Bankruptcy. Intellectual capital on Risk of Bankruptcy is negative, this indicates that any increase in intellectual capital will be followed by a decrease in Risk of Bankruptcy.

This shows that the more optimized BUMN companies in running Intellectual capital, so that it will create added value for the company which will ultimately reduce or reduce the Risk of Bankruptcy. This means that the better the Intellectual Capital owned by BUMN companies, this will reduce the risk of bankruptcy,

Intellectual Capital to the risk of bankruptcy in BUMN companies in running Intellectual capital, is able to create added value for the company, so as to reduce the Risk of Bankruptcy. BUMN companies are able to make good use of human resources, namely the knowledge and skills possessed by employees, so as to maximize the added value of the company which in turn can reduce the Risk of Bankruptcy. This means that the better the Intellectual Capital owned by BUMN companies, this will reduce the risk of bankruptcy.

IV. DISCUSSION

State-owned companies should further improve *intellectual capital* by improving *human capital* efficiency, namely increasing the knowledge, skills and experience of human resources. The need for competent human resources. The need for resource management that generates competitive advantage and increases the company's added value.

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