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#### Research Article

# The Influence of Intellectual Capital on the Financial Performance of Financial Sector Companies Listed on the Indonesia Stock Exchange

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#### **Abstract**

This study aims to examine the influence of intellectual capital and its main components on the financial performance of the company. Furthermore, this study also aims to test whether the IC contribution to the financial performance of the company does not differ among different sub-sectors. This study uses Partial Least Square (PLS) and one-way ANOVA test as a method of analysis to test the research hypothesis. The results of this study indicate that, when using firm size and leverage as control variable, human capital efficiency has a negative and significant impact on financial performance, structural capital efficiency has a positive and significant impact on financial performance, and capital employed efficiency has a positive and significant impact on financial performance. In addition, the results of this study indicate that there are significant differences in financial performance among different sub-sectors.

**Keywords**: Intellectual Capital, VAIC. financial performance

#### 1. INTRODUCTION

Company resources not only come fromtangible assets (tangible assets) but also intangible assets (intangible assets) or known as intellectual capital (IC). In conventional management, tangible assets such as land, factories, machinery, equipment, and raw materials are used as the basis for improving company performance. However, when the sources of corporate wealth become scarce or difficult to obtain, managers must find other sources of wealth that can replace the role of tangible assets. Therefore, managers can take advantage of knowledge-based sources of company intellectual property. The knowledge-based economy supports key business models that depend on the creation of wealth through the development, deployment, and utilization of corporate or IC intangible assets. IC foundations that drive company performance include knowledge, competence, Companies that lay the foundation on a knowledge-based strategy (IC) are better able to create a competitive advantage than a physical-based strategy because: There are many potential strategies that can be utilized through IC. Other than that, By utilizing knowledge-based resources, companies can monitor the market quickly, seize opportunities and anticipate threats that will occur in the company. When managers are able to manage tangible assets and intangible assets simultaneously, the company can be said to have succeeded in optimizing the allocation of its resources effectively and efficiently so that the company's mission of increasing company profits can be achieved.

IC is identified as a key resource and driver of organizational performance and value creation. According to Wu et al., (2006), IC has shown how important IC is for companies in achieving and supporting competitive advantage. As a result, IC has replaced physical assets and capital as the main basis for creating corporate value. IC plays an important role in company performance, but depends on whether managers are aware of this hidden potential. Hsu and Fang (2009), see IC as the sum of the capabilities, knowledge, culture, strategies, processes, intellectual property, and relational networks of a company. Optimum utilization of intellectual or IC resources is able to answer the company's dilemma in facing today's global business competition. The IC phenomenon has long been developing in Indonesia. This is marked by the issuance of PSAK No. 19 (Revised 2000) by the Financial Accounting Standards Board (DSAK) and is the adoption of IAS 38 (2009) regarding intangible assets. PSAK No. 19 states thatIntangible assets are non-monetary assets that can be identified and do not have a physical form and are held for use in producing or delivering goods or services, for rental to other parties, or for administrative purposes.

This study aims to determine the effect of IC on the financial performance of companies listed on the Indonesia Stock Exchange (IDX). The financial sector has service characteristics, where employees are an important element that absorbs quite high operational costs. The results of this study are expected to increase knowledge and insight about IC and its influence on the financial performance of companies, especially companies engaged in the financial sector listed on the IDX. While the practical benefits of this research are expected to provide information for readers who want to add information insights related to IC.

# 2. LITERATURE REVIEW

Companies will achieve and maintain competitive advantage if the company has superior resources, namely resources that are scarce, difficult for competitors to imitate and there are no substitutes. Not all company resources hold the potential for sustainable competitive advantage. However, to have this potential, company resources must have four main attributes:

- a. Valuable Resources
  - Firm resources can be a source of competitive or sustainable advantage when they are valuable.
- b. Rare Resources
  - A scarce resource has the potential to create a competitive advantage for now and in the future.
- c. Imperfectly Imitable Resources
  - Company resources that are difficult to imitate make the company superior to other companies because the company provides unique resources that are not owned by other companies.
- d. Non-Substitution
  - The substitution is divided into two parts. First, although other companies can not imitate as a whole but have the possibility to replace this type of resource by implementing the same strategy. Second, different company resources can also be a substitution strategy.

The change in business strategy from labor-based resources to knowledge-based resources gives the view that intellectual capital also develops in a knowledge-based economic environment. IC has been seen as a key value driver of companies operating in the new economy and has become the most powerful factor

for companies in increasing competitive competence and achieving successful companies. competitive organization by adding value to stakeholders. Measurement of intellectual capital into two categories:

- 1. Categories using monetary measurements
- 2. Categories using non-monetary measurements

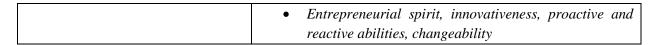
Intangible assets or intellectual capital are divided into human capital, structural capital, and customer capital (Bontis, 1999; Mouritsen et al., 2001)

- a. Human Capital (HC)
  - Human Capital is important because it provides the resources for strategic innovation and renewal.
- b. Structural Capital (SC)
  - *Structural capital* covers all non-human storehouses of knowledge in the organization which includes databases, organizational charts, manual processes, strategies, routines and anything else whose value to the company is higher than its material value.
- c. Customer Capital/Relational Capital
   customer capital is knowledge embedded in customers, suppliers, governments or related industry
   associations.

Table 1. Intellectual Capital Indicator Framework

| Internals:                          | Intellectual              | • Patents                              |
|-------------------------------------|---------------------------|--|
| Organizational (Structural) Capital | Property                  | • Copyrights                           |
|                                     |                           | <ul> <li>Trademarks</li> </ul>         |
|                                     | Infrastructure            | Management Philosophy                  |
|                                     | Assets                    | Corporate Culture                      |
|                                     |                           | Management processes                   |
|                                     |                           | • Information systems                  |
|                                     |                           | <ul> <li>Networking systems</li> </ul> |
|                                     |                           | • Financial relations                  |
| External: Customer (Relational)     | • Brands                  |  |
| Capital                             | • Customers               |  |
|                                     | Customer loyalty          |  |
|                                     | • Company names           |  |
|                                     | Distribution channels     |  |
|                                     | Business collaborations   |  |
|                                     | Licensing agreements      |  |
|                                     | • Favorite contracts      |  |
|                                     | Franchise agreements      |  |
| Employee Competence: Human          | • Know-how                |  |
| Capital                             | • Education               |  |
|                                     | Vocational qualification  |  |
|                                     | Work-related knowledge    |  |
|                                     | Work-related competencies |  |

The Influence of Intellectual Capital on the Financial Performance of Financial Sector Companies Listed on the Indonesia Stock Exchange



Financial performance is the determination of certain measures that can measure the success of a company in generating profits. If the company is able to manage its resources properly, it can be said that the company's financial performance is good. Financial performance measurement leads to strategic improvement, planning, implementation, and implementation. The improvement is reflected in the targets related to profit. Good financial performance shows a reflection that the company is able to manage its resources so that it can provide confidence for investors to invest in the company and as a form of corporate responsibility to investors, creditors, and the wider community.

# 3. METHOD

# 3.1. Independent Variable

The independent variable is the independent variable that affects the dependent variable (dependent variable). The independent variable in this study is intellectual capital which is measured based on the Pulic Value added intellectual coefficient model(VAIC<sup>TM</sup>). VAIC<sup>TM</sup> consists of human capital efficiency (HCE), structural capital efficiency (SCE), and capital employed efficiency (CEE). The three components of IC enable company management, shareholders, and stakeholders to create efficient use of IC resources. The efficiency is given as a form of how much resources are used to generate value added (VA) (Britto et al., 2014).

Value added can be calculated from the company's financial statements in the following way:

# VA = Operating Profit + Employee Salary Expense + Depreciation + Amortization

*Human capital efficiency* (HCE), obtained from wages and salaries of employees who are paid annually. HCE can be obtained by:

HCE = VA/HC

Where:

HCE = Human Capital Efficiency

VA = Value Added

HC = Human Capital (employee wages and salaries paid annually)

Structural Capital Efficiency (SCE), consists of enterprise software and hardware, internal cooperation, management and corporate culture, product innovation, trademarks, licenses, patents, and other elements that positively affect employee productivity. SCE can be calculated by:

SCE = SC/VA

Where:

SCE = Structural Capital Efficiency

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SC = Structural Capital (Difference in cost of HC from VA)

VA = Value Added

Capital Employed (CE), is a component of physical capital and financial capital obtained by dividing value added by net assets which is formulated as follows:

$$CEE = VA/CE$$

Where:

CEE = Capital Employed Efficiency

VA = Value Added

CE = Capital Employed (net assets)

*Value Added Intellectual Coefficient* (VAIC<sup>TM</sup>), indicates the intellectual ability of the organization's capital in creating added value which can also be considered as BPI (Business Performance Indicator);

$$VAIC = HCE + SCE + CEE$$

### 3.2. Dependent Variable

The dependent variable is the dependent variable which is influenced by the independent variable (independent variable). Financial performance, measured using three indicators:

#### **ROE** = Net Profit / Shareholders' Equity

ROE (Return on Equity) measures the profitability of an organization by revealing how much profit the company generates with the money that shareholders have invested.

## **ROA** = Net Profit / Total Assets

ROA (Return on Assets) is a profitability ratio that measures a company's ability to generate profits by using its assets. ROA shows how efficiently management uses assets to generate revenue.

### Revenue Growth = t-year income t-year income 1) $-1 \times 100\%$

Revenue Growth (GR) measures changes in a company's revenue. An increase in income is usually a signal for a company to be able to grow and develop (Chen et al., 2000, Yulisfan e al., 2021).

# Asset Turnover (ATO) = Total Revenues / Book Value of Total Assets

The ATO research model is used as an indicator of company performance and as an indicator of productivity for the company. The higher the ATO value, the better the company because it shows the more efficient use of assets in generating sales. ATO is a comparison between total revenue and book value of total assets.

# 4. RESULTS AND DISCUSSION

#### 4.1 Results

The population in this study are Financial Sector Companies listed on the Indonesia Stock Exchange. The sample criteria are Financial Sector Companies that are listed on the IDX, do not experience losses, and have complete data information as needed.

The purpose of this study was to determine the relationship of the components of intellectual capital to the financial performance of companies in the financial sector. IC components based on Pulic's VAIC model consist of Human Capital Efficiency (HCE), Structural Capital Efficiency (SCE), and Capital Employed Efficiency (CEE). Financial Performance is projected with five (5) measures, namely Return On Equity (ROE), Return On Assets (ROA), Return on Invested Capital (ROIC), Profitability, and Asset Turnover (ATO). Control variables used are Firm Size and leverage.

#### 4.2 Discussion

In this case, it explains that financial sector companies in Indonesia are still not able to utilize human capital properly. Human capital will increase if the company is able to use the knowledge possessed by its employees (Sawarjuwono and Kadir, 2003) this means that the contribution of HR in the company is still not reliable to improve the company's financial performance. This happens because employee competency training is still minimal and employee selection is not in line with company expectations. Therefore, the manager should pay more attention to HC. In addition, managers can make decisions about the allocation of more resources for employee training and development (Alipour, 2012).

In this case, SCE in financial sector companies has been managed quite well. The company's management culture, the existence of trademarks in the market, and the quality of internal activities help improve the company's financial performance in the financial sector. Based on resource-based theory, structural capital has 4 characteristics, namely valuable, rare, difficult to imitate, and irreplaceable. If a company is able to codify knowledge and develop systems, innovations and great ideas, then competitive advantage will be achieved.

In this case, CEE is the component that has the most influence on the company's financial performance. This proves that the role of physical capital and financial capital still has a major influence on improving the financial performance of companies in the financial sector. Companies in Indonesia are considered to still rely on increasing value added through the efficiency of physical capital and not intellectual capital.

In this case, it explains that there are differences between the company's sub-sectors in producing intellectual capital. There are companies that include high intellectual capital, moderate intellectual capital, and lower intellectual capital. It all depends on whether the company's management still utilizes physical and financial assets or intellectual capital.

## 5. CONCLUSION

The application and utilization of knowledge capital owned by the company will be a competitive advantage factor for other companies. When the knowledge capital is managed maximally, the profit is also maximized as well as the added value of the company.

Based on the results above, it can be concluded that:

1. *Human Capital Efficiency* (HCE) has no effect on the financial performance of financial sector companies.

- 2. Structural Capital Efficiency (SCE) has an effect on the financial performance of financial sector companies.
- 3. Capital Employed Efficiency (CEE) has an effect on the financial performance of financial sector companies.
- **4.** The contribution of Intellectual Capital (IC) to financial performance differs between different subsectors.

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