Proceeding 2nd Medan International Economics and Business

Volume 2, Issue 1, 2024
"Human Resource Transformation and Collaborative Innovation to Build Independent and Competitive Business in the Digital Era"

THE INFLUENCE OF INTELLECTUAL CAPITAL ON FINANCIAL PERFORMANCE OF FOOD AND BEVERAGE COMPANIES ON THE INDONESIAN STOCK EXCHANGE FOR THE 2018-2022 PERIOD

Dian Aprina Purba*[1], Nisrul Irawati[2], Khaira Amalia Fachrudin[3]
Master of Science Management, University of North Sumatra
Jl. Dr. T. Mansur No. 9, Padang Bulan , District . Medan Baru , Medan City, North Sumatra
***E-mail:** dianaprina94@gmail.com

ABSTRACT
This research was conducted to find out whether the components of intellectual capital (VACA, VAHU, STVA) have an influence on firm performance. The population of this research is food and beverage companies listed on the Indonesia Stock Exchange in 2018-2022. Using the purposive sampling method, the research sample consisted of 15 companies. This research is quantitative research using path analysis and processing the data using the Smart PLS application. The research results show that STVA has no influence on financial performance, while VACA and VAHU have an influence on financial performance. Based on this research, we suggest managers improve their management of financial resources and human resources for the company's future development.
Keywords : Capital employed, Firm performance, Human capital, Intellectual capital, Structural capital

INTRODUCTION

With increasingly rapid developments, competition between companies in Indonesia will become increasingly fierce. This competition requires companies to be more creative and innovative in developing their business. To develop a company's business, steps are needed to develop an appropriate strategy so that it can continue to exist in the face of intense competition and be highly competitive by improving company performance. Choosing the right strategy will provide strength for the company in developing its business. The current development of the business world requires companies to give their best contribution to advancing the company so that it does not fall easily and continues to be at the top. Companies must do their best to build the performance of the company they own. According to Sutrisno (2021) a company's financial performance is the achievements achieved by a company in a certain period which reflects the level of the company . Companies must transition from workforce-based businesses to knowledge-based businesses to survive quickly. Once knowledge management has been implemented, the success of the company will depend on the creation of capital based on knowledge and

the transformation and capitalization of knowledge itself, turning it into a knowledge-based business.

One of the factors that influences a company's financial performance is intellectual capital. Intellectual Capital (IC) is the hidden value owned by the company. This is because Intellectual Capital does not appear explicitly like traditional assets (tangible assets) but IC is visible in published financial reports (Edvinsson 1997). Economic development is greatly influenced by information and knowledge because advances in the fields of information and technology have increased attention to intellectual capital (Hong 2007). Intellectual capital is also defined as the sum of each component that can provide added value to the company. Intellectual capital is grouped into three categories, namely human capital, structural capital or organizational capital (organizational capital) and customer capital or relational capital (customer capital). Companies that are able to manage intellectual capital well will improve financial performance. This increase in financial performance is a positive signal for investors, so that investors will be interested in investing in the company (Putri, 2016). There have been several studies on Intellectual Capital that have been carried out previously, one of these researchers is Leonaldo & Habiburahman (2024) on the influence of intellectual capital on financial performance in food and beverage sub-sector manufacturing companies listed on the Indonesian Stock Exchange in 2019-2022. This research uses VACA , VAHU, and STVA as measuring tools for Intellectual Capital. The research results show that intellectual capital has a positive and significant effect on the company's financial performance, namely on (Return on Assets) ROA. The next research is Ikhram & Ali (2021) entitled the influence of intellectual capital on financial performance and company value (case study of financial sector companies listed on the Indonesian stock exchange in 2017-2019). The conclusion obtained from the results of this research is that Intellectual capital has a positive and significant influence on financial performance and company value. By managing the company's intellectual capital, it will be able to improve the company's performance to be effective and efficient, one of which is the company's performance in making profits.

METHOD

Theoretical basis

Agency Theory

Based on stakeholder theory, creating added value or value creation is the company's ultimate goal. Stakeholders appreciate companies that are able to create value because creating value will provide benefits for stakeholders. Based on research by Hendra Wijaya (2017), it was concluded that Intellectual Capital is able to reduce agency conflicts. This conclusion is based on the fact that the negative effects of investment decisions, funding decisions and dividend policies can be reduced by the presence of Intellectual Capital.

Intellectual Capital

According to Wijayani (2017), intellectual capital refers to the knowledge and abilities possessed by a social collectivity such as an organization, intellectual community, or professional practice. Intellectual capital is able to represent valuable resources and the

ability to act based on knowledge. Meanwhile, according to Sawarjuwono and Kadir (2003), intellectual capital can be defined as the sum of what is produced by the three main elements of an organization (human capital, structural capital, customer capital) related to knowledge and technology that can provide added value to the company in the form of competitive advantage. organization.

Value added Capital employed (VACA)

VACA is an indicator for VA created by one unit of human capital. This relationship is formulated:

$$VACA = \frac{\mathbf{VA}}{\mathbf{CE}}$$

where VACA is the ratio of VA to CE, and Capital Employment is available funds (equity, net profit).

Value added human capital (VAHU)

VAHU shows how much VA can be generated with the funds spent on labor. This relationship is formulated:

$$VAHU = \frac{\mathbf{VA}}{\mathbf{HC}}$$

where VAHU is the ratio of VA to HC, and Human capital is employee expenses.

Structural capital value added (STVA)

This ratio measures the amount of SC (SC = VA – HC) needed to produce one rupiah from VA and is an indication of how successful SC is in creating value. This relationship is formulated:

$$STVA = \frac{\mathbf{SC}}{\mathbf{VA}}$$

where STVA is the ratio of SC to VA, and SC = VA – HC. The final ratio in assessing a company's intellectual capital is the sum of the three components above, and can be formulated as follows:

$$\mathbf{VAIC™ = VACA + VAHU + STVA.}$$

Company Financial Performance

A company's financial performance is a description of its financial condition which is calculated using financial ratios (Sukhemi, 2007) and (Wijayani, 2017). According to Fahmi (2012), financial performance is an analysis to find out how far the company has carried out its obligations by referring to the rules for financial implementation properly and correctly. Profitability ratios are used to determine and assess a company's ability to generate profits (Kasmir 2010). Profitability ratios can be used to attract the interest of investors who will value companies with good performance, especially in terms of their ability to generate profits. The profitability ratio used in this research is Return on Assets (ROA). The ROA formula is as follows:

$$\mathbf{Return\ on\ Asset} = \frac{\mathbf{Laba\ Sebelum\ Pajak}}{\mathbf{Total\ Aktiva}}\mathbf{x100\%}$$

Research methods

This research uses descriptive and quantitative analysis to manage data. Descriptive statistical analysis aims to describe or describe data based on the results obtained from respondents' answers to each variable measuring indicator (Muchson, M. 2017). The population in this research is all food and beverage companies listed on the Indonesia Stock Exchange (BEI) for the 2018-2022 period, where there are 24 companies listed. After selecting sampling using several criteria, it was found that there were 15 companies that met the criteria in the research. The data collection method used is the documentation method. The documentation method is a method that uses data in the form of documents (Firdaus 2015). The documentation method is carried out by collecting, recording and calculating data related to research (Jayati 2016).

Data analysis

Data analysis in this study used the Partial Least Square (PLS) method. Partial Least Square (PLS) is a solution method for Structural Equation Modeling (SEM).

SEM Partial Least Squares

Partial Least Square is a predictive technique that can handle many independent variables, even if multicollinearity occurs between these variables (Ramzan and Khan, 2010). According to Jogiyanto and Abdillah (2009), PLS can be used for variant-based Structural Equation Modeling (SEM) analysis which can simultaneously test measurement models as well as test structural models. There are two parts of the analysis carried out in the PLS method, namely:

1. Assessing the Outer Model or Measurement Model Outer model testing is a measurement method that connects indicators with latent variables. Outer model analysis is carried out to ensure that the measurements used are suitable for use as measurements. Because the variables are built with formative indicators, it is assumed that the indicators are not correlated with each other. Thus, in this research it is not necessary to test the reliability of the formative construct (Ghozali 2014). Assess the outer model of the formative construct by looking at the weight value of each indicator and its significance value. The recommended weight value is above 0.50 and the T-statistic is above 1.645 with a confidence level of 95% ($\alpha = 0.05$) (one tailed). The VIF of the outer model is said to be maximum if it is 10. So, VIF values below 10 are declared free from multicollinearity (Ghozali 2014).
2. Assessing the Inner Model or Structural Model. The inner model describes the relationship between latent variables based on substantive theory (Ghozali 2014). The structural model was evaluated using R-square for the dependent construct and t test as well as the significance of the structural path parameter coefficients (Ghozali 2014). The R-square value shows the magnitude of the influence of the independent variable on the dependent variable. The R-square results are said to be good if ≥ 0.67 ; moderate if ≥ 0.33; and weak if ≤ 0.19 (Ghozali 2014).

RESULTS

Research result

Data analysis in this study used the Warp-PLS structural equation method by dividing it into 2 research periods. The initial step in this research was carried out by conducting an outer model test on each variable or partially to see the feasibility of each variable. Next, carry out a linear model test to determine the influence of the independent and dependent variables using path analysis.

Outer Model Evaluation (Measurement Model)

In evaluating the outer model with formative indicators in this study, the significant weight value for each latent variable was <0.01 (sign). Apart from that, the VIF value to see multicollinearity in a model for the collinearity value for each latent variable is obtained with a value of 0.000. It can be concluded that, this means that all indicators are declared valid and meet the reliability indicators.

Evaluation of Inner Model (Structural Model)

Evaluation of the structural model is carried out by looking at the R Square value, which explains the level of influence of certain exogenous variables on endogenous latent variables. There are 3 model classifications seen from the R Square value, namely strong or substantial (0.67), moderate (0.33), and weak (0.19) (Chin 1998). The R Square value in the research can be seen in table 1.1

Table 1.1 R Square

	R Square
ROA	0.707

The R Square value of the financial performance variable is 0.707, including the Substantial classification, which means that the intellectual capital variable can explain the financial performance variable with a diversity of 70.7% while 29.3% is explained by other variables outside this research. The level of IC on financial performance which is at a substantial level can be because almost all companies pay attention to and manage intellectual capital. This is proven by the number of companies that discuss intellectual capital in their financial reports. The next step is hypothesis testing, which can be seen from the values of the path coefficient. The direction of the relationship between constructs is indicated by the original sample value. The relationship between constructs is said to be positive if the original sample value is positive, and vice versa. Next, an assessment of the level of significance is carried out as indicated by the T-statistics value. The influence of the relationship between constructs is said to be real and significant if it has a T-statistics value > T-table. This research uses an alpha value of 5% so that the T-statistics value is > 1.96 and the p-value < 0.05. The path coefficient value for this research can be seen in table 1.2

Table 1.2 Path Coefficient Value

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values	Hypothesis
STVA -> ROA	0.159	0.253	0.225	0.704	**0.482**	Rejected
VACA -> ROA	0.486	0.502	0.176	2,762	**0.006**	Accepted
VAHU -> ROA	0.665	0.545	0.292	2,280	**0.023**	Accepted

DISCUSSION

The influence of Intellectual Capital, VACA (Value Added Capital Employed) on the performance of Food and Beverage Companies on the Indonesian Stock Exchange for the 2018-2022 period

The original sample value for testing the effect of VACA on financial performance was 0.486 and the t-statistic value was 2,280 . This indicates that VACA has a positive and real effect on financial performance, so the first hypothesis of this research is accepted. This is in accordance with research conducted by Kurniawati, et al (2020) which shows that VACA has a significant positive effect on company financial performance. This research is also supported by Ratnadi et al (2021) who show that VACA has a significant positive influence on financial performance. Therefore, it can be seen that capital management in the form of equity or own capital and net profit can increase the added value of the company which is ultimately able to improve the company's performance as seen from the value of return on assets (ROA).

The influence of Intellectual Capital, VAHU (Value Added Human Capital) on the financial performance of Food and Beverage Companies on the Indonesian Stock Exchange for the 2018-2022 period

The original sample value for testing the influence of VAHU on financial performance is 0.665 and the t-statistic value is 2.280 . This indicates that VAHU has a positive and real effect on financial performance, so the second hypothesis of this research is accepted. This is in accordance with research conducted by Mahdalena, et al (2023) which states that VAHU has a positive and significant effect on financial performance. This is also in accordance with research conducted by Kurniawati, et al (2020) which means that human capital efficiency has a significant positive effect on the company's financial performance.

The influence of Intellectual Capital, STVA (Value Added Capital Structure) on the financial performance of Food and Beverage Companies on the Indonesian Stock Exchange for the 2018-2022 period

The original sample value for testing the influence of STVA on financial performance is 0.159 and the t-statistic value is 0.704 . This indicates that STVA has a

positive and insignificant effect on financial performance, so the third hypothesis of this research is rejected. This is because the T-Statistics value is <1.96. This is in accordance with research conducted by Ratnadi et al (2021) which shows that STVA has no significant effect on the company's financial performance. This research is also supported by Mahdalena, et al (2023) stating that STVA has a negative and insignificant effect on financial performance. Without being accompanied by good structural capital management, such as managing systems, procedures and company routine processes, it will hamper employee productivity in producing added value. This means that employees have a high level of intellectuality, but if the organization or company has poor systems, procedures and routine processes then intellectual capital cannot achieve optimal performance and the existing potential cannot be utilized optimally, for this reason good systems and procedures are needed to achieve this. The company's high financial performance in this research is measured by the amount of Return On Assets (ROA) achieved by the company (Mahdalena, et al: 2023).

CONCLUSION

This research was conducted to determine the influence of the intellectual capital components consisting of VACA. VAHU and STVA on the financial performance of food and beverage companies on the Indonesia Stock Exchange for the 2018-2022 period. From the results of research conducted by VACA and VAHU, they have a positive and significant influence on financial performance, however, in the STVA research there is a positive but not significant influence on financial performance. This shows that the company has not been able to manage the company structure optimally to create profits for the company.

REFERENCES

Edvinsson, L. (1997) "Developing Intellectual Capital at Skandia. Long Range Planning" : 366-373. https://doi.org/10.1016/S0024-6301(97)90248-X

Firdaus, A. 2015. Analisis pengaruh profitabilitas, reputasi auditor, dan ukuran perusahaan terhadap perilaku income smoothing. Skripsi Universitas Diponegoro Semarang.

Ghozali, I. 2014. Structural Equation Modeling: Metode alternative dengan Partial Least Square (PLS) (Edisi 4). Semarang: Badan Penerbit Universitas Diponegoro Semarang.

Hadli, dkk. (2022). Pengaruh Intellectual Capital Terhadap Kinerja Keuangan Perusahaan Manufaktur Yang Terdaftar Di Bei Periode Tahun 2016-2020. Jurnal Ilmiah Ekonomi dan Bisnis e-ISSN : 2716-4411.

Hasrul & Fajrillah. (2020). Pengaruh Intellectual Capital Terhadap Kinerja Keuangan Perusahaan Di Indonesia. Jurnal Bisnis dan Ekonomi Volume 2 No 1, Juni 2020.

Hendra Wijaya. (2017). Agency Costs and Intellectual Capital in Indonesia Manufacturing Firms. Research Journal of Finance and Accounting, 8(24), 36-39.

Hong. (2007). Intellectual Capital and Financial Returns of Companies. Journal of Intellectual Capital, 76 – 95. https://doi.org/10.1108/14691930710715079

Ikhram & Ali. 2021. Pengaruh Intellectual Capital Terhadap Kinerja Keuangan dan Nilai Perusahaan (Studi Kasus Perusahaan Sektor Keuangan yang Terdaftar di Bursa Efek Indonesia Tahun 2017-2019). Jurnal Inovasi Bisnis dan Manajemen Indonesia Volume 04, Nomor 02, Maret 2021.

Jayati, S. E. 2016. Pengaruh intellectual capital terhadap kinerja keuangan perusahaan perdagangan jasa yang terdaftar di Bursa Efek Indonesia. Skripsi Universitas Negeri Yogyakarta.

Leonaldo & Habiburahman. 2024. Pengaruh Intellectual Capital Terhadap Kinerja Keuangan Pada Perusahaan Manufaktur Sub Sektor Food And Beverage Yang Terdaftar di Bursa Efek Indonesia Tahun 2019-2022. Journal of Information System, Applied, Management, Accounting and Research: Vol. 8 No.1 February 2024. e-ISSN: 2598-8719

Mahdalena, dkk. 2023. Pengaruh Intellectual Capital Terhadap Kinerja Keuangan pada Bank Pembiayaan Rakyat Syariah (BPRS) di Indonesia dengan Model Value Added Intellectual Capital (VAIC) Periode 2016-2020. Jurnal Ilmiah Ekonomi Islam, 9(03), 2023, 4373-4383

Putri, Yuni Murdiana. 2016. Pengaruh Modal Intelektual terhadap Profitabilitas dan Produktivitas Perusahaan dalam Index LQ 45. Jurnal Ilmu dan Riset Akuntansi : Volume 5, Nomor 3, Maret 2016. ISSN: 2460-0585.www.journal.stiesia.ac.id. Sekolah Tinggi Ilmu Ekonomi Indonesia (STIESIA) Surabaya.

Sawarjuwono, T., & Kadir, A. P. (2003). Intellectual capital: Perlakuan, pengukuran dan pelaporan (sebuah library research). Jurnal akuntansi dan keuangan, 1(5), 35–57.

Wijayani, D. R. (2017). Pengaruh Intellectual Capital Terhadap Kinerja Keuangan Perusahaan Publik di Indonesia (Studi Empiris pada Perusahaan Manufaktur di BEI 2012-2014). Jurnal Riset Akuntansi Dan Bisnis Airlangga, 1(2), 97–116.

Sukhemi. (2007). Evaluasi Kinerja Keuangan Pada PT. Telkom, Tbk. Jurnal Akuntansi dan Manajemen, 1(1), 1–16.