International Journal of Application on Economics and Business (IJAEB)
Volume 2, Issue 3, 2024. ISSN: 2987-1972

DETERMINANTS OF BANKING BUSINESS TRANSFORMATION DURING THE COVID -19 PERIOD

Dharma Triadi Yunus[1], Herlin Tundjung Setijaningsih[2*]

[1,2] Faculty of Economics and Business, Universitas Tarumanagara, Jakarta, Indonesia
Email: dharma.126222013@stu.untar.ac.id, herlins@fe.untar.ac.id

*Corresponding Author

Submitted: 30-03-2024, Revised: 30-05-2024, Accepted: 01-07-2024

ABSTRACT

The purpose of this research is to obtain empirical evidence about the effects of intellectual capital measured by human capital efficiency (HCE), structured capital efficiency (SCE), and capital employed efficiency (CEE) on financial performance in banking companies listed on the Indonesia Stock Exchange (IDX) for the 2020-2022 period. This research uses 46 samples and 138 data from banking companies selected by the purposive sampling method. Data processing techniques uses multiple linear regression and processed using Eviews version 12. The result of this research indicates that HCE has a negative and significant effect on financial performance, SCE has a negative and significant effect on financial performance, CEE has a positive and significant effect on financial performance.

Keywords*: Intellectual Capital, Human Capital Efficiency (HCE), Structured Capital Efficiency (SCE), Capital Employed Efficiency (CEE), Return on Asset (ROA)*

1. INTRODUCTION

The financial performance of a bank is one of the factors considered by an investor when making an investment. The emergence of the Covid-19 pandemic in Indonesia in 2020 resulted in a change in management strategy in utilizing existing resources to achieve maximum financial performance.

According to [1], Return on Assets (ROA) can be used to indicate the financial performance of a company. Based on Graph 1. the average ROA in

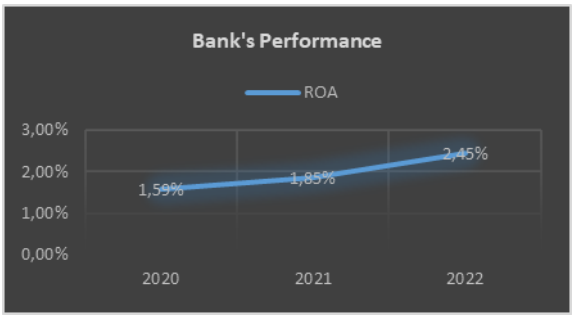

Figure 1. Average banking ROA in Indonesia in 2020-2022
Source: Statistik Perbankan Indonesia 2020 – 2022

banking in Indonesia has increased from 2020 to 2022, namely in 2020 it was 1.59%, increasing to 1.85% in 2021, and at the end of 2022 it became 2.45%. This period is the period when the Covid-19 pandemic occurred and the recovery period for banking.

According to [3], ROA shows the company's ability to generate profits from every asset used by the company and shows a measure of management's effectiveness in managing funds invested by investors. The cause of the increase in banking ROA from 2020 to 2022 is an interesting discussion to research, because based on existing research, there is no definite conclusion regarding what factors cause business transformation, namely an increase in banking ROA during the Covid-19 pandemic up to new normal.

During the Covid-19 pandemic, the Financial Services Authority (OJK) issued a Financial Services Authority Regulation (POJK Number 18/POJK.03/2020) concerning written orders for handling bank problems. This regulation contains the OJK's authority for banks to carry out mergers, consolidations and takeovers of banks experiencing bad/sick financial conditions. Therefore, during this period there was a phenomenon of bank mergers and acquisitions occurring in Indonesia to maintain bank financial performance to remain healthy. On the other hand, there are several studies conducted by [5], [6], [7], [8], [9], [10], [11], and [1] who state that the most valuable assets in this century that influence a company's financial performance are workers' knowledge and productivity, which is known as intellectual capital.

Intellectual capital is an important concept that can provide knowledge-based intangible resources and describes intangible assets which, if used optimally, enable a company to be able to carry out its strategy effectively and efficiently [12]. However, there are difficulties in directly measuring the intellectual capital owned by a company. Therefore, Pulic in [13] proposes an indirect measurement of intellectual capital with a measure that assesses the efficiency of value added as a result of the company's intellectual capabilities, namely by using the Value-Added Intellectual Coefficient (VAIC) method. According to Margaretha and Rahman in [14], there are three important aspects in the formation of a company's intellectual capital, namely: capital employed efficiency (VACA), human capital efficiency (VAHU) and structural capital efficiency (STVA). The explanation of these three aspects is as follows.

First, capital employed efficiency or physical efficiency (VACA) is a tangible asset used by a company for operational activities such as buildings, land, technology and equipment that can be bought and sold easily on the market. Second, human capital efficiency (VAHU) is intellectual capital that comes from the company's human resources, for example employees who are competent, committed, motivated at work and loyal to the company. Meanwhile, according to [11], human capital is described as the possession of knowledge, applied experience, company innovation, client relationships, and professional skills that value and provide value creation to the company. Third, structural capital efficiency (STVA) is everything outside of human relationships, for example databases, organizational structures, series of processes, strategies and everything that creates value in the company.

Higher of the capital employed value of a company, the more efficient the management of intellectual capital in the form of buildings, land, equipment, or technology that is easily bought and sold in the market for the company concerned [15]. Based on previous research conducted by [16], [9], [1], and [13] shows that there is a significant positive influence of capital employed efficiency (VACA) on the financial performance of a company. This condition shows that the greater the VACA of a company, the better the financial condition of a company. Meanwhile, other research conducted by [5] and [17] shows that there is no effect of VACA on company financial performance.

Nowadays, businesspeople are starting to change the paradigm that competitive ability does not only lie in the tangible assets owned by the company but also lies in intangible assets, especially intellectual capital [18]. Human capital is the most important asset that exist within a firm and represents the human factor in a n organisation where by combination of intelligence, skills, knowledge, aptitudes and expertise that gives the organisation its disctinctive character which those traits contributing to production and profitability, thus improve organizational performance [19]. Human capital in this context is that management must make continuous efforts to encourage organizational decisions into actions to achieve their goals [20]. Then, regarding the relationship between VAHU and company financial performance, there was previous research conducted by [5], [16], [9], [1], and [17] which shows that there is a significant positive influence of human capital efficiency (VAHU) on the financial performance of a company. This situation illustrates that the greater the VAHU of a company, the better the company's financial performance. Meanwhile, research conducted by [21], [13], and [22] shows that there is no influence of VAHU on company financial performance.

Structured capital provides an environment that allows the creation and increase of a company's knowledge [23]. Regarding the influence of STVA on company financial performance, there was previous research conducted by [5] and [1] which show that there is a significant positive effect of structured capital efficiency (STVA) on the financial performance of a company. This situation illustrates that the greater the STVA of a company, the better the financial performance of a company. Meanwhile, research conducted by [16] and [24] show that there is no effect of STVA on company financial performance.

This research aims to analyse the influence of intellectual capital on financial performance. In addition, because currently accounting standards in Indonesia are still more focused on measuring and reporting fixed assets rather than intangible assets, this research is expected to contribute to the need to consider developing better accounting standards in recognizing and measuring intangible assets, including intellectual capital.

In this study, the research subjects that will be studied are banking companies listed on the Indonesia Stock Exchange (BEI) in the period 2020 to 2022. Banking companies were chosen as research subjects because they are one of the sectors most intensive in the use of intellectual capital and operational success, growth and profitability in banks do not depend on physical assets [25]. Meanwhile, the research period chosen was the period 2020 to 2022 because researchers wanted to know the performance conditions of banking companies during the Covid-19 pandemic up to the new normal period.

Research in the Covid-19 era is important to research because in this era people carry out online activities due to government regulations regarding PSBB (Large-Scale Social Restrictions). This rule causes all business transactions to be carried out online and uses advanced technology to process transaction data. In order to be able to master and be proficient in this sophisticated technology, it is very important for the banking sector to invest in intellectual capital, especially those related to training human resources in terms of operating technology. It is hoped that research in the Covid-19 era can become the basis for banking management decision making regarding intellectual capital investment to improve banking financial performance.

Related Work

Resource-based Theory. The theory underlying this research is Resource-based Theory. According to Wernerfelt (1984) in [26], resource-based theory is a company's resources that can be used as an advantage in competition and the company can be directed towards long-term performance. Apart from that, this theory discusses the resources owned by the company and procedures for management and utilization of company resources. The knowledge-based perspective on the company is a continuous extension of the resource-based perspective on the company which is very adequate for current economic conditions [27]. Knowledge is seen as a primary asset that is very scarce and will not deteriorate over a long period of time and can result in increased profits [28]. The notion of most knowledge-based assets is intangible and dynamic [29].

Views related to the resource-based view (RBV) of companies can be found in research conducted by [30] who found that companies are managerial associations and collections of useful assets, both physical and human resources. Material assets, like human resources, can provide companies with various benefits [10]. Based on resource-based theory, a company is able to achieve sustainable excellence if it can optimize the tangible and intangible assets it owns [31]. So based on this theory, there is a link between the resources owned by a company and the success of a company, in this case described by the financial performance of a company.

Intellectual Capital.

The meaning related to intellectual capital (IC) has been widely explained by several researchers. Intellectual capital can be interpreted as the resources owned by a company, both in form and in form, to meet the company's operational needs. According to [9] there is a significant increase in research related to intellectual capital. The first research conducted by [32] stated that intellectual capital is the result of a knowledge transformation process that produces valuable assets for a company. Meanwhile, according to the Organization for Economic Cooperation and Development [33], intellectual capital is the economic value of two categories of intangible assets, namely organizational capital and human cpital. Organizational capital refers to the following, namely system software, network distribution, and supply chain, while human capital includes human resources within the organization and external resources related to the organization such as suppliers and consumers. According to [34], intellectual capital can be used as a basis for assessing core competencies for companies and can also influence resilience and competitive advantage. Meanwhile, [35] argue that intellectual capital is an economic value of two main intangible assets, namely organizational and human capital. Intellectual capital can improve the financial performance of a company and make it possible to reduce the occurrence of financial distress [36].

Components in the Value-Added Intellectual Capital (VAIC) Model.

Intellectual capital that can be maximized by a company through efficiency and effectiveness of these resources will automatically create added value and improve the financial performance of a company. According to [37], there are three main components of intellectual capital (IC), namely the first is the efficiency of human resources owned/human capital efficiency (HCE), the second is the efficiency of structural capital/structural capital efficiency (SCE), and the third is efficiency in the use of capital/capital employed efficiency (CEE).

[37] argues that HCE is a combination of knowledge, skills, innovation and individual abilities in an organization, then SCE is the ability of an organization including information systems, infrastructure, organizational culture, procedures and routines that can support individual efforts to produces

maximum intellectual capacity, while CEE is concluded as a harmonious relationship with the organization's partners. It doesn't stop there, [37] also explains, to produce intellectual capital, a company must have added value (VA). The added value is calculated on the difference between output and input. Output is calculated based on the company's gross income, while input is the company's operating costs excluding labor costs.

Human Capital Efficiency (HCE) related to Financial Performance.

Human resources are a very important asset for a company to be able to innovate and develop. Optimizing human resources owned by a company can create added value with the abilities and productivity of these employees. Efficiency in labor costs with the aim of creating added value will improve a company's financial performance. According to [37], HCE consists of salary expenses paid by the company to an individual. He also believes that salary expenses are not fixed costs but are included in investment. Human capital efficiency (HCE) is calculated by comparing the value added (VA) with the total salary paid by the company. Based on previous research conducted by [5], [16], [9], [1], and [17] show that there is a significant positive impact between human capital efficiency (HCE) and the financial performance of a company. This situation illustrates that the greater the HCE of a company, the better the financial performance of a company.

H_1: Human Capital Efficiency (HCE) has a positive influence on financial performance.

Structured Capital Efficiency (SCE) related to Financial Performance.

The next component is the effectiveness of the capital structure. An effective capital structure is described by a company's ability to support the efforts of human resources in terms of producing maximum financial performance. The capital structure can take the form of information systems, strategies, patents and the company's good name. An efficient capital structure will reduce the costs incurred in restructuring the company's strategy and systems, thereby improving financial performance. [37] argues that SCE can be calculated by comparing the company's capital structure with its value added (VA). In addition, [38] argue that SCE is the ability of an organization or company to fulfill routine processes and structures that support individual efforts to produce optimal intellectual performance and overall business performance. Based on previous research conducted by [5] and [1] show that there is a significant positive impact between structured capital efficiency (SCE) and a company's financial performance. This situation illustrates that the greater a company's SCE, the better the company's financial performance.

H_2: Structured Capital Efficiency (SCE) has a positive influence on financial performance.

Capital Employed Efficiency (CEE) related to Financial Performance.

The final component of intellectual capital is physical and financial capital. Companies that can manage financial capital and optimize the physical capital they have to the maximum will automatically reduce unnecessary financial burdens so that it will improve financial performance for a company. According to [37], intellectual capital cannot create value by itself, so it requires information regarding the efficiency of capital used by a company. [38] argues that if a company can make efficient use of its capital, so that the capital can be used for innovation and development, it will generate profits and added value for a company. CEE is calculated by comparing the added value with the book value of a company's net assets. Based on previous research conducted by [16], [9], [1], and [13] shows that there is a significant positive impact between capital employed efficiency (CEE) and the financial performance of a company. This condition shows that the greater the CEE of a company, the better the financial condition of a company.

H_3: Capital Employed Efficiency (CEE) has a positive influence on financial performance.

Based on the description of the development of the hypothesis above, the research framework is described as follows:

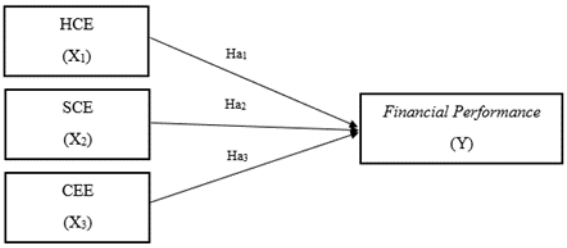

Figure 2. Research Framework
Source: Researcher, 2023

Our Contribution

The purpose of this research is to obtain empirical evidence about the effects of intellectual capital measured by human capital efficiency (HCE), structured capital efficiency (SCE), and capital employed efficiency (CEE) on financial performance in banking companies listed on the Indonesia Stock Exchange (IDX) for the 2020-2022 period. This research uses 46 samples and 138 data from banking companies selected by the purposive sampling method. Data processing techniques uses multiple linear regression and processed using Eviews version 12. The result of this research indicates that HCE has a negative and significant effect on financial performance, SCE has a negative and significant effect on financial performance, CEE has a positive and significant effect on financial performance.

Paper Structure

The research design used in this study is descriptive in nature with quantitative method approach. This study uses secondary from the financial statements of banking companies listed on the Indonesia Stock Exchange (IDX). This secondary data can be accessed through the official IDX website, www.idx.co.id. The type of data used in this study is panel data which is a combination of time series data and cross section data. The total population in this study consisted of 46 companies in the banking sector. This study uses purposive sampling method.

Some criteria used in this study to determine the samples are:

1. Banking companies listed on the Indonesia Stock Exchange period 2020-2022.
2. Banking companies that consistently publish financial reports that end in 31st December and have been audited during 2020-2022.
3. Banking companies with financial reports with Rupiah (IDR) during 2020-2022.

2. RESEARCH METHOD

This study uses descriptive statistical tests, model tests, classical assumption tests, F tests, t tests and coefficient of determination tests. Table 1 shows the operational variables and measurements in this study.

Table 1. Operational Variables and Measurements
Source: Researcher, 2023

Variable	Definition	Measurement	Scale	Source
Financial Performance (Y)	The financial performance of a company as measured by Return on Assets (ROA)	Earning After Tax / Total Assets	Ratio	Qusama et al. (2020)
Human Capital Efficiency (X_1)	Company efficiency for labor costs incurred.	Value Added / Human Capital	Ratio	Pulic (2000), Firer and Williams (2003)
Structured Capital Efficiency (X_2)	Company efficiency of invested structural capital	Structural Capital / Value Added	Ratio	Pulic (2000), Firer and Williams (2003)
Capital Employed Efficiency (X_3)	Company efficiency over physical and financial resources	Value Added / Capital Employed	Ratio	Pulic (2000), Firer and Williams (2003)

Information:

Value Added = Output – Input
= Operating Profit + Human Capital + Depreciation + Amortization
Structural Capital = Value Added – Human Capital
Capital Employed = Book value of the net assets
= Total Asset – Total Liabilities

This research uses Multiple Linear Regression Analysis so that the presentation of the equation model is as follows:

$$FPi,t = \alpha i,t + \beta 1\ HCEi,t + \beta 2\ SCEi,t + \beta 3\ CEEi,t + \varepsilon i,t$$

Information:

FP : Financial Performance
HCE : Human Capital Efficiency
SCE : Structured Capital Efficiency
CEE : Capital Employed Efficiency
α : Constanta
β1- β3 : Regression Coefficients
ε : Error Term
i : Company i
t : Year t

3. RESULTS AND DISCUSSIONS

Descriptive Statistics

Table 2. Descriptive Statistics
Source: Data Process using Eviews 12.0

	Y_FINANCI	X1_HCE	X2_SCE	X3_CEE
Mean	0.001184	-1.586152	0.862279	0.098024
Median	0.004834	-1.800799	0.515493	0.119452
Maximum	0.084093	12.93661	21.48573	0.353700
Minimum	-0.180577	-6.683019	-3.764144	-1.237958
Std. Dev.	0.029614	2.261360	2.220819	0.173234
Observations	138	138	138	138

The results of the descriptive statistical tests in Table 2 show the average, minimum and maximum values of the research variables. For the dependent variable, namely financial performance, the minimum value is -0.180577 which comes from the AGRO bank code in 2021, while the maximum

value is 0.084093 which comes from the BTPS bank code in 2022. The average financial performance proxied by ROA is 0.001184. The standard deviation is 0.029614, which is the variation in data from the financial performance variable.

Human capital efficiency (HCE) is an independent variable in this research. The minimum HCE value is -6.683019 which comes from the BBSI bank code in 2021, while the maximum value is 12.93661 produced by the AGRO bank code in 2021. The average HCE value in the 138 samples is -1.586152 with a standard deviation of 2.261360.

The next independent variable is structured capital efficiency (SCE). The lowest SCE value is -3.764144 produced by the AGRS bank code in 2020, while the highest value of 21.48573 is produced by the AMAR code in 2022. The average HCE value is 0.862279 with a standard deviation of 2.220819.

The final independent variable is capital employed efficiency (CEE). From table 2 the lowest value of CEE is -1.237958 which was produced by the bank code AGRO in 2021, while the highest value of 0.353700 was produced by the bank code BBRI in 2022. The average value of CEE is 0.098024 and the standard deviation is 0.173234.

Selection of Model Estimates

Table 3. Chow Test
Source: Data Process using Eviews 12.0

Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.907332	(45,89)	0.0000
Cross-section Chi-square	124.782079	45	0.0000

Based on the Chow test Table 3, both Cross-section F and Chi-square probability values show 0.0000 which is smaller than 0.05 so H0 is rejected, and the Fixed Effect Model is the appropriate model for this research. The next test is the Hausman test.

Table 4. Hausman Test
Source: Data Process using Eviews 12.0

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	1.801599	3	0.6146

Based on the Hausman test Table 4, the random cross-section probability value shows the number 0.6146 which is greater than 0.05 so that H0 is accepted which indicates that the most appropriate model for this research is the Random Effect Model.

Multicollinearity Test

Table 5. Multicollinearity Test
Source: Data Process using Eviews 12.0

	X1__HCE_	X2__SCE_	X3__CEE_
X1__HCE_	1.000000	0.156760	-0.753911
X2__SCE_	0.156760	1.000000	-0.149354
X3__CEE_	-0.753911	-0.149354	1.000000

The results of the multicollinearity test between the independent variables show a correlation figure below 0.8 so that the data used in this research is free from multicollinearity problems.

F- Test

Table 6. F-test
Source: Data Process using Eviews 12.0

Weighted Statistics			
R-squared	0.784744	Mean dependent var	0.000679
Adjusted R-squared	0.779925	S.D. dependent var	0.023210
S.E. of regression	0.010888	Sum squared resid	0.015886
F-statistic	162.8380	Durbin-Watson stat	1.631292
Prob(F-statistic)	0.000000		

The results of the F statistical test in Table 6 show Prob (F-statistic) of 0.000000 which is smaller than 0.05, this illustrates that the independent variables simultaneously have a significant effect on financial performance. The regression model in this research is suitable for use.

t- Test

Table 7. t-test
Source: Data Process using Eviews 12.0

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.014857	0.001908	-7.788507	0.0000
X1__HCE_	-0.006859	0.000877	-7.818021	0.0000
X2__SCE_	-0.001711	0.000479	-3.570761	0.0005
X3__CEE_	0.067698	0.011691	5.790816	0.0000

The t-statistical test is used to see the significance of the influence of the independent variable on the dependent variable partially. Table 7 shows that the three independent variables, namely HCE, SCE and CEE have a significant effect on financial performance as indicated by Prob. each independent variable < 0.05.

Coefficient of Determination Test

The coefficient of determination test results shown in Table 6 with Adjusted R-Square of 0.779925, illustrate that 77.9% of the financial performance variable is influenced by the three independent variables, namely HCE, SCE and CEE. Meanwhile, the remaining 22.1% is influenced by other factors outside the research variables.

Based on the results of multiple regression analysis, the equation obtained in this study is as follows:

Financial Performance = -0.014857 –0.006859 Human Capital Efficiency –0.001711 Structured Capital Efficiency +0.067698 Capital Employed Efficiency

The following is a table related to the results of hypothesis testing in this research:

Table 8. Hypothesis Test Results
Source: Researcher, 2023

Hypothesis	Coefficient	Prob.	Conclusion
H_1: Human Capital Efficiency (HCE) has a positive influence on financial performance.	−0.006859	0.0000	H_1 is rejected
H_2: Structured Capital Efficiency (SCE) has a positive influence on financial performance.	−0.001711	0.0005	H_2 is rejected
H_3: Capital Employed Efficiency (CEE) has a positive influence on financial performance.	0.067698	0.0000	H_3 is accepted

Based on Table 8, it is concluded that HCE has a significant negative effect on financial performance, so H1 is rejected. The results of this research conclude that the banking sector during Covid-19 did not focus on investing in intangible assets, especially in terms of development and skills for employees to improve financial performance. Based on information from Kontan.co.id, during the Covid-19 period, the banking sector even cut the number of employees so that they could continue to operate and have a competitive edge during the Covid-19 pandemic that was being faced. The results of this research are supported and in line with research conducted by [40] who stated that investment in human resources can reduce a company's financial performance because employees who are given training and skills are unproductive and lazy. Apart from that, the existence of macroeconomic factors, in this case related to the survival of banks during the critical period of Covid-19, has resulted in the company's focus not being on improving the skills of its employees. The results of this study are not in line with research conducted by [5], [16], [9], [1], and [17] which states that there is a significant positive impact between HCE and a company's financial performance.

The second independent variable in this research is SCE, it was found that SCE had a significant negative impact on financial performance, so H2 was rejected. The results of this research indicate that the amount of structural capital, especially in the banking sector during the Covid-19 pandemic, has not been able to fulfill the company's routine processes in producing optimal performance. Apart from that, companies that focus on increasing structural capital such as managing systems, procedures and databases will hinder productivity, especially in banking companies in Indonesia. The results of this research are supported and in line with research conducted by [41], [10], [42] and [43] which stated that SCE reduces the profitability of a company. However, this research is not in line with research conducted by [5] and [1] which state that SCE has a positive impact on the financial performance of a company.

The final independent variable in this research is CEE. The results of this research conclude that CEE has a significant positive impact on financial performance, especially in the banking sector in Indonesia, so that H3 is accepted. The results of this research provide an indicator that the company's intellectual ability to utilize physical capital well contributes to the company's ability to generate income. Apart from that, according to [44] having strong company capital can help banks to maintain survival and always compete in the market. The results of this research are supported and in line with research conducted by [16], [9], [1], and [13] shows that there is a significant positive impact between capital employed efficiency (CEE) and the financial performance of a company. However, this research is not in line with research conducted by [24] which states that CEE has no effect on the financial performance of a company.

4. CONCLUSIONS AND SUGGESTIONS

Based on this research, it was concluded that human capital efficiency (HCE) and structured capital efficiency (SCE) had a significant negative effect on bank financial performance, while capital employed efficiency (CEE) had a significant positive effect on bank financial performance. This empirical research proves that during Covid-19, management in companies, especially the banking sector, in terms of improving financial performance, needs to increase and utilize physical capital such as facilities and infrastructure. Meanwhile, related to the efficiency of human resources and the management of systems, procedures and databases during the Covid-19 period, it resulted in a decline in the company's financial performance because the company's focus and goal was to survive during the Covid-19 pandemic and sometimes the company misdirected itself. providing training to employees without clear objectives.

This research has several limitations, namely: 1) The independent variables in this research are limited to HCE, SCE and CEE; 2) The subjects of this research are limited to companies in the banking sector listed on the Indonesia Stock Exchange (BEI) for the 2020-2022 period; 3) The period in this research is limited to 2020-2022. 4) Business development and economic conditions during Covid-19, especially in Indonesia, are experiencing a decline.

Some suggestions for future research are: 1) Management in terms of improving financial performance can pay attention to and utilize physical capital such as owned infrastructure; 2) Banking management can review the budget they have for training and management of systems, procedures and databases; 3) For future research, other independent variables can be used to assess financial performance such as company size, liquidity and company leverage. And it is also hoped that they can research other company sectors apart from the banking sector.

ACKNOWLEDGMENT

This work was supported by the Pendidikan Profesi Akuntan Fakultas Ekonomi dan Bisnis Universitas Tarumanagara, Jakarta, and the Indonesia Stock Exchange (IDX).

REFERENCES

Acuña-Opazo, C., & González, O. C. (2021). The impacts of intellectual capital on financial performance and value-added of the production evidence from Chile. *Journal of Economics, Finance and Administrative Science*, 26(51), 127–142. https://doi.org/10.1108/JEFAS-08-2019-0178.

Aprianti, S. (2018). Pengaruh VACA, VAHU, dan STVA terhadap nilai perusahaan pada perusahaan perbankan yang terdaftar di BEI. *Jurnal Riset Terapan Akuntansi*, 2(1), 70-81.

Bontis, N. (1998). Intellectual capital: an exploratory study that develops measures and models. *Management Decision*. Vol. 36 No. 2, pp. 63-76. https://doi.org/10.1108/00251749810204142.

Castro, J. P. G., Ramírez, D. F. D., & Escobar, J. M. (2021). The relationship between intellectual capital and financial performance in Colombian listed banking entities. *Asia Pacific Management Review*, 26(4), 237–247.

Friandi, S. Z., & Akbar, I. N. (2018). Analisa pengaruh intellectual capital terhadap profitabilitas dan produktivitas pada sektor perbankan syariah Indonesia cabang Kota Tangerang. *Cyberpreneurship Innovative and Creative Exact and Social Science*, Vol. 4 (2), pp. 155-170.

Guthrie, J. (2001). The management, measurement and the reporting of intellectual capital. *Journal of Intellectual Capital*, Vol. 2 No. 1, pp. 27-41. https://doi.org/10.1108/14691930110380473.

Haris, M., Yao, H., Tariq, G., Malik, A., & Javaid, H. M. (2019). Intellectual capital performance and profitability of banks: Evidence from Pakistan. *Journal of Risk and Financial Management*, Vol. 12(2), 56. https://doi.org/10.3390/jrfm12020056.

Hidayat, M., & Dana, I. (2019). Pengaruh intellectual capital terhadap kinerja keuangan perusahaan sektor pertamangan di Bursa Efek Indonesia. *E-Jurnal Manajemen*, Vol. 8(9), 5702 - 5721.

Hoskisson, R. E., Hitt, M. A., Wan, W. P., & Yiu, D. (1999). Theory and research in strategic management: Swings of a pendulum. *Journal of Management*, Vol. 25(3), 417-456.

http://administrasibisnis.studentjournal.ub.ac.id/index.php/jab/article/view/2775.

http://dx.doi.org/10.35448/jte.v14i1.

https://doi.org/10.1016/j.apmrv.2021.03.002.

https://doi.org/10.1016/j.bir.2016.03.001.

https://doi.org/10.1051/shsconf/20173600026

https://doi.org/10.1080/23311975.2020.1859666.

https://doi.org/10.1080/23322039.2018.1453574.

https://doi.org/10.1080/23322039.2020.1802815.

https://doi.org/10.1108/14691930110409651.

https://doi.org/10.1177/014920639902500307.

https://doi.org/10.1504/IJTM.2000.002891.

https://doi.org/10.24843/EJMUNUD.2019.v08.i09.p17.

https://doi.org/10.33050/cices.v4i2.502

https://doi.org/10.35313/ijem.v3i2.4879.

https://doi.org/10.5281/zenodo.3840757.

https://e-jurnal.nobel.ac.id/index.php/akmen/article/view/793

https://jurnal.stietribuana.ac.id/index.php/parameter/article/view/241/258.

https://keuangan.kontan.co.id/news/jumlah-karyawan-bank-besar-menyusut-namun-beban-tenaga-kerja-meningkat?page=2.

https://lpbe.org/index.php/lpbe/article/view/26.

https://ojk.go.id/id/kanal/perbankan/data-dan-statistik/statistik-perbankan-indonesia/default.aspx.

https://openlibrarypublications.telkomuniversity.ac.id/index.php/management/article/view/11545/11410.

https://scholar.unair.ac.id/en/publications/intellectual-capital-financial-performance-and-value-of-company.

https://www.ojk.go.id/id/regulasi/Documents/Pages/Perintah-Tertulis-untuk-Penanganan-Permasalahan-Bank/FAQ%20-%20POJK%2018.pdf.

Hutauruk, D. N. 22 Mei 2022. Jumlah Karyawan Bank Besar Menyusut, Namun Beban Tenaga Kerja Meningkat. *Kontan.co.id*.

Isanzu, J. (2015). Impact of intellectual capital on financial performance of banks in Tanzania. *Journal of International Business Research and Marketing*, Vol. 1, 17-24. https://doi.org/10.18775/jibrm.1849-8558.2015.11.3002.

Isola, W. A., Adeleye, B. N., & Olohunlana, A. O. (2020). Boardroom female participation, intellectual capital efficiency and firm performance in developing countries: Evidence from

Nigeria. *Journal of Economics, Finance and Administrative Science*, Vol. 25 No. 50, pp. 413-424. https://doi.org/10.1108/JEFAS-03-2019-0034.

Kasoga, P. S. (2020). Does investing in intellectual capital improve financial performance? Panel evidence from firms listed in Tanzania DSE. *Cogent Economics & Finance*, 8:1, 1802815.

Le, T. D. Q., & Nguyen, D. T. (2020). Intellectual capital and bank profitability: New evidence from Vietnam. *Cogent Business & Management, ISSN 2331-1975, Taylor & Francis, Abingdon*, Vol. 7, Iss. 1, pp. 1-19.

Madyan, M., & Fikir, H. R. (2019). Intellectual capital, financial performance, and value of company. *Journal of Advanced Research in Dynamical and Control Systems*, Vol. 11(5 Special Issue), 1276-1284.

Muchlis, F. A., & Suzan, L. (2020). Pengaruh intellectual capital terhadap kinerja keuangan: Studi empiris pada perusahaan sub sektor properti dan real estate yang terdaftar di Bursa Efek Indonesia periode 2015-2018. *eProceedings of Management,* Vol. 7 (1), 778-786.

Nadeem, M., Gan, C., & Nguyen, C. (2018). The importance of intellectual capital for firm performance: Evidence from Australia. *Australian Accounting Review*, Vol. 28(3), 334–344. https://doi.org/10.1111/auar.12184.

Nawaz, T., & Haniffa, R. (2017). Determinants of financial performance of Islamic banks: An intellectual capital perspective. *Journal of Islamic Accounting and Business Research*, Vol. 8 (2), 130-142. https://doi.org/10.1108/JIABR-06-2016-0071.

Ngaziz, G. K., & Setijaningsih, H. T. (2022). The effect of good corporate governance implementation on company performance in the disruption era of the covid-19 pandemic. *EPRA International Journal of Research and Development (IJRD),* Volume 7, Issue 6*,* 306-312. https://doi.org/10.36713/epra10634.

Nugraha, G. A., Priyatama, T., Masita, T. E., Sumantri, P. E., & Wijaya, E. (2021). Pengaruh intellectual capital terhadap kinerja keuangan perusahaan sub sektor otomotif dan komponen di Bursa Efek Indonesia. *Jurnal Parameter,* Vol. 6 No. 1, 146-157.

Nurhayati, E., Arifin, B., & Mulyasari, W. (2019). Pengaruh intellectual capital terhadap kinerja keuangan di industri perbankan yang terdaftar di Bursa Efek Indonesia dengan competitive advantage sebagai variabel intervening. *Tirtayasa Ekonomika*, Vol. 14 (1), 1-25.

Organization for Economic Cooperation and Development. (1999). *International Symposium on Measuring and Reporting Intellectual Capital: Experience, Issues and Prospects*. Amsterdam: 9-11 June 1999.

Otoritas Jasa Keuangan. (2020). Peraturan Otoritas Jasa Keuangan Nomor 18/POJK.03/2020 tentang Perintah Tertulis untuk Penanganan Permasalahan Bank. *Otoritas Jasa Keuangan*.

Otoritas Jasa Keuangan. (2022). Statistik Perbankan Indonesia Tahun 2020-2022. *Otoritas Jasa Keuangan*.

Ousama, A. A., Hammami, H., & Abdulkarim, M. (2020). The association between intellectual capital and financial performance in the Islamic banking industry: An analysis of the GCC banks. *International Journal of Islamic and Middle Eastern Finance and Management*, Vol. 13, No. 1, pp. 75-93. https://doi.org/10.1108/IMEFM-05-2016-0073.

Ozkan, N., Cakan, S., & Kayacan, M. (2016). Intellectual Capital and financial performance: A study of the Turkish banking sector. *Borsa Istanbul Review*, Vol.17 (3), 190-198.

Penrose, E. (1959). *The theory of the growth of the firm*. Oxford: Basil Blackwell.

Poh, L. T., Kilicman, A., & Ibrahim, S. N. I. (2018). On intellectual capital and financial performances of banks in Malaysia. *Cogent Economics & Finance*, 6:1, 1453574.

Pulic, A. (2000). VAIC™: An accounting tool for IC management. *International Journal of Technology Management*, Vol. 20, 702-714.

Putri, S. D., & Nuzula, N. F. (2019). Pengaruh intellectual capital terhadap kinerja keuangan dan nilai perusahaan: Studi pada perusahaan sektor manufaktur yang terdaftar di Bursa Efek Indonesia periode 2012-2017. *Jurnal Administrasi Bisnis,* Vol. 66 No. 1, 28-36.

Rahim, A., Atan, H., & Kamaluddin, A. (2017). Human capital efficiency and firm performance: An empirical study on malaysian technology industry. *SHS Web Conf*, Vol. 36, No 26, pp. 1-11.

Riahi-Belkaoui, A. (2003). Intellectual capital and firm performance of US multinational firms: A study of the resource-based and stakeholder views. *Journal of Intellectual Capital*, Vol. 4 No. 2, pp. 215-226. https://doi.org/10.1108/14691930310472839.

Roos, J., Roos, G., Dragonetti, N. E., Leif, E. (1997). *Intellectual Capital: Navigating in the New Business Landscape*. London: Macmillan Publications.

Rusmawan, RIN., Setiawan, I., & Ruhadi. (2023). The effect of Intellectual Capital on financial performance with Corporate Social Responsibility as moderating variable: Studies on Islamic commercial banks. *Indonesian Journal of Econommics and Management,* 3(2), 439-449.

Shahwan, T. M., & Habib, A. M. (2020). Does the efficiency of corporate governance and intellectual capital affect a firm's financial distress? Evidence from Egypt. *Journal of Intellectual Capital*, Vol. 21 No. 3, pp. 403-430. https://doi.org/10.1108/JIC-06-2019-0143.

Siregar, H., & Fajrillah. (2020). Pengaruh intellectual capital terhadap kinerja keuangan perusahaan di Indonesia. *Literasi Jurnal Ekonomi dan Bisnis,* Vol. 2, No. 1, 167-173.

Sorongan, F. A. (2021). Bagaimana intellectual capital mempengaruhi kinerja perusahaan pada perbankan di Indonesia?. *INOBIS: Jurnal Inovasi Bisnis Dan Manajemen Indonesia*, Vol. 5(1), 35 - 46. https://doi.org/10.31842/jurnalinobis.v5i1.210.

Sveiby, K. (2001). A knowledge-based theory of the firm to guide in strategy formulation. *Journal of Intellectual Capital*, Vol. 2 (4), 344-358.

Usman, H., & Mustafa, S. W. (2019). Pengaruh intellectual capital terhadap kinerja keuangan dan nilai pasar perusahaan yang listed di Jakarta Islamic Index. *AkMen Jurnal Ilmiah*, 16(4), 529–535.

Wahyudi, I., & Lydina, E. H. (2023). Intellectual capital and transforming business banking. *Jurnal Aset (Akuntansi Riset),* 15(1), 99-110. http://ejournal.upi.edu/index.php/aset/.

Weqar, F., Sofi, Z. A., & Haque, S. M. I. (2021). Nexus between intellectual capital and business performance: Evidence from India. *Asian Journal of Accounting Research*, Vol. 6, No. 2, pp. 180-195. https://doi.org/10.1108/AJAR-07-2020-0064.

Widoatmodjo, S., & Setyawan, I. R. (2023). Special treatment to bank CEOs in Indonesia. *Academic Journal of Interdisciplinary Studies,* Vol. 12 (2), 137-147. https://doi.org/10.36941/ajis-2023-0037.

Xu, J., & Wang, B. (2018). Intellectual capital, financial performance and companies' sustainable growth: Evidence from the Korean manufacturing industry. *Sustainability 2018,* 10 (12), 4651, 1-15. https://doi.org/10.3390/su10124651.

Zakaria, G. A., & Djoko, H. (2015). Pengaruh intellectual capital terhadap kinerja perusahaan: Studi kasus pada perusahaan industri barang konsumsi yang tercatat di BEI tahun 2012-2014. *Jurnal Ilmu Administrasi Bisnis*, Vol. 6 (1), 309-321. https://doi.org/10.14710/jiab.2017.14590.