INTELLECTUAL CAPITAL DETERMINANT TOWARDS COMPANY'S COMPETITIVE ADVANTAGE AND PERFORMANCE AND ITS IMPACT ON COMPANY'S VALUES

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ABSTRACT

The purpose of this study is to analyze the effect of intellectual capital on competitive advantage, the effect of intellectual capital and competitive on company performance, the effect of competitive advantage and company performance on firm value, and the effect of intellectual capital mediation on company performance through competitive advantage. This type of research is an explanatory research with a quantitative approach to determine the effect of intellectual capital on competitive advantage and company performance and its impact on firm value. In testing the hypothesis of this study using statistical analysis, path analysis and panel regression. The population in this study are banks listed on the IDX in 2017, amounting to 43 banks. Based on the sample criteria, 37 banks were selected as research objects. The results of this study prove that (1) Value added capital employed (VACA) and Structural capital value added (STVA) have no effect on competitive advantage. Value added human capital (VAHU) influences competitive advantage; (2) Value added capital employed (VACA), structural capital value added (STVA) and value added human capital (VAHU) affect the company's performance. While competitive advantage has no effect on company performance; (3) Competitive advantage has no effect on firm value, while company performance has an effect on firm value; and (4) VAHU, VACA, and STVA indirectly affect the company's performance through unsupported competitive advantage because the path Y1 to Y2 is not significant. Thus, competitive advantage cannot mediate the effect of intellectual capital on company performance. This study shows that value added human capital (VAHU) as an indicator of intellectual capital needs to be improved to improve competitive advantage and performance of banks. In an effort to improve the performance and value of shares, the involvement of shareholders is very important in supporting the company's commitment so that banking performance can survive in any condition and increase the value of the company to attract investors.

Keywords: Intellectual Capital, Competitive Advantage, Company Performance, and Firm Value.

INTRODUCTION

Banking company's performance is still not showing a solid improvement. Banking credit only reached IDR 4,491 trillion in June 2017 the growth is declining 97 bps compared to the annual growth the previous month become 7.75% year on year. The declining of Indonesian Central Bank (Bank Indonesia) benchmark interest rate in August 2017 to 4.5% is giving a positive sentiment to financial industry which is still overshadowed by the uncertainty of global economic condition. According to banking data until June 2017, banking company's performance is still not showing a consistent improvement (Laporan perekonomian dan perbankan, 2017). Evaluating such condition, Bank Indonesia later implemented an international standard risk management practice to create a comprehensive banking system. There are five risk management principles adopted by Bank Indonesia; objective, measured, integrated, dynamic, and provide added value (Laporan perekonomian dan perbankan, 2017).

Providing added value for the company as one of the risk management principles which can be achieved by having intellectual capital. Survilaite, et al (2015) argued that in the past two decades, economic literature about modern business model has developed a new category for resources, that is intangible resources which one of them includes intellectual capital. Intellectual capital as intangible asset is claimed to have greater values for the company compared to tangible assets (Agostini et al, 2017).

The importance of having intellectual capital is in line with resource-based view theory which stated that company's internal capability to maintain company's resources is significant and necessary for the company to be able achieving competitive advantage despite tough competitions in its surroundings. If a company has a good capability, it is guaranteed that company's resource management will be better and in near future, company can achieve its competitive advantage (Mulyono, 2013). Resource-based theory provides an understanding that intellectual capital is a unique resource for the company to boost its competitive advantage and create values for company to conduct and implement strategy to improve its performance. The relations between intellectual capital and competitive advantage further explained by Khan, et al (2018) that intellectual capital has positive impact towards competitive advantage. Pratama and Achmad (2015) also argued that competitive advantage has a role to mediate the relations between intellectual capital and company's performance (ROA).

A better company's performance, which is influenced by intellectual capital, can be assessed from company's greater profitability. Even though in the beginning of this research it is argued that banking company is still not showing any solid performance improvement and is overshadowed by the uncertainty of global economic condition, in fact banking company shows improvement in profitability throughout 2016-2017 after facing a decreasing profit in 2015 (see Table 1). This proofs that banking company has intellectual capital which creates added value to be more competitive and show good performance. Table 1 below shows the banking industry profitability improvement:

Table 1: The Banking Industry Profitability Improvement 2014-2017

Year	Before Tax		After Tax	
	Semester I	Semester I	Semester I	Semester II
2014	73,47 T	70,11 T	58,43 T	53,72 T
2015	64,39 T	69,04 T	50,84 T	53,83 T
2016	69,89 T	67,58 T	54,62 T	51,92 T
2017	82,85 T	-	65,66 T	-

Source: Economic and banking reports (2017)

The increasing banking company's profitability on the table above proves that banking company has improved their performances and they were able creating added value to be more competitive despite global economic uncertainties. The banking company's ability in surviving amid the uncertainties of global economic condition leads this research to assess intellectual capital's influence towards banking company's competitive advantage and performance shown by profitability (ROA). Previously, Belkoui (2003) analyzed intellectual capital of multinational companies in the U.S. which resulted to prove that intellectual capital has positive impact towards company's performance. A research by Tudor, et al (2014), which compared intangible assets to ratio total assets and other profitability measurements such as Return Assets (ROA), also resulted that intangible assets have direct relations with profitability. Gaining competitive advantage and an ability to maintain profitability are company's goal. This goal also includes maximizing company's assets and values which able to increase the shares among shareholders (Sucuahi and Cambarihan, 2016).

Based on above explanation, intellectual capital can influence company's competitive advantage, performance, and value. A study about intellectual capital and its positive impacts for banking company is becoming more interesting to analyze following the fact that despite global economic competition and uncertainties, banking companies can still maintain their profitability which may have strong relations with intellectual capital they have. This research will study the title "Intellectual Capital Determinant towards Company's Competitive Advantage and Performance and its Impact on Company's Values (Case Study on Registered Banking Companies in Indonesia Stock Exchange)" and answer the questions about 1) whether intellectual capital influences company's performance and competitive advantage and 2) whether company's performance and competitive advantage influence the company's values. Along with proposed research question of this paper, therefore the purposes of this research are:

1. To analyze the impact of intellectual capital towards competitive advantage of registered banking companies in Indonesia Stock Exchange.
2. To analyze the impact of intellectual capital and competitive advantage towards the performance of registered banking companies in Indonesia Stock Exchange.
3. To analyze the impact of company's competitive advantage and performance toward the value of registered banking companies in Indonesia Stock Exchange.
4. To analyze indirect impact of intellectual capital towards company's performance through competitive advantage

LITERATURE REVIEW

Several theoretical reviews will be used to support this research. There are grand theory, middle theory, and applied theory explained as follows:

Resource-Based Theory

Resource-Based Theory confirms that variable Intellectual Capital (IC) is suitable with the criteria of unique resources that can create company's competitive advantage and value to conduct and implement strategy to boost its performance better. Resource-Based Theory claims that a company's performance will be optimal if the company has competitive advantage that is valuable for the company. Competitive advantage is something that is attached to the company and hard to be copied by other companies. A company can have its competitive advantage if they have a good ability in resources management which this theory believes every company has the ability (Penrose, 1959). The types of resources every company needs to manage include assets, employee's individual ability and skills, knowledge on technology, organizational process, as well as other information needed to implement company's strategy in creating more efficient and effective company.

Legitimacy Theory

It is argued that in order to gain legitimacy or when a company has special needs to be fulfilled, a company tends to show its intellectual capital to attract or get what it needs. This phenomenon indicates that tangible assets are not always useful for the company to gather acknowledgement and legitimation of its status. A successful company now is not only determined by its tangible assets, but also intangible assets.

Signaling Theory

Signaling theory firstly introduced by Spence (1973) which explained about the signal of a company and what the signal delivers. Adler (2012) later explained that a company often execute corporation actions to keep the company survive and

operating. Corporation actions by a company include cash dividend, stock offering with right issue, share dividend distribution, as well as acquisition of assets, stock, and other company's business, or other corporation actions. Those corporation actions may send a positive or negative signal, depends on what action a company takes. For instance, if a company chooses to use right issue and sells its stocks since it needs more fund, therefore the action sends a negative signal to the investor. Such action may cause shareholders to sell their shares out of worry for the decline of stock prices.

Stakeholder Theory

This theory accommodates a way to understand stakeholders' interests and describes to other parties that companies are responsible for their operations (Freeman, 1984). Chariri and Ghozali (2007) argued that companies need to maintain good relations with internal and external stakeholders by accommodating their needs and interests. A successful company is determined not only by its ability to maintain good relations with the main stakeholders but also considers the communities and surrounding environment's needs as stakeholder in conducting policies or making decisions.

Intellectual Capital

Stewart (1997) explained that intellectual capital is a formalized intellectual or ability which is useful to produce other valuable assets. Intellectual capital to a company may include, among others, human capital, perspective, information, data, knowledge, explicit and hidden skills, as well as policies. Stewart argued that intellectual capital is divided into three parts, (1) human capital aspect which includes skills, ability, knowledge, and business performance of employees, (2) structural capital aspect includes skill, ability, knowledge, and business performance of a company, and (3) customer capital aspect which includes consumers, suppliers, and government.

To implement the theory and see company's intellectual capital, this research adopts VAIC method by Public (1998). VAIC method was designated to provide various information for the company about value creation efficiency through tangible and intangible assets. VAIC explains the way a company creates value added which is gained by calculating the difference between output and input. Outputs are including revenue and all company's products and/or services in the market. Whereas inputs are including all expenditures cost to gain income, excluding costs related to employees. On the other hand, employees are acknowledged as one of the entities of value creating process. Value added created by a company highly is influenced by the efficiency of Human Capital (HC) and Structural Capital (SC), which later will be called as VACA. VACA is considered as an indicator for value added which created by a unit of physical capital (Pulic, 1998).

Pulic (2008) later explained that knowledge-based economic is necessary to be able explaining the differences between knowledge and intellectual capital. Something can be considered as a capital for a company if it can create new value. Knowledge will not be considered as an intellectual capital if it is not transformed into actions to create value which attract market demand. In other words, intellectual capital is beyond a mere knowledge, it is a knowledge that is transformed and manifested into business actions that can bring benefits and salable in the market. In modern economy, intellectual capital is brought by employees who can create and change their knowledge on products and services to create new values. Employees, therefore, have a significant role for a company and need to be treated as valuable as physical modal and assets, since they are valuable investments for company's business operations durability based on knowledge.

VAIC from Pulic (1998) is adopted to analyze intellectual capital aspect in this research for this method is suitable to assess intellectual capital statistically. Svanadze and Kowalewska (2015) argued that VAIC is an objective method since the data used for the necessary calculation are gathered directly from company's financial report. Every company has financial report, therefore it is possible to compare one company's result with the other. Additionally, financial report as the main data resource can be verified to decide whether it is reliable or not. This method is transparent, simple, and easy to use. VAIC works well in assessing a correlation between intellectual capital and company's business performance (Svanadze and Kowalewska, 2015).

Competitive Advantage

Competitive Advantage is a fundamental part of a good performance (Al, et al, 2010). A company has competitive advantage if it has the ability to increase its products quality, cut the production costs, or enlarge market share or profit (Grup and Rose, 2010). Smith (2013) described a competitive advantage is about the extent of a company in a certain area can compete with other companies elsewhere. In practical or business operational, competitive advantage is useful for a company to manage its resources, stay active and developing, as well as be more competent than its competitors (Sachitra and Chong, 2015). Along with the argument, Meutia (2012) explained that competitive advantage has three characteristics; durability, difficult to imitate, and difficult to identify.

Company's Performance

A company's performance is determined by its effectiveness and efficiency within a certain period to achieve an optimal result according to their goals. A good company's performance is shown by the effective and efficient company's operational activities that also create great or optimal profit for the company (Siegel and Shim, 1999). To measure a company's performance, one can see from its profitability level. Measuring company's profitability can use various indicators, one of them is ROA that is a ration to Measure Company's performance by accommodating numerous types of stakeholders, from manager, creditor, and investor.

Company's Values

Company's values are defined as investors' perceptions on company, specifically about the stock prices. High stock prices indicate the high company's values. Such condition is in line with what the stakeholders expect. Maximizing company's values, which also means increasing stakeholders' prosperity (Salvatore, 2005), can be achieved by managing and combining the resources they have (Hellmann, 2005). Price Book Value (PBV) will be used as the indicator to assess company's values in this research.

THEORETICAL FRAMEWORK AND HYPOTHESES

Value Added Capital Employed (VACA)'s Influence towards Competitive Advantage

Resource-Based Theory approach explains that a company can excel the business competition by owning, controlling, and utilizing strategic and significant assets, both tangible and intangible. Intellectual capital is one of the strategic intangible assets owned by the company which is resourced from human capital or the values and knowledge owned by employees. Intellectual capital is strategic since it can increase the company's competitiveness. Based on the research done by Pratama and Achmad (2015), employees' value added (VACA) has a positive influence towards company's competitive advantage. Referring to the theoretical and empirical studies, this research proposes a hypothesis:

H1a: Value Added Capital Employed (VACA) is influential towards competitive advantage.

Value Added Human Capital (VAHU)'s Influence towards Competitive Advantage

A good company's capability defines company's performance, which is determined by resources owned by the company. If the company owns and manages good resources, it is likely to boost company's capability and performance to gain competitive advantage (Mulyono, 2013). In business, abilities, skills, and capacity owned by individuals, or popularly known as human capital, are also considered as important resources to business productivity. A research by Pratama and Achmad (2015) proved that value added human capital (VAHU) has a positive influence towards company's competitive advantage. Based on theoretical and empirical studies, this research proposes a hypothesis:

H1b: Value Added Human Capital (VAHU) is influential towards competitive advantage.

Structural Capital Value Added (STVA)'s Influence towards Competitive Advantage

Empirical study by Pratama and Achmad (2015) proved that structural capital value added has a positive influence towards competitive advantage. Based on theoretical and empirical studies, this research proposes a hypothesis:

H1c: Structural Capital Value Added (STVA) is influential towards competitive advantage.

Value Added Capital Employed (VACA)'s Influence towards Company's Performance

Bontis, et al (2002) argued that customer capital, which consists of consumer, supplier, and government, influences company's performance. Beside customer capital, intellectual capital is also a significant aspect for the company increasing its performance. Routine evaluation for assessing the business resources, including intellectual capital and customer capital, is needed to help the managers understand the condition and status of their business resources. By understanding their resources efficiently and effectively, managers can build good relations with investors (Svanadze and Kowalewska, 2015) which then can improve their business performance. Resource-based approach argues that company's financial performance will get better if the company is able to own, control, and utilize tangible and intangible strategic assets. Therefore, a company is expected not to neglect the importance of human capital which consists of both combination, tangible asset for its individual physics of each employee and intangible asset for their skills, knowledge, and power. A good managed tangible and intangible resources can be useful to create a better company's performance to make higher profitability (Wijayani, 2017).mReferring to the empirical study done by Afandi and Riharjo (2017), value added capital employed (VACA) influences company's performance. The argument is also supported with the findings of the research done by Devi, et al (2017), that VACA is significantly influential towards company's financial performance. Based on the theoretical and empirical studies, this research proposes a hypothesis:

H2a: Value Added Capital Employed (VACA) is influential towards company's performance.

Value Added Human Capital (VAHU)'s Influence towards Company's Performance

Human capital is argued to be a significant factor in doing business (Bontis, et al, 2000). Talking about human capital is highly correlated with intellectual capital as each individual carries skills and knowledge that are important to boost company's performance. Svanadze and Kowalewska (2015) pointed out that intellectual capital is still rarely presented in company's financial report and accounting system for it is intangible. Where in fact, intangible assets are mostly acknowledged by the investors and are one of the main considerations for company and shareholders to make strategic decisions.

Martins and Lopes (2016) conducted a research to measure European companies' profitability using ROA and provided results that show there is a strong relation between company's knowledge and company's ability to make profit. Their research found significant differences between company's profitability and values measured by including intangible assets and the result measured only by including tangible assets. Their findings support the traditional economic argument that resources owned by the company determine company's performance and profitability. In this case, resources are not limited only to the tangible ones but also intangible such as intellectual capital owned by each human individual. Based on the theoretical and empirical studies, this research proposes a hypothesis:

H2b: Value Added Human Capital (VAHU) is influential towards company's performance.

Structural Capital Value Added (STVA)'s Influence towards Company's Performance

Bontis, et al (2000) and Devi, et al (2017) argued that structural capital value added (has a positive impact towards company's performance. A company is expected to have organizational capacity to build a condition that support the employees to optimize intellectual capital and other resources management. It is important to have structural capital and creating favorable condition mentioned above because material and intellectual capitals are significant for company's future profitability and performance (Martins and Lopes, 2016). Based on theoretical and empirical studies, this research proposes a hypothesis:

H2c: Structural Capital Value Added (STVA) is influential towards company's performance.

Competitive Advantage's Influence towards Company's Performance

In order to achieve sustainable competitive advantage in the global market, a company needs to enact the competitive and differentiation strategy firmly by the decision maker (Yasar, 2010). Competitive advantage has a positive relation with company's performance (Majeed, 2011). Organizational competition pushes companies to be able creating opportunities to gain greater profit out of other organizations' activities or often called as gaining competitive advantage, which is why companies need to find new method in improving their performances.

Intellectual capital is an important aspect in supporting company's performance and gaining competitive advantage. Diva and Mitha (2014) conducted a study about intellectual capital's influence towards banking company's values on financial performance as the intervening variable, which supported the previous statement. Their research is using VAIC method by Pulic and measuring company's values with PBV. Their findings show that intellectual capital is having a positive influence towards company's market values and positive financial performance which can affect and mediate the relations between intellectual capital and company's market values.

Competitive advantage

In dynamic market, competitive advantage is significant for companies, especially the new ones. A research by Khan, et al (2018) shows that a new company tends to look for strategy and competitive skills to make sure their organization operates and sustains for a long term as well as avoiding failures. The result shows us that competitive advantage is highly influential towards company's performance. Based on theoretical and empirical studies, this research proposes a hypothesis:

H2c: Competitive advantage is influential towards company's performance.

Competitive Advantage's Influence towards Company's Values

Resource-based theory explains that in order to gain competitive advantage amid tougher business competitions, a company needs to have a good capability to manage their resources well (Multono, 2013). The same thing goes to managing intellectual capital as one of the unique resources well, it can create competitive advantage and values for the company. Based on theoretical and empirical studies, this research proposes a hypothesis:

H3a: Competitive advantage is influential towards company's values.

Company's Performance's Influence towards Company's Values

A good company's performance, which is shown in its higher profitability, reflects that they have high company's values. Theory of the firm (1952) states that if a company wants to make higher profitability, it needs to increase its company's values. Sabrin, et al (2016) proved that profitability may affect company's values since it means bringing more profit to the company and able to pay the dividend. The ability to pay the dividend gives a positive signal from the company to the investors and increasing the stock prices.

It is the job of company's management to make sure the company creates and increases values for their shareholders. A research about value creation needs to be prioritized since it is useful to help companies in increasing their competitive advantage. From the basic notion, gathered from the researches of Diva and Mitha (2014), Repi, et al (2016), and Chen and Yu (2011), where profitability affects the company's values, it also indicates that improving company's performance can also create company's values, since company's performance can be judged by their profitability. Having good company's values can attract more investors and stakeholders to support the company's business activities. Therefore, it is important for companies to determine

their values in order to attract investments (Sucuahi and Cambariha, 2016).mBased on theoretical and empirical studies, this research proposes a hypothesis:

H3b: Company's performance affects company's values.

Indirect Influence of Value Added Capital Employed (VACA) towards Company's Performance through Competitive Advantage

Creating values should be prioritized to be the main agenda done by company's management to help the organization achieve higher competitive advantage. Values can be created by improving company's performance. Having good company's values can attract more investors and stakeholders to support the company's business activities. Therefore, it is important for companies to determine their values in order to attract investments (Sucuahi and Cambariha, 2016).

Chen, et al (2011) studied about the company's competitive advantage's influence as the intervening factor between intellectual capital and company's performance. The research showed that the intervening effect of competitive advantage on the relations between intellectual capital and company's performance is fulfilling the intervening condition. Chen's argument is supported by Pratama and Achmad (2015) who argued that competitive advantage is mediating the relations between VAIC and company's performance measured by ROA. Value added capital employee (VAHU) has a positive influence towards competitive advantage. Based on the theoretical and empirical studies, this research proposes a hypothesis:

H4a: Value Added Capital Employed (VACA) is indirectly influential towards company's performance through competitive advantage.

Indirect Influence of Value Added Human Capital (VAHU) towards Company's Performance through Competitive Advantage

A research by Wu (2013) said that intellectual capital is effectively influential in improving company's financial performance. Wu showed that the role of intellectual capital is supporting intangible resources to innovate more to win the business competition. This process will then indirectly improve the company's financial performance.

Khan, et al (2018) conducted a research that explains in dynamic market, a new company tends to look for strategy and competitive skills to make sure their organization operates and sustains for a long term as well as avoiding failures. The result shows us that competitive advantage is highly influential towards company's performance. The same thing goes to intellectual capital and business strategy that positively and significantly contribute to competitive advantage. Competitive advantage is completely bridging the relations between intellectual capital and new business performance. Additionally, it also has a partial mediating role in the relations between business strategy and new business performance. The result shows that internal capability mentioned above plays an important role in the new business.

Pratama and Achmad (2015) said that competitive advantage can mediate the relations between VAIC and company's performance measured by ROA. An empirical study by shows that value added human capital (VAHU) is positively influential towards competitive advantage. Based on theoretical and empirical studies, this research proposes a hypothesis:

H4b: Value Added Human Capital (VAHU) is indirectly influential towards company's performance through competitive advantage.

Indirect Influence of Structural Capital Value Added (STVA) towards Company's Performance through Competitive Advantage

Pratama and Achmad (2015) analyzed the influence of intellectual capital towards company's performance using competitive advantage as the intervening variable. Their research proved that intellectual capital is positively influential towards competitive advantage, and intellectual capital has a positive influence towards company's performance proxied by ROA. Competitive advantage mediates the relations between intellectual capital and company's performance measured by ROA. A research by Yasar (2010) explained that in order to improve the company's performance and gaining competitive advantage amidst global market competition, a competitive strategy needs to be enacted firmly. Additionally, all costs and differentiation strategy need to be enacted collaboratively by decision makers. Majeed (2011) showed that the relations between competitive advantage and company's performance is positive. Diva and Mitha (2014) supported the research findings by Devi, et al (2017) that argued structural capital value added (STVA) is influential towards company's performance. Intellectual capital has a positive influence towards company's market values and positive financial performance which can mediate the relations between intellectual capital towards company's market values. Khan, et al (2018) explained in their research that in a dynamic market, a new company tends to look for strategy and competitive skills to make sure their organization operates and sustains for a long term as well as avoiding failures. The result shows us that competitive advantage is highly influential towards company's performance. Based on the theoretical and empirical studies, this research proposes a hypothesis:

H4c: Structural Capital Value Added (STVA) is indirectly influential towards company's performance through competitive advantage.
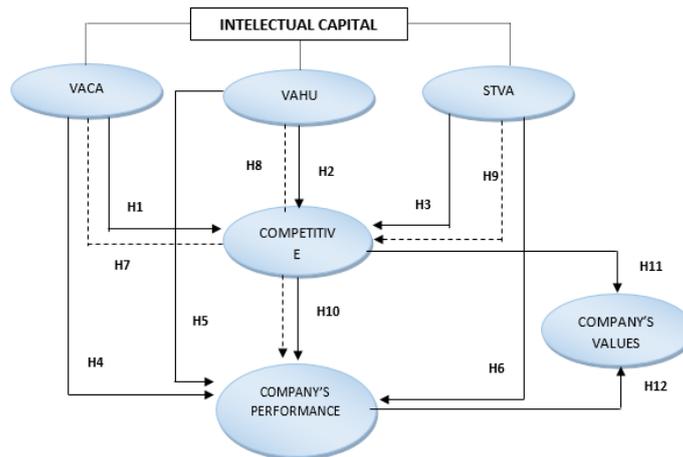
FIGURE 1: CONSEPTUAL FRAMEWORK

Notes:

→ Direct Influence

----→ Indirect Influence

RESEARCH DESIGN

This explanatory research is using quantitative approach to analyze the influence of intellectual capital towards competitive advantage and company's performance as well as its impact on company's values. Statistical path analysis is used in analyzing quantitative data. This research includes numerous companies as the population within three years period of companies' operations which also needs panel regression to help analyzing and discovering the findings.

Population and Sample

All registered banking companies in Indonesia Stock Exchange are included as the population of this research. As for sample, this research adopted sampling purposive technic to determine the sample using several considerations (Sugiyono, 2010). Several considerations mentioned previously are including:

1. Companies that are having routinely published Annual Report throughout 2015-2017. The complete data on their annual reports are necessary for this research in fulfilling all variables needed for this study.
2. Companies that are providing annual reports using Rupiah (IDR) currency, not US Dollar (USD) or others.

The population gathered form registered banking companies in Indonesia Stock Exchange are 43 banks. Whereas based on the criteria considered above, there are 37 banks chosen to be the sample or object of this study. The 37 banks are listed below:

Table 2 Banking Companies as the Objects of this Study

No	Bank	No	Bank
1	Bank Rakyat Indonesia Agroniaga Tbk	20	Bank Mandiri (Persero) Tbk
2	Bank Agris Tbk	21	Bank Bumi Arta Tbk
3	Bank MNC Internasional Tbk	22	Bank CIMB Niaga Tbk
4	Bank Capital Indonesia Tbk	23	Bank Maybank Indonesia Tbk
5	Bank Central Asia Tbk	24	Bank Permata Tbk
6	Bank Harda Internasional Tbk	25	Bank Sinarmas Tbk
7	Bank Bukopin Tbk	26	Bank of India Indonesia Tbk
8	Bank Mestika Dharma Tbk	27	Bank Tabungan Pensiunan Nasional Tbk
9	Bank Negara Indonesia (Persero) Tbk	28	Bank Victoria International Tbk
10	Bank Nusantara Parahyangan Tbk	29	Bank Dinar Indonesia Tbk
11	Bank Rakyat Indonesia (Persero) Tbk	30	Bank Artha Graha Internasional Tbk
12	Bank Tabungan Negara (Persero) Tbk	31	Bank Mayapada Internasional Tbk
13	Bank Yudha Bhakti Tbk	32	Bank Mega Tbk
14	Bank JTrust Indonesia Tbk	33	Bank Mitraniaga Tbk
15	Bank Danamon Indonesia Tbk	34	Bank OCBC NISP Tbk
16	Bank Ina Perdana Tbk	35	Bank Woori Saudara Indonesia 1906 Tbk
17	BPD Jawa Barat dan Banten Tbk	36	Bank Panin Dubai Syariah Tbk
18	BPD Jawa Timur Tbk	37	Bank Pembangunan Daerah Banten Tbk
19	Bank QNB Indonesia Tbk		

Data Type and Resource

This research is using data panel, which combines time series data and cross section. Time series data in this research are including the period of companies' operations from 2015 to 2017, whereas the cross section data shows the number of banking companies included in this study that is 37 banks. Gujarati (1995) explained that using data panel and general overview may avoid and reduce the violations against serial correlation symptom and multi-colinierity. Annual Reports throughout 2015-2017 from the targeted companies are useful for providing secondary data for this study.

Research Variable

Based on the research question, research objective, and hypothesis, the variables used in this study to be analyzed further are:

1.   Intellectual Capital

Intellectual Capital is one of the knowledge contributions to the company's added values and function. This research uses Pulic method in measuring intellectual capital of companies to provide the information of companies' value creation efficiency from their tangible and intangible assets. The company's ability to create value added is one of the objective indicators in assessing the company's success in business and creating values (Pulic, 1998). The formula to count VAIC is provided as follows:

Value Added (VA) = Output – Input
Note:
VA: Value Added
Output: Total sales and income
Input: Costs and expenditures (exclude the labor cost)
Intellectual capital variables are divided into three VAIC variables that consist of VACA, VAHU, and STVA. Each variable is explained below:

a)   VACA (X1)
     Value Added Capital Employed (VACA) is the value added which is created out of a unit of physical capital.

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

Note:
VA = Value Added
CE = Capital Employee (available funds from equity)

b)   VAHU (X2)
     Value Added Human Capital (VAHU) determines how many values added (VA) a company can make from their expenditure on labor cost.

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

Note:
VA = Value Added
HC = Labor cost

c)   STVA (X3)
     Structural Capital Value Added (STVA) shows how structural capital contributes in company's value creation.

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

Note:
VA = Value Added
HC = Labor cost
SC = VA – HC

2.   Competitive Advantage (Y1)

Competitive advantage is a company's capability in improving the quality of their products/services, reducing cost, enlarging market share and gaining higher profitability, as well as to what extent a company can compete with other companies elsewhere. In measuring competitive advantage, this research uses Assets Utilization Ratio which measure the extent of banking company's managerial capability in managing assets for gaining operating and non-operating income.

$$Assets\ Utilizatio\ n = \frac{Operating\ income\ +\ Non\ Operating\ income}{Total\ Assets}$$

3.   Company's Performance

Profitability reflects how the company's performance is. Therefore, knowing the profitability ratio is intended to measure the efficiency of company's activities and capability in profit making. Profitability ratio in this research is proxied by Return Ori Asset (ROA) which shows how much after-tax net income or profit to total assets (Manurung dan Rahardja, 2005).

$$ROA = \frac{\text{Net Income}}{\text{Total Aset}}$$

4.   Company's Values

Company's Values are determined by how the investors' perceptions toward company's level of success. A high company's value is reflected by, among others, price book value (PBV) which shows the company's current and future prospect performance.

$$PBV = \frac{\text{Harga Saham}}{\text{Book Value}}$$

DATA ANALYSIS METHOD

This research uses statistical path analysis. In such analysis, the relations among variables are shown by several coefficient path (ρij) where this coefficient is equivalent with the standardized beta coefficient (ß). This technic allows a study on the direct and indirect influences among variables (Riduwan, 2014).

1.   Decomposition Model
     Decomposition model emphasizes the causality influences among variables, both direct and indirect, within path analysis framework. Decomposition path analysis calculation on the causal influences among variables is differentiated into three as follows:
     a.   Direct causal influence is the influence of exogenous variable towards endogenous variable which occurs without going through other endogenous variables.
     b.   Indirect causal influence is the influence of exogenous variable towards endogenous variable which occurs through other endogenous variables.
     c.   Total causal influence is the accumulation of direct and indirect causal influences.

2.   Path Analysis Steps

     a.   Formulating hypotheses and structural equations. The hypotheses are:
          1.   VACA is influential towards competitive advantage.
          2.   VAHU is influential towards competitive advantage.
          3.   STVA is influential towards competitive advantage.
          4.   VACA is influential towards company's performance.
          5.   VAHU is influential towards company's performance.
          6.   Competitive advantage is influential towards company's performance.
          7.   Competitive advantage is influential towards company's values.
          8.   Company's performance is influential towards company's values.
          9.   VACA is indirectly influential towards company's performance through competitive advantage.
          10. VAHU is indirectly influential towards company's performance through competitive advantage.
          11. STVA is indirectly influential towards company's performance through competitive advantage.
     b.   Causal path analysis equation
          1.   Structural Path Equation 1
               The causal relations equation among X_1, X_2, X_3 and Y_1 is
               $Y_1 = \rho y_1 x_1\ X_1 + \rho y_1 x_2\ X_2 + \rho y_1 x_3\ X_3 + \rho y_1\ \mathcal{E}_1$
               Notes :
               $\rho y_1 x_1$ = Coefficient Path X_1 with Y_1
               $\rho y_1 x_2$ = Coefficient Path X_2 with Y_1
               $\rho y_1 x_3$ = Coefficient Path X_3 with Y_1
               X_1 = VACA
               X_2 = VAHU
               X_3 = STVA

Y_1 = Competitive advantage

2. Structural Path Equation 2
The causal relations equation among X_1, X_2, X_3, Y_1 and Y_2 is
$Y_2 = \rho y_2 x_1\, X_1 + \rho y_2 x_2\, X_2 + \rho y_2 x_3\, X_3 + \rho y_2 Y_1 + \rho y_2\, \mathcal{E}_2$
Notes :
py_2x_1 = Coefficient Path X_1 with Y_2
py_2x_2 = Coefficient Path X_2 with Y_2
py_2x_3 = Coefficient Path X_3 with Y_2
$\rho y_2 Y_1$ = Coefficient Path Y_1 with Y_2
X_1 = VACA
X_2 = VAHU
X_3 = STVA
Y_1 = Competitive advantage
Y_2 = Company's Performance

3. Structural Path Equation 3
The causal relations equation among Y_1, Y_2, and Z is
$Z = \rho z y_1\, Y_1 + \rho z y_2\, Y_2 + \rho z\, \mathcal{E}_3$
Notes :
$Pz y_1$ = Coefficient Path Y_1 with Z
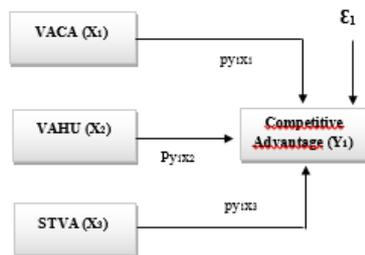$pz y_2$ = Coefficient Path Y_2 with Z
Y_1 = Competitive advantage
Y_2 = Company's performance
Z = Company's values

4. Counting coefficient path with a complete drawing of path

Figure 2: Path Diagram I

From the coefficient path equation II result, causal empirical relations among variables X_1, X_2, X_3, and Y_1 toward Y_2 can be depicted as follows:

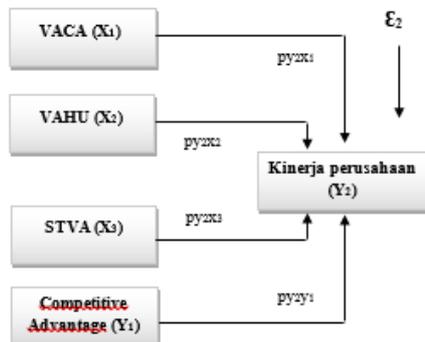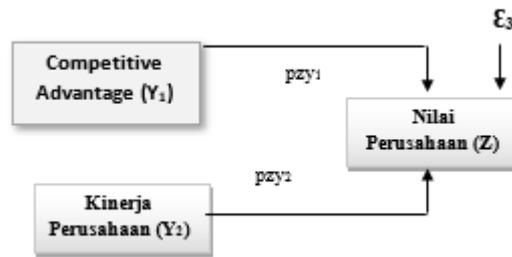**Figure 3: Path Diagram II**

Figure 4: Path Diagram III

Parameter estimation or the equation of coefficient path adopts the standardized coefficient beta.

3. Hypotheses Test Steps
   a) Determining null hypothesis (Ho) and alternative hypothesis (Ha)
   b) Significance level using sig 0.05.
   c) T table equation = df (n-k-1)
   d) Decision making on hypotheses
      ❖ If t value > t table, therefore Ha is accepted.
      ❖ If t value < t table, therefore Ho is accepted
4. Trimming Model
   Trimming model is one of the methods to correct and improve the structural model path analysis by excluding exogenous variables that have insignificant coefficient path. Trimming model occurs when each variable's coefficient path has been tested and found the insignificant variable (Riduwan, 2014).

FINDINGS

This part provides the data analysis, hypotheses tests, and further study of the results from data processing with statistical descriptive and panel data regression through eviews 9 program.

1. **Variable Description**
   Statistical descriptive gives a description of data based on mean, deviation standard, maximum, and minimum. A description on variables is presented on the Table 3 below:

Table 3 Statistical Descriptive

Table 3
Statistical Descriptive

Variabel	Mean	Deviation Standard	Maximum	Minimum
Company's values	1.5200	1.0472	5.4500	0.2800
Company's performance	0.6986	2.7692	4.1900	2.4473
Competitive advantage	0.1620	0.3509	2.4473	0.0282
VACA	1.0785	4.9592	50.470	-0.1335
VAHU	4.5599	2.6085	14.284	-0.5464
STVA	0.7099	0.4766	3.3872	-1.7168

2. **Panel Regression Equation I Result**

   a) **Regression Equation Model I Result**
      The first research question in this study is questioning the influence of intellectual capital which consists of VACA, VAHU, and STVA towards competitive advantage. The estimation result presented below is expected to answer the proposed hypotheses H1a, H1b, and H1c in this research. Based on the implemented chow test, "fixed affect" is chosen as the regression model out of "common effect regression" as the other option. The fixed effect regression result is presented on the Table 4 below:

Table 4 Regression Equation I Result

Variable	Fixed Effect	
	Coefficient	Prob
Value added capital employed (VACA)	0.0032	0.4473
Value added human capital (VAHU)	0.0034	0.0000
structural capital value added (STVA)	0.0001	0.2032
R-squared	0.9746	
Adjusted R square	0.9607	
N	111	
F-statistic	70.204	
Prob F statistic	0.0000	

Note: Competitive advantage presents as dependent variable

b) Chow Test

Chow test is executed towards Common Effect Model and Fixed Effect Model which resulted as follows:

Table 5
Chow Test Result

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	70.731302	(37,73)	0.0000

Chow statistical test on regression equation I resulted that probability score of Cross-section F is 0.000 < 0.05, which then determined Fixed Effect Model is used in this research. Whereas the fixed effect regression model result is presented on Table 4 above.

3. Panel Regression Equation II Result

a) Regression Equation Model II Result

The second research question proposed in this research is aimed to analyze the intellectual capital and competitive advantage's influence towards company's performance. The estimation result is expected to answer the proposed hypotheses H2a, H2b, H2c, and H2d in this research. Based on the chow test, "fixed effect" is chosen to be the model used in this research rather than "common effect regression." Below is Table 6 shows the result of fixed effect regression:

Table 6 Regression Equation II Result

Variable	Fixed Effect	
	Coefficient	Prob
Value added capital employed (VACA)	-0.2842	0.0000
Value added human capital (VAHU)	0.6609	0.0093
Structural capital value added (STVA)	-1.1963	0.0039
Competitive Advantage	-0.8620	0.3605
R-squared	0.8327	
Adjusted R square	0.7371	
N	111	
F-statistic	8.71	
Prob F statistic	0.0000	

Note: Company's performance as the dependent variable.

b) Chow Test

Chow test is used towards Common Effect Model and Fixed Effect Model as the result is provided below on Table 7:

Table 7 Chow Test Result

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	6.773339	(36,70)	0.0000
Cross-section Chi-square	166.543145	36	0.0000

The statistical chow test on regression equation II shows the probability score on cross-section F in the amount of 0.000 < 0.05, which makes "fixed effect model" is chosen for this research. The result of fixed effect regression model is shown on Table 6 above.

4. Panel Regression Equation III Result

a) Regression Equation Model II Result

The third research question proposed in this study is aimed to analyze the influence of competitive advantage and company's performance towards company's values. The estimated result is expected to answer the

proposed hypotheses H3a and H3b in this research. Based on the chow test, "fixed effect" is chosen to be the model used in this research rather than "common effect regression." Table 8 below shows the fixed effect regression result:

Table 8
Regression Equation III Result

Variable	Fixed Effect	
	Coefficient	Prob
Competitive Advantage	-0.4324	0.6914
Company's Performance	0.0361	0.0000
R-squared	0.9719	
Adjusted R square	0.9571	
N	111	
F-statistic	65.603	
Prob F statistic	0.0000	

Note: Company's values as the dependent variable

b) Chow Test

This research uses the chow test on Common Effect Model and Fixed Effect Model as the result is provided below on Table 9:

Table 9 Chow Test Result

Redundant Fixed Effects Tests
Equation: Untitled
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	51.185916	(36,72)	0.0000

Statistical chow test result on the regression equation III shows the cross-section F scores $0.000 < 0.05$, which makes "fixed effect model" is chosen for this research. The result of fixed effect regression model is shown on Table 8 above.

5. Hypotheses Tests

All the regression equation I, II, III results, which use fixed effect model (FEM) as explained above, will be used to contest the proposed hypotheses in this research. The results from fixed effect regression model as well as the list of hypotheses tests are presented below on Table 10:

Table 10 Hypotheses Tests Results

Hypotheses	Coefficient	P value	Notes
Structural Equation I			
H1a: Value added capital employed (VACA) is influential towards competitive advantage.	0.0032	0.4473	H1a declined
H1b: Value added human capital (VAHU) is influential towards competitive advantage.	0.0034	0.0000	H1b approved
H1c: Structural capital value added (STVA) is influential towards competitive advantage.	0.0001	0.2032	H1c declined
Structural Equation II			
H2a: Value added capital employed (VACA) is influential towards company's performance.	-0.2842	0.0000	H2a approved
H2b: Value added human capital (VAHU) is influential towards company's performance.	0.6609	0.0093	H2b approved
H2c: Structural capital value added (STVA) is influential towards company's performance.	-1.1963	0.0039	H2c approved
H2d: Competitive advantage is influential towards company's performance	-0.8620	0.3605	H2d declined
Structural Equation III			
H3a: Competitive advantage is influential towards company's values.	-0.4324	0.6914	H3a declined
H3b: Company's performance is influential towards company's values.	0.0361	0.0000	H3b approved

The hypotheses test result table above shows that value added human capital (VAHU) is influential towards competitive advantage and company's performance. On the other hand, competitive advantage is not influential

towards company's performance and values. Value added capital employed (VACA) does not have influence towards competitive advantage, yet significantly influential towards company's performance. Whereas structural capital value added (STVA) is not influential towards competitive advantage, but significantly influential towards company's performance. Lastly, company's performance has a significant influence towards company's values.

6. Indirect Influences Hypotheses Test

The hypotheses test in this research uses path analysis method. This analytical technic examines the amount of contribution shown by the coefficient path on each path diagram of the causal inter-relations and indirect relations. Table 11 below summarizes the equation I, II, and III path analysis results:

Table 11 Indirect Influences Hypotheses Test Result

Influences Among Variables (Model)	Causal Influences		Notes
	Direct Influences	Indirect Influences	
H4a: Value added capital employed (VACA) is indirectly influential towards company's performance through competitive advantage.	X_1's path towards Y_1 is insignificant.	X_1's path towards Y_2 through Y_1 is insignificant.	H4a is declined for all paths are proved as insignificant.
H4b: Value added human capital (VAHU) is indirectly influential towards company's performance through competitive advantage.	X_2's path towards Y_1 is significant.	X_2's path towards Y_2 through Y_1 is insignificant.	H4b is declined for there is an insignificant path.
H4c: Structural capital value added (STVA) is indirectly influential towards company's performance through competitive advantage.	X_3's path towards Y_1 is insignificant.	X_3's path towards Y_2 through Y_1 is insignificant.	H4c is declined for all paths are insignificant.

7. Path Diagram and the Causal Influences among Variables

Based on the hypotheses test result, the empirical causal influences among variables VACA (X_1), VAHU (X_2), and STVA (X_3) toward competitive advatnage, company's performance, and company's values are depicted on the diragram below:
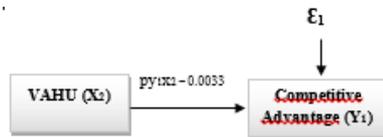
Figure 6: Path Diagram II
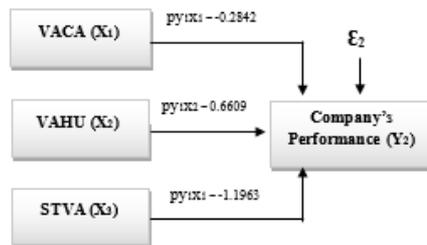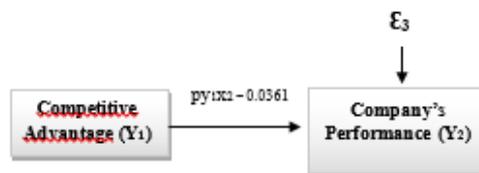

Figure 5: Path Diagram I

Figure 7: Path Diagram III

Based on the result of hypotheses and coefficient path score tests on the equation I, II, and III, this research finds significant and insignificant paths. The insignificant paths will be excluded as this research adopts the trimming models explained above. The overall result of the hypotheses and coefficient path tests which shows empirical causal relations among variables X_1, X_2, and X_3 towards Y_1, Y_2, and Z is presented on Figure 8 below:

Figure 8: The empirical causal relations among X_1, X_2, and X_3 toward Y_1, Y_2, and Z
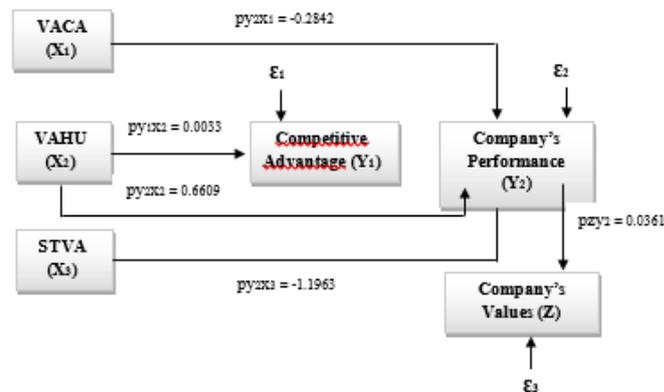
a) VACA's influence towards competitive advantage

The H1a hypothesis proposed earlier in this research which claims value added capital employed (VACA) is influential towards competitive advantage is declined. This result is achieved from the test of significance level > 0.05. The $\rho y_1 x_1$ path shows sig 0.4473 > 0.05. The test result shows that coefficient X_1 path towards Y_1 is insignificant, which also indicates that value added capital employed (VACA) is not influential towards the competitive advantage of a company. This finding shows an inconsistency against the research findings of Pratama and Achmad (2015) that claimed value added capital employed (VACA) is positively influential towards competitive advantage. Instead, this study concludes that value added capital employed is not contributing to competitive advantage.

b) VAHU's influence towards competitive advantage

The proposed H1b hypothesis which claims that value added human capital (VAHU) is influential towards competitive advantage is approved. The significance level test approves < 0.05. The $\rho y_1 x_2$ path shows that sig 0.000 < 0.05. Based on the test result above, it is confirmed that the coefficient path of X_2 towards Y_1 is significant, which implies that value added human capital (VAHU) is significantly influential towards competitive advantage. This research finds that VAHU is directly influential towards and positively contribute to company's competitive advantage. The amount of VAHU's direct contribution that affects competitive advantage is 0.0034. This condition is caused by, among others, the banking management which focuses on the development of the intermediation function, prioritizes high quality credit development by taking advantage of existing business opportunities and capacities. Additionally, all banking officials continue to strive the sustainable growth strategy while the strategy to strengthen the market is done through focused acquisition and increasing the margin. Lastly, the banking companies' officials also focus on the strategy to strengthen the bank capital in order to maintaining organizational endurance in increasing competitiveness through business expansions.

c) STVA's influence towards competitive advantage

The H1c hypothesis which claims that structural capital value added (STVA) is influential towards competitive advantage is declined. This result is gained from the significance level test > 0.05. The $\rho y_1 x_3$ path shows sig 0.2032 > 0.05. Based on the test result above, it shows that coefficient path of X_3 towards Y_1 is insignificant, which implies that structural capital value added (STVA) is not influential towards competitive advantage. This research finds that STVA is not directly influential towards competitive advantage.

d) VACA's influence towards company's performance

The proposed H2a hypothesis which claims that value added capital employed (VACA) is influential towards company's performance is approved. This result is shown by the significance level test < 0.05. The $\rho y_2 x_1$ path shows sig 0.0000 < 0.05.

Based on the test result above, the coefficient path of X_1 towards Y_2 is significant, which also indicates that value added capital employed (VACA) is significantly influential towards company's performance. This research finding is consistent with the research findings of Devi, et al (2017) which argued that VACA is significantly influential towards company's financial performance. As the hypothesis H2a is approved, it indicates that VACA negatively contributes to company's

performance. The amount of VACA direct contribution towards company's performance is 0.2842. This condition is caused by, among others, the company's organizational culture in implementing values towards their employees, such as orderly, calm, diligent, careful, precise, effective, and efficient to work well.

e) VAHU's influence towards company's performance

The proposed H2b hypothesis which argues that value added human capital (VAHU) is influential towards company's performance is approved. This result is shown in the significance test result < 0.05. The $\rho y_2 x_2$ path shows sig 0.0093 < 0.05. Based on the test result above, the coefficient path of X_2 towards Y_2 is significant, which also indicates that value added human capital (VAHU) is significantly influential towards company's performance. This finding is consistent with the research findings by Bontis, et al (2000) that argued human capital is a significant factor in operating company's business and that structural capital has a positive influence towards company's performance. As the H2b hypothesis is approved, it indicates that VAHU is positively contributing to company's performance. The amount of VAHU direct contribution towards company's performance is 0.6629. This condition is caused, among others, by everyone in banking companies should support the creation of positive and productive company's performance. In other words, everyone in banking companies should maximize their intellectual capital that includes provide satisfying services for the customer, welcome every customer and colleague well, as well as understanding the needs of each customer and colleague.

f) STVA's influence towards company's performance

The H2c hypothesis which claims that structural capital value added (STVA) is influential towards company's performance is declined. This result is shown in the significance level test > 0.05. The $\rho y_2 x_3$ path shows sig 0.0039 > 0.05. Based on the test result above, the coefficient path of X_3 towards Y_1 is insignificant, which indicates that structural capital value added (STVA) is not influential towards company's performance. This research finding is consistent with the empirical findings argued by Martins and Lopes (2016) that intellectual capital and accounting standard positively contribute to company's performance. The research findings provided by Devi, et al (2017) also supported and argued that STVA is influential towards company's performance. As the H2c hypothesis is declined, this also indicates that STVA negatively contributes to company's performance. The amount of value added human capital direct contribution is 1.1963. This condition is caused, among others, by the banking companies focus on their goal in increasing the core capital periodically as well as maintaining a healthy capital. Additionally, banking companies are attempting to achieve their target on the credit growth, retail segment, consumer, infrastructure, and telecommunication.

g) Competitive advantage's influence towards company's performance

The H2d hypothesis which argues that competitive advantage towards company's performance is declined. This result is shown in the significance test result > 0.05. The $\rho y_2 y$ path shows sig 0.3605 > 0.05. Based on the test result above, the coefficient path of Y_1 towards Y_2 is insignificant, which also implies that competitive advantage is not influential towards company's performance. This research finding is consistent with the research findings by Majeed (2011) that argued there is a positive relation between competitive advantage and company's performance. Other research by Diva and Mitha (2014) argued that intellectual capital is positively influential towards company's market values, positive financial performance which can mediate the relations between intellectual capital with company's market values. Additionally, this research finding supports Khan, et al (2018)'s research that argued competitive advantages has positive significant influences toward business performance. As H2d hypothesis proves that competitive advantage does not directly influence company's performance, it indicates that competitive advantage is not contributing to company's performance. This condition is caused by the uncertain global economic condition that overshadows the banking companies' business activities. This finding is in line with the banking data until June 2017 that showed the banking companies' performances is still not showing any consistent improvement.

h) Competitive advantage's influence towards company's values

The H3a hypothesis which argues that competitive advantage is influential towards company's values is declined. This result is shown by the significance level test > 0.05. The $\rho y_2 y$ path shows sig 0.6914 > 0.05. Based on the test result above, the coefficient path of Y_1 towards Z is insignificant, which also indicates that competitive advantage is not influential towards company's values. This research finding is consistent with Multono's (2013) argument that explained as the resource-based theory claims that company's capability is one of the significant internal factors in managing resources owned by the company in order to gain competitive advantage amidst a tougher global competition. If companies have good capabilities, therefore they can manage their resources well to help them gaining competitive advantage in the future. As H3a hypothesis is declined, this research finds that competitive advantage does not contribute to the company's values. This condition occurs because the banking companies consistently focus on the implementation of the integrated risk management and good governance that can increase the company's values for the shareholders. In consequence, almost all banks commit to always implementing good governance principles in every banking activities, instead of focusing on gaining competitive advantage.

i) **Company's performance's influence towards company's values**

The H3b hypothesis which claims that company's performance is influential towards company's values is approved. This result is shown in the significance level test > 0.05. The $\rho y_2 y$ path shows sig $0.000 < 0.05$. Based on the test result above, the coefficient path of Y_2 towards Z is significant, which also indicates that company's performance is influential towards company's values. This research finding is in line with the findings of the researches by Diva and Mitha (2014), Repi, et al (2016), and Chen and Yu (2011) that argued profitability is positively influential towards company's values. As the H3b hypothesis is approved, this indicates that company's performance contributes to company's values. This condition occurs because the banking companies consistently focus on the implementation of the integrated risk management and good governance that can increase the company's values for the shareholders. In consequence, almost all banks commit to always implementing good governance principles in every banking activities. Additionally, banking companies are always eager and willing to achieve their targets with the supports of shareholders' commitments.

j) **Indirect influences of intellectual capital (VAHU, VACA, and STVA) toward company's performance through competitive advantage**

The H4a, H4b, and H4c hypotheses that argue VAHU, VACA, and STAV are indirectly influential toward company's performance through competitive advantage is declined. This condition occurs since the path of Y_1 towards Y_2 is insignificant.

CONCLUSION

Based on the hypotheses tests and discussion above, this study reaches conclusion as follows:

1. Value added capital employed (VACA) and structural capital value added (STVA) is not influential toward competitive advantage. Whereas value added human capital (VAHU) is influential towards competitive advantage.

2. Value added capital employed (VACA), value added human capital (VAHU), and structural capital value added (STVA) are influential toward company's performance. On the other hand, competitive advantage is not influential towards company's performance.

3. Competitive advantage is not influential towards company's values. In the contrary, company's performance is influential towards company's values.

4. VAHU, VACA, and STVA that are claimed to be indirectly influential toward company's performance through competitive advantage is not supported as the path of Y_1 towards Y_2 is insignificant. Therefore, competitive advantage cannot mediate the relations between intellectual capital and company's performance.

Implication

Based on hypotheses tests and conclusion above, several implications from this research are:

1. Based on the finding which proves the highest and most significant score of coefficient path is value added human capital (VAHU), which is influential towards competitive advantage and company's performance. Therefore, in the future, VAHU needs to be improved to increase the company's competitiveness and performance.

2. Based on the hypothesis test that finds intellectual capital is the significant variable in increasing company's performance, companies need to put their concerns continuously on VACA, VAHU, and STVA, as the indicators that shape intellectual capital, to increase the banking companies' performances.

3. This research finds and emphasizes the importance of shareholders' role in supporting company' commitment and activities. Shareholders' supports are essential to make the company able to survive in any condition and increase the company's values to attract investors.

4. VAIC method by Pulic (1998) is suitable for executing researches with statistical analysis.

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