

THE INFLUENCE OF INTELLECTUAL CAPITAL COMPONENTS TOWARDS THE COMPANY PERFORMANCE

By
Agustinus Soetrisno
Lina

University of Pelita Harapan (UPH)

Abstrak: Tujuan penelitian ini adalah untuk memberikan bukti empiris mengenai pengaruh komponen *intellectual capital* terhadap kinerja perusahaan. *Intellectual capital* terdiri dari *human capital*, *structural capital*, dan *relational capital*. Komponen *intellectual capital* diukur dengan menggunakan Value Added Intellectual Capital Coefficients (VAIC™) yang dikembangkan oleh Pulic. Kinerja perusahaan diukur dengan menggunakan rasio profitabilitas yaitu *return on assets*. Sampel penelitian ini adalah perusahaan industri keuangan yang terdaftar secara konsisten di Bursa Efek Indonesia selama periode 2009, 2010, dan 2011. Analisis regresi berganda digunakan untuk menjawab hipotesis dalam penelitian ini. Hasil penelitian ini menunjukkan bahwa *human capital* dan *structural capital* tidak memiliki pengaruh terhadap kinerja perusahaan sedangkan *relational capital* memiliki pengaruh negatif terhadap kinerja perusahaan.

Kata kunci: Intellectual capital, human capital, structural capital, relational capital, kinerja perusahaan.

Introduction

A great leap in the recent development of technology advancement in the twenty-first century has made the world a smaller place where news is easily spread out. Brand names, quality of service, manpower abilities and skills, corporate culture of a company are the ones mostly mentioned about. In today's vast and rapid economy it is much different from the past, turning more globalised with a faster information flow and easier to obtain as market competition getting stiffer. Business people have realized that physical, financial capitals and production facilities of the companies are no longer factors that differentiate and generate an added value of sustainable competitive advantage. In this knowledge economy, intellectual capital not only has become the driving force and an important source of value creation and sustainable development of enterprises but also innovation and the key to profit growth (Libo, Xin and Su, 2009). Choudhury (2010) mentioned that Intellectual capital can be defined as the 'economic value' of three categories of intangible assets of a company that includes human capital, organisational capital and social capital collectively.

In Indonesia, the role of human capital is pivotal towards the development of a world-class capital market. However, researches regarding Intellectual capital against the performance of company are still rarely to be found in Indonesia. Furthermore with the financial sector is now in a prime position to be more innovative, relying on new technologies and emphasizing on skills and knowledge

of their employees rather than on assets such as plants or machinery. This is due to the intense competitive pressure, which arises from changes in the financial environment, technological advancements and the needs of the consumers in terms of product quality. Hence, highly skilled individuals are needed to facilitate the delivery of high value-added products and services as well as the competencies to build consumers' confidence and trust (Mavridis, 2004 as cited in Muhammad and Ismail, 2009). Prior study "Performance Impact of Intellectual capital: A study of Indian IT Sector" conducted by Choudhury (2010) revealed that the three components of Intellectual Capital influences significantly to organisational performance. This study is used as a based in developing a similar research in the Indonesian financial industry companies. Choudhury (2010) conducted his research by conducting a field survey to get data on each component and using a stratified random sampling method. Whereas in this research, Intellectual Capital is measured using Value Added Intellectual Capital (VAIC™) to measure each component and the samples are chosen by a purposive sampling method. In another study "Impact of Intellectual Capital on Return on Asset in Nigerian Manufacturing Companies" by Salman *et al.* (2012), conducted outside of Indonesia have shown that relationship exists between intellectual capital components efficiencies and company performance.

Moreover, financial sectors such as banking are a knowledge-intensive, skills-based and relationship-rich industry. In an increasingly complex and more liberal environment, the competitiveness of banking institutions will depend critically on the quality of human intellectual capital and the extent to which the industry is able to leverage on these talents (Muhammad and Ismail, 2009). Subsequent study by Rehman *et al.* (2011) also proved a significant relation on the financial performance of the company in their study of "Intellectual Capital Performance and its impact on Corporate Performance: An empirical evidence from Modaraba sector of Pakistan".

Therefore, financial sectors need to anticipate and respond to these demands and expectations. Although Indonesia is a developing country, it has started to globalise such as with the AFTA (Asean Free Trade Agreement) and so on. In this new era of the global economy, corporation tend to realize that values can be generated by intangibles that are not always reflected in financial statements. Forward-looking companies have considered that these are an integral part of fully understanding the performance of their business. As an intangible asset, intellectual capital and its components have not been widely explored.

Intellectual capital (IC) represents the collective knowledge that is embedded in the personnel, organizational routines and network relationships of an organization (Stewart, 1997; Bontis & Choo, 2002; Kong, 2008 in Choudhury, 2010). Hence, IC is divided into three components of human capital, structural capital and relational capital. Therefore, the problems formulated in this study are: 1). Does the human capital of the company influence the company performance? 2). Does the structural capital of the company influence the company performance? 3). Does the relational capital of the company influence the company performance?

The objective of this quantitative research study is to find out the influence of intellectual capital components towards the company's performance of Indonesian companies in the financial industry. This research is also conducted in order to obtain empirical evidence about the influence of intellectual capital

components towards the company's performance of the Indonesia companies in the financial industry.

Theoretical Base and Hypotheses Development

Intellectual Capital Components

The introduction of intellectual capital from the previous chapter conveys that its definition is still in a grey area. Intellectual capital is an intangible asset of every company of which its effect has not been regarded from the past era of the economy. Ahmad and Mushraf (2011) explained intellectual capital as a main source to improve business performance that the sum of knowledge of company's members and practical translation of this knowledge like trademark, patents and brands. Intellectual capital is "firm's overall or holistic capacity and capability that emerges from its creative and flexible orchestration and co-ordination of its human capital, innovativeness, competencies and capabilities, streamlined processes and expertise. Intellectual capital bundles knowledge resources like constellation of employees, users, processes and technologies and work enabling a company to make a difference to users" (Choudhury, 2010). Choudhury (2010) further defined Intellectual capital as the 'economic value' of three categories of intangible assets of a company-that includes human capital, organisational capital and social capital collectively. Many strategic analysts argue that sustained advantage can occur only in the situations in which physical, human, and organisational capital varies across the firms and where some firms may be unable to obtain necessary resources that are benefiting other firms.

Human Capital

Human capital (HC) is a major backbone of intellectual capital where it is referred to as the firm's individual employees and their corresponding skills, ability, knowledge and know-how (Salicru *et al.*, 2007). Basically it is 'the soul of the company' and can be divided into three components of competence, attitude and intellectual agility. Rehman *et al.* (2011) defined human capital as the skill and creativity of employees that can be further encourage by investing more in their training programs. Human Capital is experience and expertise of employees which increases the efficiency of organizations. More efficient employees means more efficient of organization to boost Value Added (VA) efficiency. However, competence includes skills and education while attitude covers the behavioural component of the employees' work (Bontis *et al.*, 2000). Intellectual agility provides one to change habits and to think of innovative solutions to problems faced. Though employees are regarded the most important asset in a learning organisation, they are not owned by the organisation. HC is defined as the knowledge, qualifications and skills of employees and the fact that companies cannot own or prevent those employees from going home at night (Zeghal and Maaloul, 2010). Hence, lots of disagreement still make up around on whether employees' knowledge belongs to the company or not. Bontis *et al.* (2000) also mentioned that in another school of thought the departure of some individuals in a firm might be considered good, since it may provide fresh new perspectives to the firm from replacement employees. Thus, it contradicts the result of loss in corporate memory that might become a threat to the company.

Structural Capital

Structural Capital (SC) on the other hand refers to the learning and knowledge enacted in day-to-day activities (Baah and Taiwah, 2011). Bontis *et al.* (2000) said that structural capital includes all the non-human storehouses of knowledge in organisations such as databases, organisational charts, process manuals, strategies, routines and anything that has a higher value than its material value to the company. It arises from processes and organisational value, reflecting the external and internal focuses of the company, plus renewal and development value for the future. A strong structural capital provides a supportive culture that allows individuals to try new things, to learn and to fail. Wang (2012) mentioned structural capital as companies solve problems and create value for the overall systems and procedures. It represents the operation of the mechanism and structure of organisations, to assist and support staff, the intelligent pursuit of personal best performance and reach enterprise-wide performance. To Zeghal and Maaloul (2010) SC refers to the knowledge that remains with the company after the employees go home at night. In this component of IC, it includes production processes, information technology, customer relations and R&D etc.

Relational Capital

Relational capital (RC) is a relationship of company with external stakeholders (Rehman *et al.*, 2011). The existence of cumulative trust, experience and knowledge make up the main core of the relationship among organization, their customers and suppliers. Relational capital keeps customers from abandoning a commercial relationship. In Baah and Taiwah (2011), Relational Capital however characterises an organisations' formal and informal relations with its external stakeholders and the perceptions that they hold about the organisation, as well as the exchange of knowledge between the organisation and its external stakeholders (Bontis, 1998; Fletcher *et al.*, 2003; Grasenick and Low, 2004). Wang (2012) described relational capital as the initiation, maintenance, and development of an organisation's external relationships, including the relationships with customers, suppliers and business partners.

Company Performance

Business performance evaluations are to ensure compliance with crucial minimum standards, making sure of how well is the company performing, to check upon strategic assumptions and to provide a reliable basis for communicating with interested parties (Ahmad and Mushraf, 2011). Performance is the result of a systematic assessment and the performance indicators are based on the activities in the form of inputs, outputs, outcomes, benefits and impacts. Performance cannot be separated from the process which is the activity to process inputs into outputs or judgement in the process of drafting policies/ programs/ activities that are considered important and influential to the achievement of goals and objectives. Performance is measured upon as the basis for assessing the success and failure of the implementation of activities in accordance with the goals and objectives that have been established in order to realise the vision and mission of the organisation.

By which, performance is the ability to work measured based upon the results of the work. Company performance is something that is achieved by a

company during a period of time abiding to the level of standards implemented. Company performance is defined as a performance that is measurable and provides information on the condition of the company or the level of attainment of organizations goals from the ratio of measurements desired (Ahmad and Mushraf, 2011). In order to know the performance of the company, measurement of company performance is conducted. The objective of assessing the performance is to motivate the personnel of the company to achieve the organisation target and abiding the standard set upon, in order to achieve actions and results that have been desired by the organisation. Assessing the performance of the company is also used to avoid any actions that disrupt the performance and to stimulate the right and desired actions through providing rewards to those abiding the right manner by providing it extrinsically or intrinsically.

Company existing as an organisation, has a goal of performance to achieve together with its members. As the market is getting saturated with globalisation, company has to enhance their competitive advantage and differentiate from their competitors. Hence, the standard level of performance can be measured in various ways in order to know whether the standard level of performance has been achieved. One of the ways used to measure performance in this study will be the ratio of Return on Assets (ROA).

Many studies have been conducted since 1990s and the empirical literature reveals that Intellectual Capital (IC) affects the business performance of an organisation. This literature covers three components of IC, which are human capital (HC), structural capital (SC) and relational capital (RC). Through prior researches by Salman *et al.* (2012) and by Zeghal and Maaloul (2010) in 'Impact of Intellectual Capital on Return on Asset in Nigerian Manufacturing Companies' and 'Analyzing value added as an indicator of Intellectual Capital and its consequences on company performance' respectively showed that companies' components of IC have a positive impact on organisational performance.

Human Capital and Company Performance

Preceding research of 'Performance Impact of Intellectual Capital: A study of Indian IT sector' by Choudhury (2010) showed that human capital is increasingly crucial and positively related towards the organisational performance in today's knowledge economy. The importance of people has become increasingly important as HRM (Human Resource Management) is the key factor to increase employees' productivity. HRM practices turn employees into a resource development and a source of competitiveness while money talks and machines often perform better than human can, but it does not think and do not invent. As we are living in a knowledge boom, it is people not building or machines that create new product and service ideas, improve processes and help companies shift direction in order to create new source of value. There is no longer just a physical employee rather there is a knowledge employee. Eventually, Choudhury (2010) proved that human capital exhibited strong relationship with performance lending support to the widespread anecdotal evidence suggesting that talented people are critical ingredient in developing and delivering superior products and services that generate high consumer demand.

In another prior research done by Salman *et al.* (2012) showed that human capital influence positively towards the company's performance in Nigerian

manufacturing companies. The transformation of the economy from production-based economy to a knowledge-based economy throughout the world and especially in Nigeria is inevitable. Thus this brings companies to achieve industrialization strategy through the human capital in order to improve the pace of the economy development. It is also confirmed that successful companies always invest in human capital to develop their overall working capabilities and environment.

While Muhammad and Ismail (2009), found out that human capital influences company's performance (ROA) positively in their research on Malaysian financial sectors. Human capital is the organisation's constant renewable source of creativity and innovativeness that is not reflected in the financial statements. Furthermore, with the globalisation era, organisations are increasingly confronted with worldwide competition. Hence, to build and sustain their competitive advantage, the knowledge and expertise of an organisation, staffs need to be seen as a critical strategic resource. Both results of the researches are in consistent with the study conducted by Choudhury (2010).

Further research conducted by Rehman *et al.* (2011) whose research conducted using the Value Added Intellectual Coefficient (VAIC™) proved that one of the significant components to strengthen the IC performance is Human Capital Efficiency (HCE) where investing more to the employees' skills and ability would increase the human efficiency of employees. The research also proved human capital as one of the important components for measuring intellectual capital and it has a high significant relation towards financial performance.

As prior research done by Choudhury (2010) proved that human capital is increasingly crucial and positively related towards the organisational performance in today's knowledge economy. Since an organisation made up of mostly human, importance of people has become increasingly important and significant in having the knowledge to compete in the current competitive market. Bontis *et al.* (2000) expressed that people's departure from a company results in a loss of corporate memory that creates a treat to the company. Though in a different perspectives replacement of employees brings a fresh new concept into the company. Hence, it shows the closeness between human capital in a company and its performance. In the current globalisation era, to cater the high consumer demand organisation has to improve their human capital to deliver a superior product and service. Hence, the first hypothesis is formulated in this study as:

H₁: Human Capital has influence on the company performance

Structural Capital and Company performance

Bontis *et al.* (2000) conducted a study on Intellectual Capital and Business performance in Malaysian Industry and found out that the development of structural capital has a positive relationship with business performance regardless of industry. The result of the study implies that organisations' efforts to codify organisational knowledge and thereby further develop their structural capital ultimately yield a sustainable competitive advantage. The advantage automatically translates itself onto a higher business performance.

In another prior research conducted by Maditinos *et al.* (2009), the research was designed to extend those findings revealed by Bontis *et al.* (2000) consistently and their empirical results find out that structural capital has a positive relationship to business performance in both industry types, and especially in non-service

industries. In addition, the study suggested that the relationship between Structural Capital and business performance is positive and relatively important to non-service industries. On the other hand, they verify to be less substantive in the service industries. These findings imply that if companies aggregate their efforts to unlock the organisational knowledge, they will gain a competitive lead eventually. This competitive advantage will transform into a higher business performance and corporate value.

Libo *et al.* (2009) using the measurement of VAIC™ found out that the driving force of capital to create value lies in both human capital and structural capital while the influence of physical capital is relatively low. In the knowledge economy, companies have to pay attention to the structure of the driving force, such as improving the organisational structure and management system to strengthen the efficiency of structural capital, to create value in order to improve the efficiency of capital. This way, companies can maintain the driving force to create value inside the organisations and avoid the risk of losing high-quality employees.

Also, Muhammad and Ismail (2009) revealed that structural capital is the intellectual value that remains with the enterprise when people leave. In this globalisation era, employees are getting much more difficult to get retained. Hence, the intellectual value that is of more importance is the structural capital that whatever remains in the enterprise. Furthermore, the result from their findings revealed that structural capital influence positively with performance of the company.

Subsequent researchers study on the relationship between Structural Capital and companies' performance. It is defined by Zeghal and Maaloul (2010) as the knowledge that remains with the company after the employees go home at night. In this component of IC, it includes production processes, information technology, customer relations, R&D etc. As structural capital arises from processes and organisational value, reflecting the external and internal foci of the company, plus renewal and development value for the future, it is one of the important factors that influence company's performance (Bontis *et al.*, 2000). Though it might not influence directly however, companies are mainly made up of human if the structure does not provide a comfortable surrounding or condition to work in, business performance might be low. Furthermore, to achieve a sustainable competitive advantage, organisations have to improve their structure of organisation and unlock the organisational knowledge. Therefore, the second hypothesis formulated in this study as:

H₂: Structural Capital has influence on the company performance

Relational Capital and Company performance

Choudhury (2010) found that relational capital or social capital is regarded the strongest predictor of performance. A strong linkage between relational capital supports that knowledge tied up in relationship among employees, customers, suppliers, alliance partners and the like tends to lead to process and product innovations, better problem solving which tends to increase production and service delivery efficiencies as well as customer satisfaction. It also enables the company to fully utilise their knowledge by leveraging it across the entire organisation thereby reducing redundancies. Subsequently, the result of this study is there is a positive relationship between relational capital and business performance.

Prior research 'Impact of Intellectual Capital on Return on Asset in Nigerian Manufacturing Companies' a study conducted by Salman *et al.* (2012) reveals that the relationship between Relational capital and company performance remained mix and inconclusive. The reason for this could be many manufacturing companies' managers like other developing countries invest heavily in human capital without providing adequate and proportionate organizational structure and physical capital to work with. Though it was also mentioned that companies required to maximize value creation from its intellectual capital to succeed in WTO regime, The competitive edge is gained through enhancing value creation efficiency from Intellectual Capital components such as operational structure and capital employed.

Also, Muhammad and Ismail (2009) revealed that relational capital or capital employed is showing positive relationship with business performance as capital employed was determined by the usage of tangible assets. Capital employed shows how efficient the company in using their available capital in generating income for the company.

However, Khalique *et al.* (2011) conducted a research of 'Relationship of Intellectual Capital with the Organisational Performance of Commercial Banks in Islamabad, Pakistan.' showed that relational capital has positive relationship with organisational performance. The Pearson correlation test was conducted for the research done by Khalique *et al.* (2011) that showed the positive relationship between relational capital and company performance.

Relational Capital is the next component of Intellectual Capital being studied in many other researches. Relational Capital is how the organisation keeps in relations with their suppliers and customers. The existence of trust, experience and knowledge made up the main core of relational capital. Dissemination of this intelligence must be done both horizontally and vertically within the organisation so that a competency in organisation-wide action or responsiveness to market changes can be developed (Bontis *et al.*, 2000). Although many research found the relationship between relational capital and business performance is still in a mix and inconclusive, this component of IC still make up an important linkage with business performance. Ultimately, the third hypothesis formulated in this study as:

H₃: Relational Capital has influence on the company performance

The conceptual framework can be visualized such as:

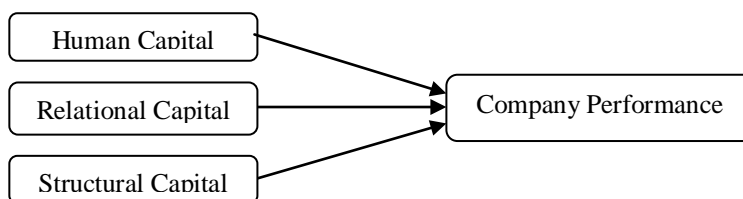


Figure 1 Conceptual Framework

Research Methodology

Research Sample

The sample being used in this study comes from all subgroup within the financial industry. Financial firms comprise of banking, insurance, securities companies and other financial institutions. Sampling method used in this study is purposive sampling method which sample selected based on certain criteria. The criteria used are as the following: 1). Financial company listed on the Indonesian Stock Exchange

(IDX) in 2009-2011. 2). The financial statements of the company for the year 2009-2011 are easily accessible via the Internet or IDX corner of Universitas Pelita Harapan. 3). The companies have a financial statement period ending 31st December. 4). Net income after tax and net assets of these companies should be shown a positive value for the year 2009-2011. 5). The companies include salaries or personnel expense in their financial statements.

Data Collection Method

Method of data collection used in this study was by using the method of documentary. The hypothesis tested in this study required secondary data from the company annual reports. Such data can be obtained from the Indonesian Stock Exchange (IDX) through the Internet (www.idx.co.id) and Universitas Pelita Harapan's IDX corner. From those resources, quantitative data such as financial statements are obtained in the annual reports produced by the companies that have IPO and listed in Indonesian Stock Exchange (IDX).

Empirical Model of the Research

$$ROA = \alpha_0 + \alpha_1 VACA_{it} + \alpha_2 VAHU_{it} + \alpha_3 STVA_{it} + \varepsilon_{it}$$

Description:

ROA: Return on Asset = Net income available to the common stockholder / Total assets

α : Alpha

it: Time

ε : Epsilon

VACA: Value Added Efficiency of Capital employed (RC)

VAHU: Value Added Efficiency of Human Capital (HC)

STVA: Value Added Efficiency of Structural Capital (SC)

Operational Variable Definition

Independent Variables

The independent variable in this study is the intellectual capital (IC) components that composed of human, structural and relational capital. Intellectual capital as defined in this study is the performance IC measured by the value added created by the relational capital (VACA), human capital (VAHU) and structural capital (STVA). To begin, we have to first calculate the value added in the company by the following (Pulic, 1998 as cited in Muhammad and Ismail, 2009):

$$VA = Out - In$$

VA: Value added

Out = Output: total overall income from all products and services sold on market

In = Input: All expenses for operating the company, exclusive of labour expenses, which is not regarded as a cost.

Value Added Intellectual Coefficient

Value added intellectual coefficient indicates an organisation's intellectual abilities. They can be considered as the BPI (Business Performance Indicator). VAICTM is the sum of the three coefficients mentioned above namely: VACA, VAHU and STVA.

$$VAIC^{TM} = VAHU + VACA + STVA$$

Human Capital Coefficient

From the human capital coefficient, it shows how much can be produced by VA funds issued for labour. Pulic (1998) argues that total salary and wage costs are an indicator of firm's Human Capital (cited in Muhammad and Ismail, 2009). Since the market determines salaries as a result of performance, it is only logical that the success of human capital should be expressed by the same criteria. Thus, this ratio indicates the contribution made by each dollar invested in the HC against the value added of the organisation.

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

VAHU = Value added of human capital: ratio of VA towards HC

VA = Value added

HC = Human Capital : Employees' salaries expense

Relational Capital Coefficient

Relational Capital coefficient or also known as value added capital employed (VACA) is an indicator for the value added created by one unit of physical capital. This ratio indicates the contribution made by each unit of capital employed towards the value added of the organisation. Pulic (1998) assumes that if a unit of CA generates greater returns in one company than another, then the first company is better at utilisation of its CA (cited in Muhammad and Ismail, 2009). Thus, better utilisation of CA is part of the Intellectual Capital of companies. When compared over a group of companies, VACA becomes an indicator of the intellectual abilities of the company to better harness physical capital.

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

VACA = Value added of capital employed: Ratio of VA towards CE

VA = Value added

CE = Capital employed: funds available (equity)

Structural Capital Coefficient

Structural capital coefficient ratio measures the amount of structural capital required to produce 1 Rupiah of value added and is an indication of how success in structural capital value creation. In Pulic's model, structural capital is value added minus human capital. Pulic (1998) expressed that the lesser the contribution of HC in value creation the greater is the contribution of SC (cited in Muhammad and Ismail, 2009).

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

STVA = Structural capital coefficient: ratio of SC towards VA

SC = Structural capital: $\mathbf{VA - HC}$

VA = Value Added

Dependent Variable

Dependent variable in this study is the company's performance measurement. In order to measure the performance of the company, profitability ratio of Return on Asset (ROA) is used. ROA reflects the business benefits and company's efficiency in the utilization of total assets (Chen *et al.*, 2005).

ROA = Net income available to all common stockholders / Total Assets

Findings and Discussion Analysis

Research Object Description

The total amount of sample taken for this research is concluded in the table shown below.

Table 1 Research Object Descriptions

Financial companies listed on the Indonesian Stock Exchange (IDX)	72
Financial statements of the company for the year 2009-2011 that are not easily accessible via the Internet or IDX corner of Universitas Pelita Harapan	(2)
Net income after tax and net assets of these companies shown a negative value for the year 2009-2011	(6)
Companies do not include salaries or personnel expense in their financial statements	(19)
The amount of companies taken for this research	45
Total research data for 3 years (2009-2011)	135
Research data excluded after treatment for outlier	(57)
Total final research data observed	78

Descriptive Statistics

The results of descriptive statistic from the 78 final samples are as follows:

Table 2 Descriptive Statistics

	ROA	VAHU	VACA	STVA
Mean	1.505762	4.534545	0.627889	0.716515
Median	1.454670	4.356358	0.599346	0.770442
Maximum	3.525135	11.40272	1.134032	0.912302
Minimum	0.526571	1.019045	0.253985	0.018689
Std. Dev.	0.662212	2.079655	0.200449	0.173504

Source: Output Eviews6

Normality and Outlier

After the treatment of outliers and normality, fifty-seven data samples have been removed to reach a better regression and normality distribution between the dependent variable ROA and the three independent variables VAHU, VACA and STVA. The new regression of seventy-eight observed samples produced a regression with normality of Jarque-Bera (JB) 1.710858 with a probability of 0.425101.

Multicollinearity Test

From the collinearity statistics table below, the results determined that the regression is free from multicollinearity as all three independent variables having a VIF values below five and tolerance values not close to zero.

Table 3 Collinearity Statistics

	Collinearity Statistics	
	Tolerance	VIF
VAHU	0.335	2.962
VACA	0.647	1.546
STVA	0.258	3.873

Source: Output SPSS

Hence, it can be confirmed that multicollinearity does not exist between the independent variables.

Heteroscedasticity Test

Test for heteroscedasticity is conducted by using White's heteroscedasticity test. The occurrence of heteroscedasticity is caused by the inequality of the residual variance from one observation to another. Through the White test, it was found that the regression's observation samples are having a homoscedasticity behaviour. In the test's results table, probability of Obs*R-squared are having a probability greater than 0.05 so it can be determined that the regression is not in the existence of heteroscedasticity. (Winarno, 2011). Hence, there is no problem of heteroscedasticity in the regression as the result is conveying the existence of homoscedasticity.

Table 4 White Heteroscedasticity Test

Heteroscedasticity Test: White			
F-statistic	0.654817	Prob. F (3.74)	0.5825
Obs*R-squared	2.017090	Prob. Chi-Square(3)	0.5689
Scaled explained SS	1.554553	Prob. Chi-Square(3)	0.6697

Source: Output Eviews6

Autocorrelation Test

Breusch-Godfrey output table results provide a probability Obs*R-squared value of 0.1164 which is greater than 0.05. The allowance of using the first method of differentiation treatment is determined with applying G test or Berenblutt-Webb test to calculate ρ value (Winarno, 2011). The ρ value, which is the sum square resid from the differentiated regression divided by the initial regression, is 0.98635. This ρ value is a significant value thus the first method of differentiation is used. Hence, we can conclude from the new Breusch-Godfrey Serial Correlation LM test that the regression is free of autocorrelation problem.

Table 6 Breusch-Godfrey Serial Correlation LM test

Breusch-Godfrey Serial Correlation LM test:			
F-statistic	2.100276	Prob. F (2.72)	0.1300
Obs*R-Squared	4.301065	Prob. Chi-Square (2)	0.1164

Serial Correlation after correction of autocorrelation on ROA

Source: Output Eviews6

Hypothesis Testing

In the results output table, the regression's adjusted R^2 is 0.119105, which also conveys 11.9105% of the regression's variation that can be explained by the variation of the independent variables.

Table 7 Hypothesis Testing

Dependent Variable: D(ROA)	
Adjusted R-squared	0.119105
F-statistic	4.425295
Prob. (F-statistic)	0.006484

Variable	Coefficient	t-Statistic	Prob.
D (VAHU)	0.009718	0.128226	0.8983
D (STVA)	1.795175	1.128097	0.2630
D (VACA)	-1.554827	-3.609234	0.0006

Source: Output Eviews6

The probability of F-statistic (0.006484) is less than α (0.05). *F*-test is performed to test whether the feasibility of a regression model. This test used significance level 0.05 ($\alpha = 0.05$). Since the significance level of $F < 0.05$ ($0.000 < 0.05$), means that the regression model is feasible to use.

As for the t-statistic test of the variables, the regression results output table shows the value of t-statistics probability for independent variable VAHU as 0.8983 which is greater than $\alpha = 0.05$ that shows H_1 is rejected meaning that Human Capital has no influence towards company performance. In the current globalization era, customers may easily switch to the nearest competitors just because they are being treated recklessly. With the availability of qualified and competent manpower, it may become a source of productivity, efficiency, creativity, innovations and ideas that would provide an input and solutions in moving the company forward. For having this resource, companies may be able to differentiate themselves from their nearest competitors as it is difficult for others to duplicate especially human abilities differ from one to another. However, in this study it is shown that there is no influence or relationship between VAHU and ROA. This result is inconsistent with the previous researches.

The result of this research is due to the banks making up largest portion of the financial industry companies in the Indonesian Stock Exchange. As we know that banks in Indonesia have adapted the outsourcing strategy for the employment of employees such as tellers, customer service officer etc. By relying on an outsourcing company, banks are basically not attached directly with the employees, hence, they are able to change the employees if there is any unmatched of ability. Other reasons might be that the human capital efficiencies might be used for other agendas which are not aligned to organizational goals.

The second t-statistic probability value for the independent variable STVA is 0.2630 which is again greater than $\alpha = 0.05$. This shows that H_2 is rejected meaning that Structural Capital has no influence towards company performance. The last t-statistic probability value for the independent variable VACA is shown as 0.0006 which is smaller than $\alpha = 0.05$.

Structural capital is the competitive intelligence, formulas, information systems, patents, policies and processes which resulted from the products or systems the firm has created over time. With globalization, companies tend to make intellectual investment in physical, technical and business culture infrastructures that support its activities. However, the results in this study proved that there is no influence and relationship between STVA and ROA where it contradicts the results of previous researches. The result attained might be due to the fact that company's performance might be more influenced by other financial factors such as sales volume and how the company manages their expenses rather than non-financial factors.

Thus, H_3 is accepted and with a coefficient of -1.554827, meaning there is a negative influence between VACA and Return on Assets. Relational capital shows

how efficient the company in using their available capital in generating income for the company. It also characterizes an organization's formal and informal relation with its stakeholders and the perceptions they hold regarding the organization. A strong connection between social capital supports that knowledge tied up in relationship among employees, customers, suppliers, alliance partners and the like tends to lead to cumulative trust and experience to improve process and product innovations, better problem solving which tends to increase production and service delivery efficiencies as well as customer satisfaction. The results of this study reveal that there is negative influence or relationship between VACA and ROA. However, the result is also inconsistent with the previous findings.

Financial industry companies are mainly involved in investing their capital either through tangible assets such as lands or in financial instruments such as stocks. It could be due to these investments making the influence of VACA negative towards ROA. As the current market value of tangible assets such as lands and buildings keep increasing in values and these values at times greater than the general income of the financial industry companies.

Conclusion and Recommendations

Conclusion

To wrap up this research, the author will sum up the conclusions from the lengthy analysis and discussion of the previous section. This research consists of three hypothesis which comprises of the three components of intellectual capital and their influence against company performance which is measured by return on assets. The results of this research can be concluded as follows: 1). There is no influence between human capital and company performance. It is inconsistent with previous studies of Choudhury (2010), Salman *et al.* (2012) and Muhammad and Ismail (2009). 2). There is no influence between structural capital and company performance. It is inconsistent with Choudhury (2010) and Muhammad and Ismail (2009) and with Salman *et al.* (2012) where the result is still mixed and inconclusive. 3). There is a negative influence between relational capital and company performance. It is align with Choudhury (2010) and Muhammad and Ismail (2009) however in an opposite direction. It is also inconsistent with Salman *et al.* (2012) where the result is still mixed and inconclusive.

Implication of The Research Results

The research results provide an implication to organizations who faced the difficulty in leveraging and managing the intangible assets in corresponding to the globalization era of the knowledge-based economy. It was hoped that this research results will trigger for more researcher to conduct their study in the field of Intellectual capital in Indonesia. Hence, the results will help accountants and business investor in Indonesia to take note on the significance of intellectual capital on organizational performance. Subsequently, it will trigger the financial industry companies in Indonesia to begin managing their intellectual capital to prepare for the new era of knowledge-based economy.

Implication of the result would help to arouse the accounting regulators in Indonesia in making policies and decisions regarding the treatment of intellectual capital either in the form of minimum wage requirement etc. Also, it is to instill the

accounting regulators to include the management of intellectual capital in the accounting standard.

Companies in the financial industry are operated by humans. Subsequently, managing the human capital may provide the companies with qualified employees with exceptional talents to enhance the companies' creativity, innovations and breakthrough strategies in differentiating them from the nearest competitors. The result of this research would also arouse the directors and managers of companies to consider the effectiveness of Intellectual capital towards financial performance of the company. Hence, it can provide them with inputs to consider intellectual capital for the firm more than physical and financial assets of the firm to create a firm's value.

Limitations

Researcher has some limitations that occur during the research conducted. The research conducted has some limitations namely as follows: 1). The research only take note of companies listed in the Indonesian Stock Exchange and only in one industry. 2). The financial data period of the research done were taken only for three years ranging from 2009-2011. 3). Company's performance is only measured through one financial ratio of Return on Assets. 4). Intellectual capital measured by Pulic's VAIC™ which only regards the monetary side effects. 5). Measurement of total salary and wages done in this study did not provide a separation between the salaries of the employees and commissioners hence measurement of human capital is not clearly distributed. 6). There is no control variable used in the study to observe the other factors affecting ROA. 7). Pulic's aggregate level of VAIC™ measurement is not used in the research.

Recommendations

Researcher also provides suggestions for other future researchers who are going to conduct intellectual capital in Indonesia. The suggestions are as follows: 1). The research conducted should cover a variety of industry to find out the influence of the intellectual capital components to the different industries. 2). The financial data period of the research ought to be taken from a wider range of years to take note of the development of the economic conditions. 3). Future researches should take note of other company's performance measurement such as market value, EPS. 4). Future researches should implement other measurements of Intellectual capital such as using a field interview or survey to consider the non-monetary side effects. 5). More details should be taken for future researches such as the separation between the salaries and wages of employees and commissioners to clearly distribute the value of human capital. 6). Future researches should use a control variable to consider other factors affecting the company's performance. 7). Future researches are recommended to consider in using Pulic's aggregate level of VAIC™ measurement.

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