

**THE EFFECT OF INTELLECTUAL CAPITAL ON FIRM VALUE WITH
PROFITABILITY AS MODERATING VARIABLE:
EMPIRICAL STUDY OF TELECOMMUNICATION COMPANIES
LISTED ON IDX 2011-2019**

(UNDERGRADUATE THESIS)

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2021**

ABSTRACT

THE EFFECT OF INTELLECTUAL CAPITAL ON FIRM VALUE WITH PROFITABILITY AS MODERATING VARIABLE: EMPIRICAL STUDY OF TELECOMMUNICATION COMPANIES LISTED ON IDX 2011-2019

By

ATIKA PUTRI DIANTI

This paper aims to scrutinize the relationship between intellectual capital on affecting firm value in telecommunication subsector companies listed on the Indonesian Stock Exchange 2011-2019 due to different relation direction in previous research results. Shifting value is the main background of research where traditional economic paradigm that mainly focused on tangible assets has shifted to the use of new economic paradigm of knowledge based economy. This paper examines the relationship of intellectual capital on affecting the firm value under resource-based theory and stakeholder theory finance management frame of references and profitability as moderating variable. The result of the study has shown that intellectual capital does not affect firm value and profitability could moderate the relationship of intellectual capital to firm value.

Keywords: Intellectual Capital, Profitability, Firm Value.

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**By
ATIKA PUTRI DIANTI**

Undergraduate Thesis

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At

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**MANAGEMENT DEPARTMENT
ECONOMICS AND BUSINESS FACULTY
UNIVERSITY OF LAMPUNG
BANDAR LAMPUNG
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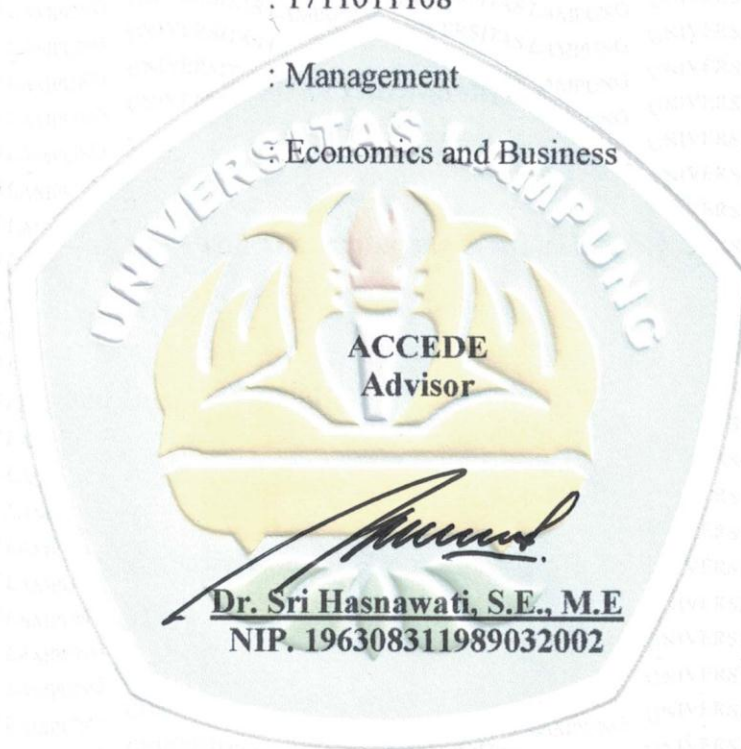
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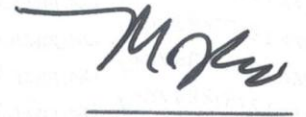
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STATEMENT LETTER

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I hereby declare that the undergraduate thesis entitled "The Effect of Intellectual Capital on Firm Value with Profitability as Moderating Variable: Empirical Study of Telecommunication Companies Listed on IDX 2011-2019" is truly my own work. This undergraduate thesis does not constitute a plagiarism of other people's work or acknowledge the results of other people's thoughts as if it were my own by not acknowledging the original author. If in the future it is proven that this statement is not true, I am willing to accept sanctions in accordance with the applicable regulations.

Bandar Lampung, November 10th 2021



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BIOGRAPHY

The author is the first child of Sukirdianto and Eka Yulianti that was born in Bandar Lampung, 5th of April 2000. The author is the eldest with two siblings. The author completed Elementary School (SD) at SD Negeri 2 Sumberejo in 2011, Junior High School (SMP) at SMP Negeri 14 Bandar Lampung in 2014, and High School (SMA) at SMA Negeri 3 Bandar Lampung in 2017. The author was accepted at the Management Department, Faculty of Economics and Business, University of Lampung through the Seleksi Bersama Masuk Perguruan Tinggi Negeri (SBMPTN) in 2017.

During the study at the University of Lampung, the author was active in various english debate and speech competitions. The author was a member of the first division of education and cadre (EEC) FEB Unila for the 2018/2019 period, and became General Treasurer at the Economics' English Club (EEC) FEB Unila for the 2020 period. In November 2019, the author managed to do a short course at Aoyama Gakuin University of Tokyo and in January 2020, the author carried out a Kuliah Kerja Nyata (KKN) in Karya Bakti, Tulang Bawang Barat for 40 days.

MOTTO

“Fall seven times, stand up eight”

(Japanese Proverb)

“Do not ever forget to be kind and shine!”

(Atika Putri Dianti)

DEDICATION

Bismillahirrahmanirahim

All Praise to the Almighty Allah S.W.T

First of all I would love to dedicate this work to “Atika Putri Dianti” for all your dedication and responsibility on finishing not only your study but also all of your life’s tragedy.

To my beloved and most favourite and supportive people on earth, my parents
“Mr. Sukirdianto and Ms. Eka Yulianti”

Thank you for all the prayers, support, love and infinite attention that always gives such an endless encouragement so that I can finish this undergraduate thesis well.

Hopefully in the future I can make mom and dad proud too, may we all always be given health and a long life.

And my beloved alma mater,

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Bismillahir rahmanir Rahim..

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The undergraduate thesis with the title " The Effect of Intellectual Capital on Firm Value with Profitability as Moderating Variable: Empirical Study of Telecommunication Companies Listed on IDX 2011-2019" is one of the requirements to obtain a Bachelor's degree in Management at the Faculty of Economics and Business, University of Lampung.

During the process of preparing this thesis, it is certainly inseparable from various parties who have provided contributions, guidance, advice, and constructive suggestions. Therefore, with all sincerity and humility, the author would like to express his gratitude to:

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The author realizes that there are still many shortcomings in this thesis and it is still far from perfect, but the author hopes that this thesis can be useful and provide benefits for the readers.

Bandar Lampung, 10 November 2021
Author,

Atika Putri Dia

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CHAPTER I INTRODUCTORY

A. Background

In the current era, the existence of practicality that comes along with the technology undeniably demands the higher creative innovation aspect of the business doer to actively not only do developing but also making improvement of their business which in correlation related to the current practice technological era and more to the knowledge based role. Knowledge takes such an important role in an organization since it plays an important role in the business development.

The traditional economic paradigm, which focuses primarily on tangible assets, has shifted with the development of a new paradigm of a knowledge-based economy. Knowledge-based economy is a source for the formation of innovation and ICT (Information, Communication, and Technologies) as the basis for the growth of human resource creativity thus in directly influence the company's value when in currently has forced economic actors to be more progressive and competitive (Azijah et al, 2015).

The value creation process, which initially relied on industry and was oriented towards increasing production, shifted to the use of knowledge in the products and services produced. Business organizations are currently facing new challenges to maintain competitiveness by always innovating and optimizing the use of their intangible assets (Solikhah et al, 2010). The company establishment purposes stated by some experts that involved: to look for maximum profit, to prosper the owner of the company and or the company's shares' owner and to maximize the company's value that is reflected in the price of its shares. The three goals of the

company almost substantially have the same meaning, but the emphasis to be achieved by each company is different between one another (Harjito and Martono, 2005).

In the past, scientists and researchers have always emphasized the importance of tangible assets. This method slightly changed, causing the company's intellectual capital to become the most important factor. Some studies have shown that it is extremely important for innovation and new ideas generated by, for example, human capital, when human capital is considered a structural component of intellectual capital (Mačerinskienė and Survilaitė, 2019). Besides, the value that been reported in the financial statements is considered insufficient to describe the overall value of the company, and the gap between the market value and the book value of the stock has proven to be a benchmark for company value and is expanding every year in most countries (Lev and Zarowin, 1999).

Companies in the communications industry are actively developing their business by providing what is needed in today's society. This growth will affect the business results or profit development of telecommunication companies where the income which is the result of the business reflects the return of stock that will be gained by the investors in telecommunication companies. If the business performance is high, it will produce high stock returns, and vice versa. Thus, the company must have the ability to add value, which will make the company better than other companies. Study shows that knowledge-based technology supports the success of the business (Sayyidah and Saifi, 2017).

As the world turns to the era of globalization, investors need non-financial disclosures in addition to financial disclosures to assist the decision-making process. Intellectual capital is no longer as valueless as financial capital in providing truly sustainable income (Pourzamani et al., 2012), since it is able to provide some future firms development capturization (Castro, 2014). The more possible advanced information access and virtual economy, intellectual capital that is the sum of the set of knowledge of a company that built the business competitive advantage becomes at least as important as financial capital in

providing truly sustainable earnings (Pourzamani et al., 2012). It results in the issues related to intellectual capital being increasingly important nowadays (Chiucchi and Dumay, 2015; Dumay, 2016; Passaro et al., 2018).

Intellectual capital is related to competitive advantage, which can provide added value to the company and at the same time improve the performance of the company. If the company can develop the ability to motivate employees to innovate and increase productivity, and has systems and structures that can support the company to maintain or even increase the company's profitability and value, then intellectual capital can be said to be very good (Sayyidah and Saifi, 2017).

Tan et al (2007) found in their research on the Singapore Stock Exchange that intellectual capital is positively related to company performance and market performance where the contribution of intellectual capital differs depending on the type of industry. Solikhah et al., in 2010 found that Intellectual capital has a positive impact on financial performance and growth when the intellectual capital does not affect the company's market value. Sayyidah and Saifi in 2017 found out the result that their study indicate a significant influence between VAIC TM on Tobin's Q. According to the research of Mačerinskienė and Survilaitė (2019), company's intellectual capital impact on market value of Baltic countries listed enterprises. It has been confirmed that the intellectual capital of listed companies in the Baltic States has a positive impact on their market value which is unconsciously related to its firm value. Dharma and Pangestu (2020) found out that human capital, structural capital and capital used have a positive impact on financial performance.

Contrary to other opinions, in the research of Maditinos et al in (2011) pointed out that intellectual capital has no significant impact on company value, but the components of intellectual capital have an impact on company value. Regardless of its importance, intellectual capital is not simply easy to be identified, to be captured, and to be reported in a financial statement since it may be partly as the influence of standard of accounting (Nimtrakoon, 2015). The effort to increase the

use value of intellectual capital is carried out by measuring the intellectual capital measurements. In this study, intellectual capital measurements used the Value Added Intellectual Coefficient (VAICTM) developed by Pulic (1998).

Since previous studies on intellectual capital and its components have shown different results. Therefore, research on intellectual capital is not limited to examining the impact of VAICTM on the company's market value, but also includes examining the impact of various components of the company. These components are VACA (Value Added Capital Employed), VAHU (Value Added Human Capital) and STVA (Structural Capital Value Added) (Ståhle, Ståhle and Aho, 2011). In this way, this article will include investigating the relationship between the elements of intellectual capital and the relationship with the affected firm value substance. Value added intelligence coefficient (VAICTM) is positively correlated with economic performance, financial performance and stock market performance. This may have a positive impact on the company, such as reducing the company's production costs and increasing the company's value creation (which can benefit investors and other stakeholders).

Where profitability is one of the company's main goals where is to use the least capital to obtain the greatest profit. One of the factors that can determine the company's performance is profitability, because the company's profitability will affect the company's survival (Pratiwi, 2018). Therefore, through the profits or benefits obtained by the company, the company has an open ability to possibly expand its business and increase the company's enthusiasm and value. This leads to the reason on why profitability is chosen as the moderating variable where it brings an open probability on affecting whether strengthen or weaken the relationship on valuing intellectual capital that is more uncertain to its firm value. The idea appears when earnings information is important aspect needed by users of financial reports, delivering earnings information in financial reports as a communication tool used by management in providing useful information for stakeholders (Riswandi, 2011). The sale of company's products is the source of company profits. It can be said that if sales increase, the profits will be greater (Sinaga and Malau, 2020). Many investors make investment decisions based on

the profitability of the company, because investors tend to invest in companies with a fairly high increase in profit compared to companies that have a low increase in profits. In correlation to return on equity, it is likely common to have a return on equity information shortcut written on the financial report rather than intellectual capital information. Companies with good profitability can attract interest from suppliers, creditors, and investors to invest so that they affect company value (Lestari and Satyawan, 2018). The characteristic of uncertainty that appears as a heavy investment consideration of stakeholder is likely to be moderated by the attendance of profitability. Hence, it is likely to indicate that profitability could weaken or strengthen the relation between intellectual capital and firm value as moderating variable.

Sayyidah and Saifi in 2017 found out that there is a significant interaction between VAICTM and ROI on Tobin's Q. The research shows an indication that the profitability ratio could be used as the moderating variable between intellectual capital and firm value. Since the previous research of Sayiddah in 2017 use ROI as the profitability proxy, the research will try to use another proxy of profitability named ROE as what been used in Indriawati's research (2018) and Marlina (2013). The moderating variable named Return on equity (ROE) is the ratio or comparison of return (net profit) to equity (capital). It is the most important main indicator for investors to analyze financial statements or basic stock analysis. This may be related to the most commonly used valuation (a method of evaluating the price of high or low stocks), namely the P/E ratio derived from earnings (earnings) and the PBV derived from equity (book value) (Indriawati, 2018).

A way to determine stock valuation is by looking at the book value (PBV) (Marlina 2013) in which becomes the dependent variable to this research. Price to Book Value (PBV) is used to measure the performance of the stock market price against its book value. The book value ratio also shows the extent to which the company can create firm value relative to the amount of invested capital. The higher the company value, the greater the prosperity the company owner will get. Indriawati (2018) stated that the higher the book value (PBV), the better the

market view the company and its prospects, which means the more successful it is in creating value for shareholders.

The research subject that been used in this study is the telecommunications sub-sector company because it is related to technology industry which is involved in High IC intensive industry group. There are four intellectual capital (IC) intensive industry groups (banking, electrical, information technologies and services) (Firer and Williams, 2020). Aside that, there is a high demand in the telecommunication sector needs the better offer of telecommunication services that is being developed to meet the following needs and is becoming the higher competitive difference among the companies. According to the National Social and Economic Survey, 39.90% of the Indonesian population has used the Internet in 2018 and 47.09% in 2019. The high use of the internet reflects the atmosphere of open information and the society's recognition of technological development and information society changes. The higher the demand of telecommunication penetration in Indonesia must be in ideal companion with the growth of human capital in the telecommunication industry since it is in line with the ICT roadmap of Indonesia, part of the National Development Plan 2005-2025, which is a general plan that incorporates a cross departmental approach across government for the improvement of countrywide systems such as transportation and utilities as well as national connectivity and digital services where the vision is to strengthen National Connectivity to Balance Economy and Infrastructure Development. Since the development executor are human. Human capital that is in tight correlation to individual capability, individual motivation, leadership, the organizational climate and workgroup effectiveness does affect the IT function in itself where it involved all process of operational, monitoring, control, planning, decision making, and communication line in which directly correlates to the organizational performance (Ayuningtias and Anggadwita, 2015) seen as the most important spectrum to be seen, which in this case could be measured by the intellectual capital. Indonesia's 2015-2019 national medium-term development plan shows that investment in human resource development will promote the country's transition from a commodity-based economy to a knowledge-based economy (Dharma and Pangestu 2020).

In the view of modern economics, economic progress leads to a science-based economy with the application of knowledge management. This system argues that conventional capital such as natural resources, financial resources, and other physical asset resources is meaningless without knowledge and technology-based capital. The application of knowledge and technology-based capital in a company will increase the efficiency and effectiveness of the use of other resources, so that it will provide a competitive advantage for the company.

The technology industry in which the telecommunication sector is targeted because of its potency as a knowledge intensive sector that makes it an ideal sector for intellectual capital study (Wang and Chang, 2005). Other than the in line characteristic, developments in the world of information are currently getting faster, both in terms of content and technology used to convey information. The current existence of growing technology suits the purpose of more of the knowledge study of telecommunications companies that are closely related to technology and their intellectual capital in managing the company.

Regarding to the previous research coming from Ni and Cheng in 2020, company value is positively affected by the average net profit per employee, as well as goodwill and intangible assets, because companies with knowledgeable employees will have the advantage of the company which will encourage people to do more consumption and investment. It is in line with what Nimratkoon stated in 2017 that companies with higher intellectual capital tend to have higher market value and has a positive correlation between intellectual capital and financial performance. Another research came from Suprano and Ristika (2017) stated that intellectual capital has a positive and significant impact on the company value of LQ45 from 2010 to 2014. Meanwhile Sayyidah et al in 2017 found out that intellectual capital (VAIC™) has a significant impact on company value with the indicator Tobins' Q, among which components (VACA has no significant impact on Tobin Q, VAHU has a significant impact on Tobin Q, and STVA has no significant impact on company value). This research also shows that VAIC™ and ROI also have a significant interaction on Tobin's Q. On the other hand, Indriawati found in 2018 that the profit margin (ROE) has a positive impact on

company value.

Based on the statement of Tan et al in 2007, intellectual capital is positively related to market performance and company performance with a note that the contribution of the intellectual capital is depend on the type of industry. Moreover, since there is a growing continuity of telecommunication needs in Indonesia with lack of literature about intellectual capital and the growing telecommunication industry. Thus, the author is interested in conducting a study entitled "**The Effect of Intellectual Capital on Firm Value with Profitability as Moderating Variable: Empirical Study of Telecommunication Companies Listed on the Indonesia Stock Exchange in 2011-2019**"

B. Problem Formulation

Since the effect of intellectual capital to firm value is depending on the subject of industry that been choose and there is limited literature regarding to the correlation between intellectual capital on valuing the telecommunication industry companies. Based on the background above, problem can be formulated:

1. Does intellectual capital influence firm's value?
2. Does the ROE moderate the relationship of intellectual capital and firm's value?

C. Research Objectives and Benefits

C. 1. Research Objectives

Based on the formulation of the problem above, the objectives of this study are as follows:

1. This is to examine the effect of intellectual capital to telecommunication firm's values.
2. This is to examine the effect of moderation of return on equity to intellectual capital and telecommunication firm's values.

C. 2. Research Benefits

The benefits expected from this research are as follows:

a. Practical Benefit

This research is expected to increase knowledge and information in the field of management, especially in finance and add insight to readers.

b. Theoretical Benefit

This research can be used as a reference or study material for further researchers, especially in the financial sector whose research is related to financial literacy, intellectual capital and firm value.

CHAPTER II

LITERATURE REVIEW, FRAMEWORK AND HYPOTHESIS

A. Literature Review

A. 1. Resource-based Theory (RBT)

Resource-based theory (RBT) is an idea developed in the theory of strategic management and the company's competitive advantage, that is, if a company has extraordinary resources, it will achieve extraordinary achievements. In order to explain the impact of intellectual capital on the company's financial performance, growth and market value, Wernerfelt (1984) explained that according to the resource-based theory, companies obtain competitive advantages and good financial performance by owning, controlling and using important strategic assets. These strategic assets include tangible assets and intangible assets.

Firm resources could be divided into two; resources can be tangible or intangible (Ferreira et al., 2011). The tangible resource could be seen as any resources mainly recorded on the firm annual report such as factories, vehicles, materials, machinery, et cetera. The intangible resource could be defined as any resources rarely recorded on firm annual reports such as company culture, organizational structure, employee skill and knowledge, et cetera. The right proportion combination of these two resources is critical since it supports one another to a great firm value. Intangible assets will produce nothing if there is no enough support from the tangible asset or, at the very least best could generate in minimum, and vice versa. A great resource of intangible assets and an excellent knowledge on empowering intangible assets are stated to have a competitive added value. It could be stated that a marvelous collaboration of companies' resource reflected from its availability of intellectual capital, and a great

knowledge and any other invisible advantage reflected by its intellectual capital value is seen as a companies' competitive advantage combos material. It can be stated that other than its capabilities value, it is also seen as a plus side of a company or, in similar words, competitive advantage under the resource-based theory frame of reference. The correlation to the theory of research-based and research conducted on intangible assets focusing on its competitive value is interesting since it could reflect companies' capability on empowering its strategic assets. It is stated that this competitive value is complex since it can experience an escalation and degradation with lots of external factors such as technologies and competitors' actions.

According to this theory, the benefits of both assets are a positive outcome between company resources and performance measurement. Investment in an intangible asset stems from its ability to have all the characteristics of a strategic asset. When most of the intangible assets are not strategic assets, IC is usually considered an important strategic asset. Owning IC means that the company has special and valuable knowledge. The qualification of IC as a strategic asset lies in the potential relationship between IC and company performance (Belkaoui, 2003).

A. 2. Stakeholder Theory

Stakeholder theory (Friedman, 1970), stakeholder theory provides a tool to link morality and strategy (Phillips, 2003), and companies that strive to serve the interests of a broad range of stakeholders will create more value of time (Campbell, 1997; Freeman, 1984; Freeman, Harrison & Wicks, 2009). This theory maintains relationships between stakeholders, including various forms of relationships between the company and all its stakeholders. A stakeholder is seen as any actors that affect or got affected by the companies' performance and is narrowed to certain character of potency as their capability to contribute valuable resources to the organization, their power on affecting inside and over an organization, and their capability and power on taking organization's resource at a certain degree of risk and is willing to take any disadvantage or advantage for any generated result. When contributing valuable resources will determine the stakeholder potency idea, having a great sense to put any scoop of resources in

addition will determine the recognition of stakeholder legitimacy. It is due to the identity idea that is likely to be brought by the stakeholder regardless the organizational interests.

Descriptively stakeholder theory could be defined stakeholder as a reflection of organization's operation since they are the related party on running the organization and do have power on organization crucial regulation decisions. Manager, seen under stakeholder theory point of view, must put a focus on all stakeholders in which it is not just the owners of the company. The stakeholder theory points out that one of the management strategies for companies to produce better corporate performance is to focus on stakeholders. Stakeholder theory spread the organization focus into two aspects in which are on managing organization's relationship to its whole stakeholder, and on planning and analyzing relation involving external party that may affect the firm by its counterintuitive policy such as government as the most neutral regulatory bodies and is put more focus to social issue above companies' interests.

According to stakeholder theory, organizational managers must carry out activities that are considered important by stakeholders and report these activities to stakeholders. In the context of explaining the relationship between VAIC TM and the company's financial performance, growth, and market value, stakeholder theory has been studied from both the ethics (ethics) and management fields. Stakeholder management theory believes that the ability of stakeholders to influence corporate management should be considered a function of the level of stakeholder control over the resources required by the organization (Ulum, 2008). The prosperity of the company depends on the support of stakeholders. Stakeholders are defined as parties or groups that have direct or indirect interests in the existence or activities of the company. Therefore, this group influences and is influenced by the company (Ayudia, 2017).

A. 3. Legitimacy Theory

Degan (2002), correlates to legitimacy theory, companies will voluntarily carry out their overall activities if management considers that this is what the

community expects where the legitimacy theory states that companies are continually looking for ways to ensure their operations are within the boundaries and norms of society. Legitimacy theory is closely related to stakeholders and reporting intellectual capital as a measure of the report. Companies will be determined more to reveal their intellectual capital capacity in the financial statements to obtain legitimacy from the public for the intellectual property they have, since Ulum in 2009 stated that the public legitimacy is important to maintain the company's existence in the company's social environment.

The essence of the formation of legitimacy theory is that an organization pays attention to giving responsibility for the rights of investors and pays attention to the rights of the public (Deegan and Rakin, 1996). This theory emphasizes that the aspects in which the organization operates by considering the norms that make the affected outside parties (the community) more guaranteed their rights, especially in the environmental aspect due to the production process or the overall activities carried out by the company in realizing its interests. Nevertheless, the legitimacy theory referred to in this paper focuses more on the influence of stakeholders in building their legitimacy points related to the results of organization activities reflected in the organization's annual reports. When a company's legitimacy aspect is questioned, there are some points that an organization can consider doing. The organization can try to inform some of the changes that occur to stakeholders, seek to change perceptions related to stakeholder doubt issues and give confidence that doubts can be convinced without changing organizational behaviour, seek to divert issues, and seeks to replace and influence external parties related to the company's performance (Lindblon (1994) in Gutrie et al., (2006).

A. 4. Intellectual Capital

Intellectual capital is the form of immaterial ownership or is the gathering of information in correlation to the company which can be used to generate new customers, investors, presenting of their new goods, spreading their branches in which generally brings their firm to a step ahead in the competitive status quo of main element to materialize intellectual capital (Stewart, 1997). Intellectual capital measured by VAIC™ (Value Added Intelligence Coefficient). VAIC™ is

a method of measuring the performance of a company's intellectual capital (Pulic in Ulum, 2009). This method is the simplest method, because the data required to calculate VAIC™ is contained in the company's financial statement account (balance sheet, profit and loss). VAIC™ has three components, namely VACA or (physical capital), VAHU (human capital) and STVA (structured capital).

a. Value Added Human Capital (VAHU)

VAHU shows the ratio of the contribution of each rupiah invested in HC to the company's added value. The relationship between VA and HC shows the ability of HC to create value for the company. VAHU can be calculated using the following formula:

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

(Pulic in Sayyidah and Saifi, 2017)

Note:

VA = Value-added

HC (Human Capital) = Employee expense (salary and wages)

Where

$$\mathbf{VA} = \mathbf{OUT} - \mathbf{IN}$$

(Pulic in Sayyidah and Saifi, 2017)

Note:

VA = Value-added

OUT = Output (total sales and other income)

IN = Input (operating expense except employee expense)

b. VACA (Value Added Capital Employed)

VACA is the ratio between value added (VA) and actual tangible capital (CE). This ratio is an indicator of VA which is obtained by one unit of tangible assets using the following formula:

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

(Pulic in Sayyidah and Saifi, 2017)

Note:

VA = Value-added

CE (Capital Employed) = Available funds (equity, net income)

c. STVA (Structural Capital Value Added)

The STVA measures the amount of structural capital needed to generate 1 rupiah of added value (VA). This ratio is calculated by the formula:

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

(Pulic in Sayyidah and Saifi, 2017)

Note:

VA = Value-added

SC = The difference between value added and human capital (VA-HC)

These ratios are a calculation of a company's intellectual ability where the result is the VAICTM indicator, which is as follows:

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

(Pulic in Sayyidah and Saifi, 2017)

A. 5. Profitability

Profitability is a measure of the company's ability to generate or increase its profit. Profitability can reflect the level of effectiveness the company has achieved. There are several phenomena that indicate that companies that gained profit along its operations tend to submit financial reports in a timely manner. On the contrary, some phenomena also indicate that companies with declining profitability or loss often submit financial reports late (Cahyani, 2015). There are several indicators that can be used to measure profitability, namely Operating Margin (OM), Profit Margin (PM), Return on Total Assets (ROA), Basic Earning Power (BEP), Return on Equity (ROE) (Brigham and Houston, 2009).

A. 5. 1. Operating Margin (OM)

This ratio measures operating income, or EBIT, per dollar of sales. The formula is:

$$\mathbf{OM} = \frac{\mathbf{Operating\ Income}}{\mathbf{Sales}}$$

(Brigham and Houston, 2009)

A. 5. 2. Profit Margin (PM)

This ratio measures net income per dollar of sales. The profit margin, also sometimes called the net profit margin, is calculated by dividing net income by sales:

$$\mathbf{PM} = \frac{\mathbf{Net\ Income}}{\mathbf{Sales}}$$

(Brigham and Houston, 2009)

A. 5. 3. Return on Total Assets (ROA)

ROA is a type of ratio to assess the company's ability to gain benefit from the used assets. ROA could be used to evaluate the company's ability based on profits track record and income so that it can be used for the next period's evaluation. The formula is:

$$\mathbf{ROA} = \frac{\mathbf{Net\ Income}}{\mathbf{Assets}}$$

(Brigham and Houston, 2009)

A. 5. 4. Basic Earning Power (BEP)

This ratio indicates the ability of the firm's assets to generate operating income. The formula of BEP is:

$$\mathbf{BEP} = \frac{\mathbf{EBIT}}{\mathbf{Total\ Assets}}$$

(Brigham and Houston, 2009)

A. 5. 5. Return on Common Equity (ROE)

The most important, or bottom-line, accounting ratio is the return on common equity (ROE), found as follows:

$$\mathbf{ROE} = \frac{\mathbf{Net\ Income}}{\mathbf{Common\ Equity}}$$

(Brigham and Houston, 2009)

The value of a company that grows sustainably is very important since it influence the way investors perceive the company (Wahyuni, 2018). It is stated in Sayyidah and Saifi (2017), profitability could be used as moderating variable between intellectual capital and firm value. VAIC, ROI and (VAIC*ROI) simultaneously have a significant effect on Tobin's Q (Sayyidah and Saifi, 2017).

The research will use return on equity (ROE) as the indicator of profitability that could be defined as a profitability ratio to assess the company's ability to generate profits from the company's shareholder investment expressed as a percentage. ROE reflects the effects of all of the other ratios, and is the single best accounting measure of performance (Brigham and Houston, 2009). Investors can use accounting profit as a basis for consideration when making investment decisions, the accounting profit has a significant effect on stock returns (Marlina, 2013). ROE is calculated from the company's income against the capital invested by the owners of the company (common stockholders and preferred stockholders). Return on equity shows how successfully the company manages its capital (net worth) so that the level of return is measured by the investment of the owner of the capital or the company's shareholders. ROE is the profitability of its own capital or what is called the profitability of the business.

A. 6. Firm Value

Firm value in which companies are striving to improve is considered to be the main indicator for evaluating corporate performance (Ni and Cheng, 2020). The company's goal is to achieve high company value or achieve the company's continuous growth. Growing companies are manifested by high valuations of

company assets and stock markets. The value of the company is reflected in the stock price. A higher stock price means a high rate of return for investors, which means that the company's higher value is related to the company's own goals, which is the goal of maximizing shareholder wealth (Gultom and Sharif in Bestariningrum, 2015). In simple terms, the company's condition is reflected in the company's stock price. There are several indicators to measure firm value:

A. 6. 1. Price Earning Ratio (P/E Ratio)

The P/E ratio is used to understand how the market reflects the company's performance in earnings per share. The price-to-income ratio shows the relationship between the common stock market and earnings per share. The price-to-earnings ratio shows how much investor is willing to pay for each dollar of reported profit.

$$\mathbf{PER} = \frac{\mathbf{Price\ per\ Share}}{\mathbf{Earning\ per\ Share}}$$

(Brigham and Houston, 2009)

A. 6. 2. Tobins' Q

The Tobins' Q ratio shows an estimate of the return value of each incremental investment dollar in the financial market (Astuti et al., 2018). According to Weston & Copelan (2008: 244), the method of using the Tobins' Q ratio to measure the value of a company is to compare the market value of a company listed on the financial market with the value of the company's asset replacement.

$$\mathbf{Tobins'Q} = \frac{\mathbf{ME+DEBT}}{\mathbf{TA}}$$

Puspitasari and Sudiyatno (2010:15) in Sayyidah and Saifi (2017).

Notes:

ME = Market value of all outstanding shares

DEBT = Total Debt

TA = Total Asset

A. 7. Price to Book Value

Firm value is generally captured in book value (PBV) (Patricia et al, 2018). A higher PBV tends to make the market more confident in the company's future prospects. Increasing company value is an achievement in accordance with the wishes of the owner, so that the owner's welfare also increases (Hery, 2017).

Firm value is the investor's perception of the company which is often associated with stock prices. Firm value in this study is measured by price to book value. A high price to book value will make the market believe in the company's future prospects.

The price to book value (PBV) is calculated using the following formula:

$$\text{PBV} = \frac{\text{Share Price}}{\text{Book Value per Share}}$$

Where the book value per share is calculated by the formula:

$$\text{Book value per share} = \frac{\text{Equity}}{\text{Number of Outstanding Share}}$$

(Indriawati, 2018)

B. Previous Research

The previous research was used as reference and support by other researchers for research. With previous research, the existing theories in the research can be used to compare and strengthen the analysis results involving multiple studies. The following table is a table of previous studies, which provides detailed information and results of the study:

Table 2.1 Previous Research

No	Researcher and Year of Research	Research Title	Variable of Research	Research Result
1.	Ni, Yensen, and Cheng,	“Do intellectual	Dependent Variable :	Firm value is affected positively by the average

	Yi-Rung. 2020.	capitals matter to firm value enhancement? Evidences from Taiwan”.	Firm value Independent Variables: Human Capital, Innovation Capital, Customer Capital, Process Capital.	net profit per employee as well as goodwill and intangible assets. This is because firms having employees with abundant knowledge will possess advantage for innovation, and the excellent reputation, a part of goodwill for oriental firms, would encourage people to consume and invest more.
2.	Suprano, and Ramadini, Ristika. 2017.	“Pengaruh Intellectual Capital dan Earning Per Share terhadap Nilai Perusahaan (Studi Empiris pada Perusahaan LQ45 yang Terdaftar di Bursa Efek Indonesia Periode 2010-2014)”	Dependent Variable: Firm Value Independent Variables: Intellectual Capital, Earning Per Share	1. Intellectual capital and earnings per share (EPS) have an effect on company value in LQ45 which is listed on the Indonesia Stock Exchange in 2010-2014. 2. Intellectual capital has a positive and significant effect on company value in LQ45 which listed on the Indonesia Stock Exchange in 2010-2014. 3. Earning per share (EPS) has a positive and significant effect on firm value at LQ45 companies listed on the Indonesia Stock Exchange in 2010-2014.
3.	Sayyidah, Ulfah and Saifi, Muhammad. 2017.	“Pengaruh Intellectual Capital terhadap Nilai Perusahaan dengan Profitabilitas sebagai Variabel Moderasi (Studi Pada	Dependent Variable: Firm Value Independent Variable: Intellectual Capital (VAIC™) Moderating Variable:	1. VACA has no significant effect on Tobin's Q 2. VAHU has a significant effect on Tobin's Q 3. STVA has no significant effect on Tobin's Q 4. Intellectual capital

		Perusahaan Sub Sektor Property Dan Real Estate Di Bursa Efek Indonesia Periode 2013-2015)”	Profitability	(VAIC™) has a significant effect on Tobin's Q 5. There is a significant interaction between VAIC™ and ROI on Tobin's Q
4.	Cahyani, Ramadhania Intan., Widiarti, Tara., and Ferdiana, Jelita Listya. 2015.	Pengaruh Intellectual Capital terhadap Profitabilitas pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia	Dependent Variable (X) : Profitability (ROA). Independent Variable: Intellectual Capital (VACA, VAH-U, STVA).	1. Intellectual Capital does affect the profitability of manufacture companies listed on the IDX 2010-2013. 2. Intellectual capital (IC) does affect the profitability before and after IFRS (International Financial Reporting Standards) implementation of manufacture companies listed on the IDX 2010-2013. 3. The cement industry and the plastic packaging sector shows that intellectual capital (IC) has no effect on profitability in 2010-2011.
5.	Indriawati, Fitri. 2018.	“The Impact of Profitability , Debt Policy, Earning per Share, and Dividend Policy on The Firm Value (Empirical	Independent Variables: Profitability, Debt Policy, Earning Per Share, and Dividend Policy. Dependent Variable:	a. Profitability (ROE) has a positive effect to firm value b. Debt policy (DER) has no effect to the firm value. c. Earnings per share (EPS) has no effect on-the firm value. d. Dividend policy

		Study of Companies Listed In Jakarta Islamic Index 2013-2015)”	Firm Value	(DPR) has no influence on the firm value.
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Source: Previous Scientific Research Journal

C. Framework

This study assumes that the intellectual capital and profitability moderation have an effect on firm value.

C. 1. Intellectual Capital and Firm Value

Pramelasari in 2010 stated that the market value of a firm's stock is an important investment consideration for most stakeholders. In addition, firm performance is often used as a reference for the investors to do the investment, but all of these are still unable to describe the factors driving the firm's performance so as to create firm value. The average net profit per employee as well as goodwill and intangible asset has a positive impact on the firm's value. This is because companies with knowledgeable employees will have the advantage of innovation and the good reputation of oriental companies where it will encourage more consumption and investment (Ni and Cheng, 2020). Workers who are the executor that involved in firm's activities and are creative in increasing the efficiency and effectiveness of the firm are in often neglected in the value creation process. If the work efficiency of the company is not cultivated to be improved through its employee and capital availability, it will be difficult for investors to provide high value to the company. Intellectual capital does not have a clear form in its financial statements, but investing in intellectual capital will encourage investors to provide added value to the company, which will have an impact on changes in company value (Pramelasari, 2010). Ozkan et al. (2017) analyzed the relationship between intellectual capital and the financial performance based on the 10 years of sample data of banks at Turkey. Putri & Suwitho (2015) and Hidayah (2014) in Susanti & Restiana (2018) research both shows that financial performance has a positive and

significant effect on the firm value. The findings of Ozkan et al. (2017) conclude that intellectual capital is primarily affected by human capital efficiency (HCE) while structural capital efficiency (SCE) and capital efficiency (CEE) is less effective in creating value in the banking sector. Previous research results show that companies with higher intellectual capital perform better than companies with low intellectual capital. The growth of the company's value usually starts with the increase of the company's profitability and productivity. In this case, VAICTM can measure personnel performance brought about by knowledge concepts (Mavridis, 2004).

C. 2. Profitability as Moderating Variable

Intellectual capital is a part of intangible assets and does play an essential role in an organization as it could be used as a tool to examine the firm's value. It is not easy to directly measure intellectual capital. Therefore, in 1998, a researcher named Pulic developed an indirect method to measure intellectual capital. The method developed focuses on the added value the company has. Human capital can generate added value through the use of capital and structural capital (they are resources in an organization or company). Human capital, working capital and structural capital are the foundation of intellectual capital. Pulic's intellectual capital method is called VAICTM (Value Added Intelligence Coefficient). The stronger the company's ability on managing the three components of intellectual capital (VACA, VAHU and STVA), the stronger the company's ability on managing its assets.

Gained the maximum profit with the limited resources is the company's most straightforward goal to be explained. Rizqia et al., in Indriawati (2018) states that companies that can maintain their stability and increase earnings can be scored as a positive signal catch by investors related to the company's performance, and this can be shown by its profitability ratio. Wijaya & Sedana (2015) stated that the company experiencing increased profit indicated the excellent company's performance that resulted in the positive investor impression to company and indicates the increase of stock price as good tangible feedback.

If the company can manage assets well and reduce operating costs, the added value of the company will increase as a result of optimizing the use of intellectual capital (Cahyani, 2015). It also indicated the more significant equity for the firm's future value as the result of the more significant amount of assets that the firm's produce. It means that every additional of return on equity that valued by the stakeholder is likely to shift the point of view of stakeholder on the relation resulted by the empowerment of intellectual capital since the higher the profitability is in line with the higher the company's ability to generate profits, and so vice versa. The greater the profit indicates the ability of the company of increasing its value. The higher profitability ratio will come along with a higher positive signal for investors, which indicates that the company is in a favorable condition. This is the attraction of investors to own shares of the company. By this, the high demand for shares will make investors appreciate the value of shares more significant than the value recorded on the balance sheet company so that the value of the company was high (Martikarini,2012).

Based on the background of the problem, theoretical reviews, and previous research reviews, the research framework is formulated as follows:

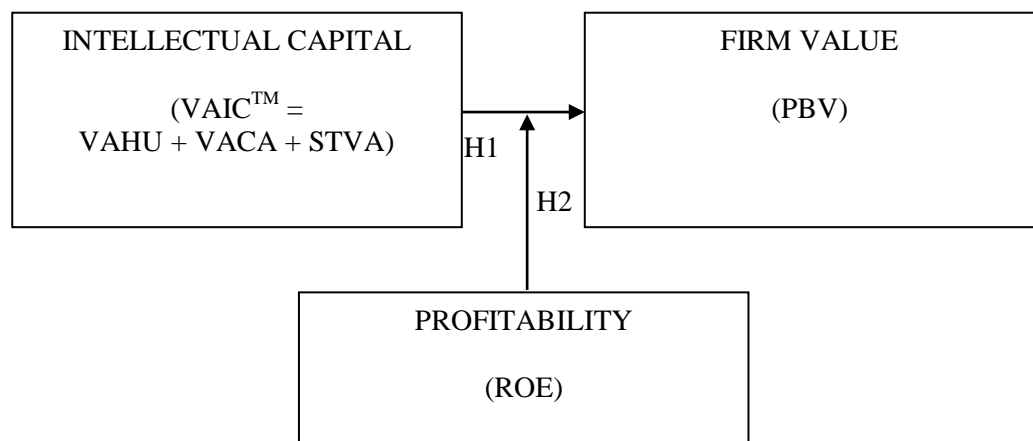


Figure 2.1 Framework

D. Hypothesis

H1: Intellectual capital affects firm value on telecommunication companies listed on the Indonesia Stock Exchange 2011-2019.

H2: Profitability moderates the relationship between intellectual capital and firm value at telecommunication companies listed on the Indonesia Stock Exchange 2011-2019.

CHAPTER III

RESEARCH METHOD

A. Type and Source of Data

Research design is a strategy to achieve predetermined research goals and provide guidance to researchers throughout the research process (Nursalam, 2003). This study uses explanatory explanations/relationships to determine the relationship between two or more variables (Agung, 2012: 3). This study aims to examine the effect of intellectual capital on company value with profitability as a moderating variable in telecommunications companies listed on the IDX in 2011-2019. This research uses quantitative methods. The independent variable in this study is intellectual capital (X), ROE as Moderating Variable (M) and the dependent variable in this study is the firm value which is given the symbol (Y). The research conducted in this study was by downloading data directly through the official IDX website www.IDX.co.id. Data technique analyses that will be used in this paper are multiple regression analysis and moderating regression analysis.

B. Research Variable

Operations variable are needed to determine the types and indicators of variables involved in this research. In addition, the operability of variables aims to determine the measurement range of each variable so that tools can be used to conduct hypothesis testing properly.

B. 1. Dependent Variable

According to Sugiyono (2012), the dependent variable is the output variable, the criteria, the consequences. The dependent variable is the variable that is influenced or the result of the existence of the independent variable (independent).

The dependent variable is also called the dependent variable, dependent, and affected. The dependent variable in this study is firm value with the proxy PBV (Price to Book Value) that can be calculated by dividing the price per share of the company concerned with the book value per share (Marlina,2013). As the operational variable, price to book value formula is:

$$\text{Price to Book Value (PBV)} = \frac{\text{Share Price}}{\text{Book Value per Share}}$$

Where the book value per share is calculated by the formula:

$$\text{Book value per share} = \frac{\text{Equity}}{\text{Number of Outstanding Shares}}$$

(Indriawati, 2018)

B. 2. Moderating Variable

Moderating variables can strengthen or weaken the direct relationship between the independent and dependent variables (Liana, 2019). Moderating variables are variables that have an influence on the nature or direction of the relationship between variables. The nature or direction of the relationship between independent variables with dependent variables may be positive or negative depending on the moderating variable. Therefore the moderating variable is also called the contingency variable. The moderating variable in this research is the profitability ratio that is measured by Return on Equity (ROE) Ratio. ROE value can be calculated by dividing a firm's net income by its stakeholder's equity (Gumati, 2011). ROE is the profitability of own capital or the so-called profitability of the enterprise, where the formula is:

$$\text{Return on Equity (ROE)} = \frac{\text{Net Income}}{\text{Equity}}$$

(Brigham and Houston, 2009)

B. 3. Independent Variable

The independent variable is the variable that affects or causes changes in the dependent variable (Sugiyono, 2012). The independent variable is also called the independent variable, influence, treatment, cause or stimulus. The independent

variable in this study is Intellectual Capital that is measured by VAICTM method. There are several steps on calculating the VAICTM value since VAICTM has three main components (VAHU, VACA, STVA). The VAHU (Value Added Human Capital) could be gained by dividing the value of value-added (OUT-IN) by its employee expenses. The VACA (Value Added Capital Employed) could be gained by dividing the value added to the CE (available funds that consist of equity and net income). The STVA (Structural Capital Value Added) can be calculated by dividing SC (the difference between value-added and human capital) by the value-added (OUT-IN). The last step is to add up the three components (VACA+VAHU+STVA) to gain its value-added intellectual (VAICTM) (Sayyidah and Saifi, 2017).

The sums up formulas are:

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

(Pulic in Sayyidah and Saifi, 2017)

Note:

VA = Value-added (OUT-IN)

HC (Human Capital) = Employee expense (salary and wages)

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

(Pulic in Sayyidah and Saifi, 2017)

Note:

VA = Value-added (OUT-IN)

CE (Capital Employed) = Available funds (equity, net income)

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

(Pulic in Sayyidah and Saifi, 2017)

Note:

VA = Value-added (OUT-IN)

SC (Structural Capital) = The difference between value-added and human capital (VA-HC)

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

(Pulic in Sayyidah and Saifi, 2017)

C. Population and Sample

C. 1. Population

The population that will be used in this research is all telecommunication sub-sector companies listed on the Indonesian Stock Exchange (BEI) in the 2013-2019 period, with a total of 6 companies.

Table 3.1 Telecommunication Companies Listed on Indonesia Stock Exchange (IDX)

NO	NAME	IPO DATE
1	Bakrie Telkom Tbk.	3 rd of February 2006
2	XL Axiata Tbk.	29 th of September 2005
3	Smartfren Telecom Tbk.	29 th of November 2006
4	Indosat Tbk.	19 th of October 1994
5	Jasnita Telekomindo Tbk.	16 th of May 2019
6	Telekomunikasi Indonesia Tbk.	14 th of November 1995

Source: www.sahamok.com

C. 2. Sample

The sample is part of the number and characteristics of the population (Sugiyono, 2016). The technique used in sampling in this study is the purposive sampling method by determining the criteria.

Table 3.2 Research Sample Criteria

NO	NAME	TOTAL
1	Telecommunication companies that have been listed on the Indonesia Stock Exchange (IDX)	6
2	Telecommunication companies that were delisted from the Indonesia Stock Exchange (IDX) during the study period, namely for the period 2011-2019	(1)
3	Company that has both negative return and negative equity on each year involved in observation period	(1)
The number of companies that match the sample criteria		4
Total Observation		36

Based on the criteria used in determining the sample through the purposive sampling method, the companies that met the sample criteria and were selected as samples in this study were four telecommunications companies listed on the Indonesia Stock Exchange (BEI) 2011-2019 period. Since the value of return on equity could not be developed when a company experiencing loss and at the same time having negative equity, the elimination of company that has both negative return and negative equity on each year involved in observation period is needed as for the return on equity determination. The company that been eliminated is Bakrie Telkom Tbk since it is experiencing loss and minus on equity, hence the return on equity could not be developed. The list of companies that were the research samples selected through the purposive sampling method, namely as follows:

Table 3.3 Research Sample

NO	NAME	IPO DATE
1	XL Axiata Tbk.	29 th of September 2005
2	Smartfren Telecom Tbk.	29 th of November 2006
3	Indosat Tbk.	19 th of October 1994
4	Telekomunikasi Indonesia Tbk.	14 th of November 1995

Source: www.sahamok.com

D. Source of Data

According to Arikunto (2002), data is all facts and figures that can be used as material to compile information, while information is the result of data processing used for a purpose. The data collection technique of this research is to use data sources in the form of secondary data. Secondary data is research data obtained that is not directly related to providing data to data collectors (Sugiyono, 2018: 137). Since the data sources use secondary data, so the data collection technique used is documentation. Secondary data used in this study comes from the Indonesia Stock Exchange (IDX) website in annual financial reports.

E. Data Collection Method

The data collection method is a technique used by researchers who aim to collect

data. When conducting research, in order for the data to be valid, data collection techniques are needed so that the information obtained supports the truth of a particular theory. The literature study that been used is a secondary data source that is used as a basis for comparison when compiling research. Secondary data obtained by searching for relevant reading sources from literature books, journals, and previous research results related to this research. The purpose of conducting a literature study is to support the data's completeness so that the research results obtained are more valid. This is intended to collect all the data needed to answer research problems and enrich the literature to support the quantitative data obtained. The data used in this study obtained from the website www.IDX.co.id and the websites of each telecommunication company listed on the Indonesia Stock Exchange (IDX).

F. Data Analysis Method

Classical hypothesis test

F. 1. Normality test

The normality test aims to test whether the confounding variables or residual variables in the regression model have a normal distribution (Ghazali, 2014: 199). In this study, the normality test of the data was performed using the Kolmogorov-Smirnov test sample, and the significance level was 5%. The normality test is performed by comparing the asymptotic significance of $\alpha=0.05$. If asymptotically > 0.05 , it indicates that the data has passed the normality test (Santoso, 2002: 212).

F. 2. Multicollinearity test

The multicollinearity test is designed to test whether there is a relationship between some or all of the independent variables in the regression model. A good regression model should not have correlations between independent variables (Ghazali, 2014: 92). Perform a multicollinearity test, and it can be done by analyzing the correlation between variables by calculating the tolerance value and the variance inflation factor (VIF).

Multicollinearity occurs when:

- a. If the tolerance number is ≤ 0.1 , it means that there is no correlation between

independent variables whose value is more than 95%. And the results of the VIF value ≥ 10 .

b. If $VIF \leq 10$, it means that the independent variables used in the model are accurate and objective.

F. 3. Autocorrelation test

The autocorrelation test is designed to test whether there is a correlation between the confounding error (residual error) of the linear regression model in the t period and the confounding error in the t-1 period (the previous period). If there is a correlation, it is called an autocorrelation problem. This means that the results within a certain period will be affected by the previous period. To detect autocorrelation, it can be done by using the Durbin Watson test (DW test).

F. 4. Heteroscedasticity Test

The purpose of the heteroscedasticity test is to test whether there are unequal variances in the residuals from one observation to another in the regression model. If the residual variance from one observation to another is constant, it is called mean square error, and if there is a difference, it is called heteroscedasticity. If there is a mean square error or an uneven square error, the regression model is considered good. Use a scatter plot for this test. If it forms a regular pattern (the wave first widens and then narrows), it indicates heteroscedasticity. Conversely, if these points do not form an ordered pattern that extends upward and downward, it means that there is a mean square error.

G. Regression Analysis

G. 1. Multiple regression analysis

$$Y = c + b_0 IC + b_1 M + e$$

G. 2. Moderating regression analysis

$$Y = c + b_0 IC + b_1 M + b_3 ICM + e$$

Note:

Y :Firm Value

c	:Constanta
β_1 - β_3	:Regression Coefficient
IC	:Intellectual capital
M	:Profitability
ICM	:Interaction between Intellectual Capital and Profitability
e	:Error term, that is, the error estimation rate in research.

H. Data Analysis Technique

Sanusi (2016) states that data analysis techniques describe the analysis techniques used by researchers to analyze the data that has been collected, including testing it. Before being analyzed, the data must be processed first so that the data can be used as a basis for making decisions. There are two data analysis techniques in this study, namely:

H. 1. Descriptive Data Analysis

This analysis is used to analyze data by describing the data that has been collected and then describing the data in the form of words, schemes, and images. The results of the analysis are then used by researchers to provide an overview of the research variables.

H. 2. Quantitative Data Analysis

Quantitative analysis is carried out using a statistical approach or formula. In this study, using an analysis technique in the form of multiple linear regression, which aims to measure the effect of two or more independent variables on the dependent variable.

I. Hypothesis Testing

Hypothesis testing is done to see how much influence the independent variable has on the dependent variable. Hypothesis testing is the same as testing the significant multiple linear regression coefficients partially related to the research hypothesis statement (Sanusi, 2016).

I. 1. Coefficient of Determination

The coefficient of determination is used to measure the ability of variable X

(independent variable) to affect variable Y (independent variable). This test aims to determine the best level of certainty in regression analysis represented by the determination coefficient. The coefficient of determination, $R^2 = 1$, means that the independent variable has a perfect effect on the dependent variable. On the other hand, $R^2 = 0$ means that the independent variable does not affect the dependent variable.

I. 2. F Test

The F test shows whether all the independent variables included in the model have a joint or simultaneous influence on the dependent variable (Ghazali, 2014: 22).

The decision making criteria, according to Sujarweni (2007: 85), are:

- a. If Sig > 0.05 means that H_A is rejected
- b. If Sig < 0.05 means that H_A is accepted

I. 3. Partial Test (t test)

The t-test basically shows how far the influence of one independent variable on the dependent variable assuming the other variables are constant. The decision making criteria, according to Sujarweni (2007: 85), are:

- a. If Sig > 0.05 means that H_A is rejected
- b. If Sig < 0.05 means that H_A is accepted

CHAPTER V CONCLUSION AND RECOMMENDATION

A. Conclusion

Based on the result and above discussion, the author could take several conclusions as follows:

1. Intellectual capital which take independent variable role does not affect the independent variable, firm value, that been represented by Price to Book Value in telecommunication subsector company listed on Indonesian Stock Exchange 2011-2019. By this, H1 in result is not accepted. The unacceptance means that any addition or abolishment of the value of intellectual capital will not affect both bigger value exaggeration and decreasing the value of firm that are listed in the observation. As the result of previous research comparison, the author come to an idea that the unacceptance of intellectual capital to firm value in this research is likely caused by the not yet populist obligation of company to reveal its intellectual capital disclosure.

2. Profitability variable that is represented by Return on Equity is result as it is could moderate the relation between intellectual capital and firm value in telecommunication subsector that been listed in the year of observation. By this, H2 is accepted. It is proved that Return on Equity could moderates the once not related variables (Intellectual capital to firm value) to have a positive significant relation. As the result of previous research comparison, the author come to an idea that the moderation effect of return on equity to the effect relation of intellectual capital to firm value in this research is likely caused by the easy access and interpretation of stakeholder towards return on equity as it is affect the intellectual capital empowerment.

Based on the result and above discussion, it can be justify to sum that intellectual capital does not significantly influence firm value and profitability could moderates the affect relation in between intellectual capital and firm value in telecommunication subsector companies listed on Indonesian Stock Exchange 2011-2019. The result of the effect relation of intellectual capital to firm value could be categorized as in line with the theory of resource based theory. Resourced based theory stated that a company is likely to have an advantage at the point of competition when it could empower its important strategic asset. The independent variable, intellectual capital, in affecting the firm value of telecommunication subsector company that been conducted in this research which shows an insignificant effect indicates that the companies in the study are not in its succeed on empowering its intellectual capital assets, shown by the unaffected relation to its firm value.

Belkoui (2003) stated that a company having the ownership of intellectual capital asset could be justify to defined as it is having a value of knowledge which seen as one of vulnerable strategic assets. The insignificancy correlation of intellectual capital to firm value could be correlated to stakeholder theory. Stakeholder theory stated that stakeholder is seen as the vulnerable actor on valuing firm value in which it could be interpreted that stakeholder's frame of reference to a firm value is count as important. The correlation between the results of the insignificant relationship of the influence of intellectual capital with firm value in this study related to stakeholder theory is the knowledge of stakeholders in interpreting intellectual capital is indicated to run unwell, so that the influence of intellectual capital on firm value is not significant. This can also be related to the legitimacy theory, which states that the company will consciously and voluntarily put more effort and do report on any company activities that are considered by the company's management to affect the views of the community important party who expect the report. Indications of the low awareness of stakeholders who are seen as vulnerabilities as actors or important community units in assessing the company can be related to the results of research which states that intellectual capital is not related to the value of the company.

Picturing point of view from the results of moderation, profitability is proven to be able to influence the affect between intellectual capital and firm value. The effect of profitability proxied by return on equity which takes role as moderating variable between intellectual capital and firm value in this study is indicated by easier interpretation of return on equity by financial report interpret by even basic finance needier. The legitimacy and stakeholder theory in this moderation seen as return on equity is likely a common component to reveal in any financial report. Return on equity is justify to be seen as a reflection of the effect of other ratios and is the single best accounting measure of performance of a company, related to its profitability (Brigham and Houston, 2009).

B. Recommendation

Based on the research that has been done, the suggestions in this study are as follows:

B. 1. Investors

Investors should start looking at the value of intellectual capital on valuing a company, seeing from the theories that been used in the study, it come to an idea where intellectual capital is one component of the strategic value of a company even it is not affect the firm value when it stand as the only variable since the availability of moderation of ROE proven to make a positive significant relation on intellectual capital to firm value. Related to strengthening this view, investors can see the value of return on equity because this variable is even able to moderate the influence of intellectual capital on firm value.

B. 2. Companies

Based on the results of this study, intellectual capital found as it is not significantly affect the firm value of telecommunication subsector that has been listed in telecommunication subsector listed on Indonesian Stock Exchange in 2011-2019 period. If we limitedly interpret the effect of intellectual capital to firm value, the empowerment of intellectual capital is unlikely to be important to pursue since it is insignificant affect relation. Other frame of reference seen since the research is also use profitability which has been represented by the value of return on equity, it is more advantageous for the company to decide the

improvement by the moderation affect result. It is realized that the return on equity could moderate the effect of intellectual capital to firm value by then it is also important for the company to do more effort on controlling and empowering its intellectual capital assets.

B. 3. Further Research

Based on the results of the moderation test in this study, it was found that return on equity was able to moderate intellectual capital and firm value. In hope for further research, researchers can conduct research by using other moderating variables, haven't been used unlike return on equity and return on investment, which are also thought to be able to moderate. In addition, researchers can also use other sectors due to a statement that the contribution of the relationship between intellectual capital and firm value is depending on the sector that being studied.

Bibliography

- Appuhami, B.A. Ranjith. 2007. The Impact of Intellectual Capital on Investors' Capital Gains on Shares: An Empirical Investigation of Thai Banking, Finance & Insurance Sector. *International Management Review*: Vol. 3. No. 2.
- Arikunto, S. 2002. *Metodologi Penelitian Suatu Pendekatan Proposal*. Jakarta: PT. Rineka Cipta.
- Ayudia Dwi Puspitasari. 2017. Analisis Pengaruh Enterprise Risk Management Disclosure, Intellectual Capital Disclosure, dan Corporate Social Responsibility Disclosure Terhadap Nilai Perusahaan (Studi Empiris Pada Perusahaan Pertambangan yang Terdaftar di BEI Tahun 2012-2015). Skripsi, Universitas Lampung.
- Ayuningtias, Hani Gita, and Anggadwita, Grisna. 2015. "Human Capital Development of Information and Communication Technology Industry in Indonesia" Bandung: JRAAM.
- Astuti, F. Y., Wahyudi, S., & Mawardi, W. (2019). Analysis of Effect of Firm Size, Institutional Ownership, Profitability, and Leverage on Firm Value with Corporate Social Responsibility (CSR) Disclosure as Intervening Variables (Study on Banking Companies Listed on IDX 2012-2016 Period). *Journal of Business Strategy*, 27(2), 95.
- Azijah, Zulfa., A, Muhammad Findi., and Irawan, Tony. 2015. "Knowledge-Based Economy (KBE), Konvergensi, dan Pertumbuhan Ekonomi: Studi Kasus di ASEAN Plus Three (Periode tahun 2001-2014)". *Jurnal Ekonomi dan Kebijakan Pembangunan FEM IPB*, hlm. 153-167, Vol 4 No 2.
- Belkaoui, A.R. 2003. Intellectual Capital and Firm Performance US Firm. A Study of The Resource Based and Stakeholders View. *Journal of Intellectual Capital* 4(2): 215-226.
- Berzkalne, Irina and Zelgalve, Elvira. 2014. *Intellectual capital and company value*. Latvia: Elsevier.
- Bestariningrum, Nenggar. 2015. "Analyzing The Effect of Capital Structure and Firm Size on Firm Value (Case Study: Company that Listed in LQ-45 Index Period 2010-2014)". Manado: *Jurnal Berkala Ilmiah Efisiensi*. Volume 15 No. 04.

- Brigham, Eugene F. and Houston, Joel F. 2009. *Fundamentals of Financial Management 12th Edition*. Canada: Nelson Education Ltd.
- Cahyani, Ramadhania Intan., Widiarti, Tara., and Ferdiana, Jelita Listya. 2015. "Pengaruh Intellectual Capital terhadap Profitabilitas pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia" Surabaya: *Jurnal Riset Akuntansi dan Perpajakan JRAP* Vol. 2, No. 1, hal 1 – 18.
- Campbell, A. 1997. Stakeholders: The case in favour. *Long Range Planning*, 30: 446–49. [http://dx.doi.org/10.1016/S0024-6301\(97\)00003-4](http://dx.doi.org/10.1016/S0024-6301(97)00003-4).
- Castro, G Mart in-de. (2014), "Intellectual capital and the firm: some remaining questions and prospects", *Knowledge Management Research and Practice*, Vol. 12 No. 3, pp. 239-245.
- Chiucchi, M.S. and Dumay, J. 2015. "Unlocking intellectual capital", *Journal of Intellectual Capital*, Vol. 16 No. 2, pp. 305-330.
- Deegan, Craig. 2002. The Legitimising Effect of Social and Environmental Disclosures - A Theoretical Foundation. *Accounting, Auditing & Accountability Journal*. Vol. 15, No.3, pp. 282-311.
- Dharma, Michele Angeline and Pangestu, Stevanus . (2020). The Impact of Intellectual Capital on the Financial Performance of Publicly Listed Indonesian Manufacturing Companies. *Accounting Journal* Vol.1, No.2.
- Dumay, J. (2016), "A critical reflection on the future of intellectual capital: from reporting to disclosure", *Journal of Intellectual Capital*, Vol. 17 No. 1, pp. 168-184.
- Ferraro, Olga and Veltri, Stefania. 2011. The value relevance of Intellectual Capital on the firm's market value: an empirical survey on the Italian listed firms. Department of Business Administration , University of Calabria 87036, Arcavacata di Rende (CS), Calabria, Italy.
- Firrer, Steven and William, S. Mitchell. 2003. Intellectual Capital and traditional measures of corporate performance. *The Emerald Research: Journal of Intellectual Capital*. Vol.4 No.3.
- Friedman, M. 1970. The social responsibility of business is to increase its profits. *New York Times Magazine*, September 13: 32–33, 122–24.
- Freeman, R. E. 1984. *Strategic management: A stakeholder approach*. Boston: Pitman. . 1994. The politics of stakeholder theory: Some future directions. *Business Ethics Quarterly*, 4: 409–21.
- Freeman, R. E., Harrison, J. S., & Wicks, A. C. 2007. *Managing for stakeholders: Survival, reputation, and success*. New Haven, CT: Yale University Press.

- Ghazali, Imam. 2006. Analisis Multivariate dengan Program SPSS. Semarang: Badan Penerbit Universitas Diponegoro.
- Gultom, Margareta, Corry and Syarif, Firman. 2008. “ Pengaruh Kebijakan Leverage, Kebijakan Deviden, And Earning Per Share Terhadap Nilai Perusahaan.” Jurnal Akuntansi 47.
- Gumanti, T. A. 2011. “Manajemen Investasi Konsep, Teori dan Aplikasi”. Jakarta: Mitra Wacana Media. Vol: 1.
- Harjito, A dan Martono. (2005). “Manajemen Keuangan”. Yogyakarta: Ekonisia.
- Hermawan, Sigit. 2012. Makna Intellectual Capital Perspektif The Role Theory dan The Resource Based Theory. *Ekuitas: Jurnal Ekonomi dan Keuangan* No. 80/DIKTI/Kep/2012.
- Hidayah, N. (2014). The effect of company characteristic toward company value in the property and real estate company in Indonesia Stock Exchange. *International Journal of Business, Economics, and Law*, 5(1), 1-8.
- Indriawati, Fitri. 2018. The Impact of Profitability, Debt Policy, Earning Per Share, and Dividend Policy on The Firm Value (Empirical Study of Companies Listed In Jakarta Islamic Index 2013-2015). *Information and Knowledge Management*. Vol.8, No.4
- Irene Wei Kiong Ting Hooi Hooi Lean, (2009), "Intellectual capital performance of financial institutions in Malaysia", *Journal of Intellectual Capital*, Vol. 10 Iss 4 pp. 588 – 599
- Joseph, Andre Sinaga. and Harman, Malau. in *Jurnal Ekonomis*; Vol. 13 No. 3 (2020): EKONOMIS : Oktober 2020 ; *Jurnal Ekonomis*; Vol 13 No 3 (2020): EKONOMIS : Oktober 2020 ; 1979-0856 (2020-10-28)
- Kartika, M., & Hatane, S. E. (2013). “Pengaruh Intellectual Capital terhadap Profitabilitas Perusahaan Perbankan yang Terdaftar di Bursa Efek Indonesia pada Tahun 2007-2011”. *Business Accounting Review*, Vol.1, No.2, 14-25.
- Lev, Baruch and Zarowin, Paul. (1999). The Boundaries Between Financial Reporting and How to Extend Them. *Journal of Accounting Research* Vol. 37, No. 2 (Autumn, 1999), pp. 353-385
- Lestari, Dyah Ayu Dwi and Satyawan, Made Dudy. 2018. Pengaruh Intellectual Capital terhadap Nilai Perusahaan dengan Profitabilitas sebagai Variabel Moderasi. *Jurnal Universitas Negeri Surabaya*.
- Liana, Lie. 2009. Penggunaan MRA dengan Spss untuk Menguji Pengaruh Variabel Moderating terhadap Hubungan antara Variabel Independen dan Variabel

Dependen. *Jurnal Teknologi Informasi DINAMIK* Volume XIV, No.2, Juli 2009 : 90-97

- Mačerinskienė, I., & Survilaitė, S. (2019). Company's intellectual capital impact on market value of Baltic countries listed enterprises. *Oeconomia Copernicana*, 10(2), 309–339. doi: 10.24136/oc.2019.016
- Marlina, Tri. 2013. "Pengaruh Earning Per Share, Return On Equity, Debt To Equity Ratio dan Sizeb Terhadap Price To Book Value" *Jiaskes*. Vol. 1 No. 1. Page 59-72
- Patricia., Bangun, Primsa., and Tarigan, Malem Ukur. 2018. "Pengaruh Profitabilitas, Likuiditas, dan Ukuran Perusahaan Terhadap Nilai Perusahaan Dengan Kinerja Keuangan Sebagai Variabel Intervening (Studi Empiris Pada Perusahaan Manufaktur Yang Terdaftar Di Bursa Efek Indonesia)". *Jakarta: Management and Business Journal*, Vol. 13, No. 1.
- Phillips, R. A. 2003. *Stakeholder theory and organizational ethics*. San Francisco: Berrett-Koehler Publishers.
- Pourzamani, Z., Jahanshad, A. and Mahmoudabadi, A. (2012), "The impact of intellectual capital on firms market value and financial performance", *Journal of Accounting and Auditing Review*, Vol. 19 No. 68, pp. 17-30.
- Pratiwi, D. P. (2018). "Analisis Pengaruh Intellectual Capital Dan Karakteristik Keuangan Terhadap Kinerja Perusahaan Manufaktur". *Surakarta: Economics and Business Faculty of Muhammadiyah University*.
- Pulic, Ante., 1998, *Measuring The Performance of Intellectual Potential in Knowledge Economy*, accessed on 27th of November 2020, <http://www.measuring-ip.at/OPapers/Pulic/Vaictxt/vaictxt.html>
- Puspitasari, Elen and Sudiyatno, Bambang. 2010. Tobins'Q dan Altman Z-score sebagai Indikator Pengukur Kinerja Perusahaan. *Jurnal Kajian Akuntansi*. Vol. 2, No.1, Februari:9-21.
- Martikarini, N. (2013). "Pengaruh Profitabilitas, Kebijakan Hutang Dan Dividen Terhadap Nilai Perusahaan", *Jurnal Fakultas Ekonomi Jurusan Akuntansi, Universitas Gunadarma*.
- Mavridis, 2004. "The intellectual capital performance of the Japanese banking sector". *Greece: Journal of Intellectual Capital* Vol. 5 No. 1.
- Ni, Yensen, and Cheng, Yi-Rung. 2020. "Do intellectual capitals matter to firm value enhancement? Evidences from Taiwan" *Journal of Intellectual Capital*. Taipei: Emerald Insight.
- Nimtrakoon, Sirinuch. 2015. "The relationship between intellectual capital, firms'

market value and financial performance: Empirical evidence from the ASEAN”, *Journal of Intellectual Capital*, Vol.16 Issue: 3, pp.587-618.

- Nursalam. (2003). *Concept and Application of Science Research Methodology of Nursing Thesis Guidelines, Thesis and Research Instruments of Nursing*. Jakarta: Salemba Medika.
- Ozkan, N., Cakan, S. & Kayacan, M. 2017. Intellectual Capital and Financial performance: A study of the Turkish Banking Sector. *Borsa Istanbul Review*, 17(3), 190-198.
- Putri, A. O., & Suwitho. (2015). Pengaruh kinerja keuangan terhadap nilai perusahaan dengan pengungkapan CSR sebagai variabel pemoderasi. *Jurnal Ilmu Riset dan Bisnis*, 4(4), 1-19.
- Pramelasari and Metta, Yosi. 2010. “Pengaruh Intellectual Capital terhadap Nilai Pasar Perusahaan dan Kinerja Keuangan Perusahaan”. Semarang.
- Riswandi, P. 2011. Pengaruh Kepemilikan Manajerial, Proporsi Komisaris Independen terhadap Kualitas Laba, (2003), 210–223.
- Rizqia, Dwita Ayu, Siti Aisjah, dan Sumiati. 2013. Effect of Managerial Ownership, Financial Leverage, Profitability, Firm Size, and Investment Opportunity on Dividend Policy and Firm Value. *Research Journal of Finance Accounting*. Vol. 4, No. 11: 120 – 130.
- Saham Ok. 2020. Sub Sektor Telekomunikasi BEI. Diunduh di <https://www.sahamok.net/emiten/sektor-infrastruktur-utilitas-transportasi/sub-sektor-telekomunikasi/>. Accessed on 15th of November 2020 at 10.00 WIB.
- Sanusi, Anwar. 2016. *Metodologi Penelitian Bisnis*. Cetakan Keenam. Salemba Empat. Jakarta.
- Santoso, Singgih. 2002. *Buku Latihan SPSS Statistik Parametrik*. Jakarta: PT Elex Media Komputindo.
- Sayyidah Ulfah and Saifi, Muhammad. 2017. Pengaruh Intellectual Capital terhadap Nilai Perusahaan dengan Profitabilitas sebagai Variabel Moderasi (Studi Pada Perusahaan Sub Sektor Property Dan Real Estate Di Bursa Efek Indonesia Periode 2013-2015). *Jurnal Administrasi Bisnis (JAB)*|Vol. 46 No.1.
- Solikhah, Badingatus, Abdul Rohman, Wahyu Meiranto. 2010. Implikasi Intellectual Capital terhadap Financial Performance, Growth dan Market Value; Studi Empiris dengan Pendekatan Simplistic Specification”. *Symposium National Accounting Journal*. Purwokerto: SNA XIII.
- Stewart, T.A. (1997) *Intellectual Capital: The New Wealth of Organizations*. Doubleday/Currency, New York.

- Subaida, Ida and Mardiaty, Nurkholis Endang. 2018. Effect of Intellectual Capital and Intellectual Capital Disclosure on Firm Value. *Journal of Applied Management (JAM)* Volume 16 Number 1.
- Sujarweni, V Wiratna. 2007. *Belajar Mudah Menggunakan SPSS*. Yogyakarta: Ardana Media.
- Sugiyono. 2012. *Metode Penelitian Kuantitatif Kualitatif dan R&B*. Bandung: Alfabeta.
- Sujarweni, Wiratna. 2007. *Panduan Mudah Menggunakan SPSS (Dilengkapi Contoh Penelitian Bidang Ekonomi)*. Yogyakarta: Ardana Media.
- Susanti, Neneng., & Restiana, Nanda Giska. (2018). What's the Best Factor to Determining Firm Value?. *Jurnal Keuangan dan Perbankan*, 22(2):301–309.
- Stähle, Pirjo; Stähle, Sten and Aho, Samuli. 2011. Value Added Intellectual Coefficient (VAIC): a critical analysis.
- Tan, H.P., Plowman, D. and Hancock, P. (2007), "Intellectual capital and financial returns of companies", *Journal of Intellectual Capital*, Vol. 8 No. 1, pp. 76-95.
- Ulum. 2008. *Intellectual Capital dan Kinerja Keuangan Perusahaan; Suatu Analisis dengan Pendekatan Partial Least Squares*
- Wahyuni, Sri Fitri. 2018. Pengaruh Corporate Social Responsibility Terhadap Nilai Perusahaan Dengan Profitabilitas Sebagai Variabel Moderating. *Maneggio: Jurnal Ilmiah Magister Manajemen*. Vol 1, No. 1, September 2018, 109-117.
- Wang, Wen-Ying and Chang, Chingfu. (2005). Intellectual capital and performance in causal models Evidence from the information technology industry in Taiwan. *Journal of Intellectual Capital* Vol. 6 No. 2, 2005 pp. 222-236 q Emerald Group Publishing Limited 1469-1930 DOI 10.1108/14691930510592816.
- Wernerfelt, B. (1984). A Resource Based View of The Firm. *Strategic Management Journal*, 171, 180.
- Weston, J.F dan Copeland. 2008. *Dasar–Dasar Manajemen Keuangan Jilid II*. Jakarta : Erlangga.
- Widyaningdyah, Agnes Utari and Aryani, Y. Anni. 2013. Intellectual capital dan Keunggulan Kompetitif (Studi Empiris Perusahaan Manufaktur versi *Jakarta Stock Industrial Classification JASICA*). *Jurnal Akuntansi dan Keuangan*, Vol. 15, No. 1.
- Wijaya, B. I. & Sedana, L. B. P. (2015). Pengaruh Profitabilitas terhadap Nilai Perusahaan (Kebijakan Dividen dan Kesempatan Investasi sebagai

Variabel Mediasi)”.*Management Journal of Unud*, 4(12), 4477-4500.

Zeghal, D., & Maaloul, A. (2010). Analysing value added as an indicator of intellectual capital and its consequences on company performance. *Journal of Intellectual Capital*, 39-60.