

ANALYSIS INTELLECTUAL CAPITAL OF CORPORATE VALUE AT INDONESIA STOCK EXCHANGE

Eni Wuryani

Faculty of Economics, Universitas Negeri Surabaya, Surabaya, Indonesia
eniwuryani@unesa.ac.id

Submit : 04th August 2018, Revised : 05th March 2020, Accepted : 25th March 2020

ABSTRACT

This study looks at the impact that intellectual capital has on firm interest. Data collection methods of reporting data in Financial Reporting Companies listed on the Indonesian stock exchange from 2014 to 2016. Data processed was 84 companies. Analysis of research data using quantitative with linear regression. Intellectual assets are estimated with the value added variable, the market interest assessed by Tobins Q. The consequence of this intellectual capital research is having an effect on the company's value.

Keywords: *Intellectual Capital, Corporate Value, Stock Exchange, Tobins Q*

I. INTRODUCTION

Meijerink and Bondarouk (2018) Resource management is a source of intellectual capital. Intellectual Money isn't just about on the value of human resource management services, but needs to increase knowledge and skills. Intellectual capital is the resource, ability and competence that drives organizational efficiency and creates value. Nuryaman (2015) intellectual capital have a positive impact on firm interest, the productivity has a positive impact on intellectual capital. Romero et al. (2017) gender diversity is a mechanism of corporate governance which has a positive impact on the level of information disclosure of intellectual capital. Lee and Lin (2018) Companies with young employees have better operating performance. Overall, humans, processes and customers are the main dimensions which influence the industry in maintaining good performance and operations. Performance evaluation of the company's accounting operations, and the Establishment of established structure of management, will bring positive results for the quality of service and the company's operating efficiency. Intellectual capital is an intangible asset, generated from three pillars: individual, institutional and consumer resources.

Kianto et al. (2018), defining that intellectual capital is calculated must review the basics of knowledge to increase the intensity of work knowledge, organisation, and the production of value. Knowledge-based intellectual capital perspectives include multi-dimensional, human agency and behavior, contextuality, dynamics and temporality. Bontis et.al. (2000) Intellectual resources can be used to create richness. IC is a set of efficient knowledge. Weiling and Xin, (2017) Firm value is positively correlated with information disclosure and company value. Sajid and Afza (2018) manager's opportunistic behavior towards managing the earnings would kill the company's value and manipulate reported accounting earnings. The opportunistic behavior of managers to manipulate profits negatively affects corporate governance and corporate value.

Research conducted by Aida and Rahmawati, (2015) shows the intellectual capital has a beneficial effect on firm interest, while research conducted by Wergiyanto and Nining, (2016) Shows that intellectual capital has adverse effects on firm interest. Aida and Rahmawati, (2015) examined the impact of and disclosure of intellectual capital on corporate value: the effect of intervening corporate performance. The results of this study show positive effects of intellectual capital on corporate values indirectly through the

performance of the company as intermediary variable. Sayyidah and Saifi (2017) state that the results show that the intellectual capital exerts a significant influence on firm interest. Wergiyanto and Nining (2016) show that the research into intellectual capital have negative effects on firm interest.

Outreach of intellectual capital is a signal given by the company to shareholders. This is because intellectual capital disclosure will reflect how much human capital owned by the enterprise. The company's intellectual capital, the easier it will be for companies to achieve good financial performance using their human resources. Managers are parties who know full information from within the company. If so, then the choice of giving incentives to managers on a scheduled basis and the components revealed in the financial statements will give a signal to the stock market (Ross, 1977). In a competitive market equilibrium condition, the signal that emerges will bring up a conclusion that will later be used as a basis for investors' decision making on the stock market.

The interest of the firm to study is calculated using the Tobin's Q formula. The Tobin's Q model is seen as providing the best knowledge. The research is based on the companies listed on the IDX and included in LQ45, because 45 are selected stocks that meet the criteria of having liquidity, high market capitalization, high trading frequency and high trade growth prospects and have a growth process and financial conditions good enough. With these criteria, the LQ 45 group is a stock group of companies that are of interest and are the focus of investor attention. This condition is the main consideration for choosing shares in the LQ 45 group to be the object of research

A. Intellectual Capital

The definition of intellectual capital is a community of acquired knowledge that are organizational attributes and contribute significantly to improving the position by adding value to competition interested parties (Widarjo, 2011). PSAK No. 19 revised edition, written that non-monetary assets: intangible assets that do not have a form that is used to finance activities of the business where the assets are stored must have the

nature, identification, control and economic benefits.

PSAK no. 19 Before the study, based on the presence of intangible assets divided into two categories: intangible assets whose life is restricted by certain circumstances, such as trademarks, Copyrights, leases, restricted franchises, licenses and intangible assets of infinite useful life that can not be determined from the date of expiry, such as logos, proprietary processes and formulas, perpetual deductibles and goodwill. In PSAK 19 the definition of intangible assets is non-monetary assets that does not have a method used to finance the activities of the company where the assets are stored must have the nature, identification, control and economic benefits. Intangible assets or resources are mentioned Science, technology, development and implementation of new technologies or procedures, licenses, intellectual property rights, market knowledge and trademarks (including product names or brand names). Definitions of intangible assets include: computer software, trademarks, copyrights, live photos, client lists, debt tenure rights, import quotas, deductibles, supplier relationships, customer relations, customer loyalty, promotion and market share protection.

Intellectual Capital consists of several elements which can be used as a framework to execute their strategies for businesses. Knowing intellectual capital components is expected to help companies build added value and improve competitiveness. Woodcock and Whithing, (2009) state that the portion of Intellectual is made of three main components principal elements, namely internal capital, external capital, and human capital. The three elements are very closely related. The organization will pay attention to the three elements of Intellectual Capital, so they can be used to boost the company's performance and profitability. The business won't achieve its optimum intellectual efficiency if good corporate processes and procedures don't help its intellectual capital. Effective cooperation between human capital and domestic capital should build productive external capital. The company pays attention to the external environment around it. By establishing a good cooperative relationship, it will enhance business cooperation that can

provide benefits for all parties so as to boost the performance and reputation.

B. The Value of the Company

Company Value is a number that can be used to measure the amount that an organization has "level of interest" is seen from the point of view of several parties such as investors who associate the value of a company from its stock price (Gultom et al., 2013). Increasing the company's value is the same as increasing the stock price and that is what the owner wants, because the company's high value implies strong shareholder prosperity. A company's value will offer full shareholder satisfaction if its stock price increases, because shareholders can directly enjoy the profit from the sale of shares when the shareholders sell their shares. Investors typically turn over management to professionals attaining high corporate worth. Professionals are known as executives or commissars. An important concept for investors is enterprise value (EV), or also known as firm value, since measuring the business as a whole is a proxy for the market (Fauzia and Amanah 2016).

The value of the company is The sum the prospective buyer is willing to pay if the company is sold. In the company's estimation there were elements of prediction, compensation, forecasts and judgment. There are several basic research principles, namely the value calculated for a given period of time, the value must be determined at a reasonable price, the determination shall not be affected by a specific group of buyers. In analysis the company's worth was calculated using Tobin's q.

II. METHODOLOGY

Methods of data collection with documentation of data in the listed as Financial Reporting Companies on the Indonesian stock exchange, 2014 to 2016. Data processed by 84 companies. Analysis of research data using quantitative with linear regression. In this analysis calculation of intellectual capital uses idea about added value which is calculated the differences between output and input (Pulic, 1999). Next, the VAICTM formulation of calculations based on the pulic opinion:

VA is Output-Input

VACA is VA/CE

VAHU is VA/HC

STVA is (VA-HC)/VA

VAHU is VACA + VAHU + STVA

Keterangan:

VAICTM is *Valus Added intellectual capital*

VA is *Value Added*

VACA is *Value Added Capital coefficient*

VAHU is *Value Added Human Capital*

STVA is *Structural Capital Value Added*

Output is Total sales and income

Input is Expenses and costs, other than expenses employee

CE is *Capital Employed*

HC is *Human Capital*

The value creation cycle is calculated by the HC productivity, Capital Employed (CE), and Structural Capital (SC):

1. Value added of Capital Employed (VACA)

The definition of Value Added from Employed Capital (VACA) is a measure of VA generated for one unit of physical capital. Pulic (1999) claims that if 1 unit of the Capital Employed produces more returns than other units, then it is easier for the business to use the Capital Employed.

2. Value Added Human Capital (VAHU)

The definition Value Added Human Capital (VAHU) represents the number of VA generated using spent labor funds. The relationship between VA and HC shows how HC can create value within the company.

3. Structural Capital Value Added (STVA)

The definition Structural Capital Value Added (STVA) represents Structural Capital (SC) contribution to value development. STVA measures the amount of SC required for the production of 1 VA rupiah and is an indicator of SC's success in value creation. SC is not a discrete measure as HC is in the process of value creation. That is to say, the greater HC's contribution to value creation, in this respect, the smaller the SC contribution will be. Pulic further said SC is VA minus HC. The process of value creation is determined by the productivity of human capital (HC), working capital (CE), and systemic capital (SC).

Company Value is a value that can be used to measure how much a company's "level of

interest" is seen from the point of view of several parties such as investors who associate the value of a company from its stock price (Gultom et al., 2013). The business value was evaluated using Tobin's q in this analysis. Formula of book value as follows:

$$Q = \frac{(EMV + D)}{(EBV + D)}$$

Where :

Q is Company value

EMV or Equity market value (EMV = Preis closure x number of outstanding shares)

D is Book value Overall debt

EBV is The gross book value of the properties

III. RESULTS AND DISCUSSION

Table 1
Descriptive Statistics

Information	N	Minimum	Maximum	Mean	Std Deviation
IC	84	1,20	14,96	5,3601	2,61762
CV	84	0,60	18,64	2,4553	3,23912

In Table 1 data were processed as many as 84 of the companies that went public in 2014-2016.

Tabel 2
Anova

Model	Sum of Squares	Df	Mean Square	F	Sig
Regression	38,188	1	38,188	5,902	0,017
1 Regression	530,522	82	6,470		
Total	568,709	83			

a. Dependent Variable: IC
b. Predictors: (Constant), CV

Table 3
Coefficients

Model	Unstandardized Coefficients B	Standardized Coefficients Std. Error	t Coefficients Beta	Sig
(Constant)	4,846	0,349	13,885	0,000
1 CV	0,209	0,086	0,259	2,429

a. Dependent Variable: IC

Intellectual capital affects firm desires positively, the results are based on the of linear regression. P interest yields a value of 0.017 less

than 0.05. This result means that the greater the value of intellectual capital will have a greater influence on enterprise value. Intellectual Capital components which include employee competencies, internal structures and external relations should impact the Corporate Quality. Employee competencies include all the capabilities, expertise, skills, knowledge and business performance of employees (human capital). Some of the basic features that can be evaluated are educational courses, qualifications, knowledge, expertise, recruiting, mentoring, learning programs, human ability and personality. The "internal" framework of the organization including the expertise, abilities, knowledge, experience and business performance of the company (Structural Capital). An person may have a high level of intellectuality, but if the company has inadequate processes and procedures, it is difficult for intellectual capital to achieve optimum performance and capacity that is not optimally exploited.

"External" relationships include consumers, suppliers and government (customer capital). Intellectual capital is one of the variables that in the eyes of investors decides the high value of businesses. This is because intellectual capital is a corporate intelligence tool that businesses use to counter business competition. Companies that have high knowledge assets can more easily overcome business competition, so that the enterprise value rises. Intellectual Capital consists of several components that can be used as a basis for the implementation of their business strategies. Good management of human resources can enhance efficiency and effectiveness at work. The organization should use human capital and the importance of employee expertise to generate wealth for the company, so this can minimize work errors. Competent, committed, creative and loyal employees can work efficiently, without wasting time or incurring unnecessary costs

Facilities and infrastructure owned by the company, such as databases, software, and organizational structures are expected to support the performance of all employees in order to be more optimal and able to provide added value for the firm in the eyes of investors. Based on signaling theory, having high intellectual capital is expected to attract investors' attention because high intellectual capital will help companies build

added value and improve competitiveness. The results of this study match the analysis carried out by Nuryaman (2015), Weiling and Xin, (2017), Aida and Rahmawati (2015), Fauzia and Amanah (2016), Sayyidah and Saifi (2017). Research says intellectual capital positively impacts firm worth.

IV. CONCLUSION

Intellectual capital has a positive impact in 2014-2016 on the valuation of the listed manufacturing companies in LQ45. Human capital represents the organization's collective capacity to produce the best solution, based on the knowledge that individuals in the enterprise possess. Human Capital will improve if the organization can leverage the expertise that its workers possess. Structural capital is the capacity of an entity or corporation to fulfill the routine cycle and structure of the company that helps workplace efforts to achieve maximum intellectual efficiency and overall business results, such as: operating system of the company, the manufacturing process, the organizational culture, the management philosophy, and kinds of intellectual property owned by a company. Relation capital is a harmonious partnership/association network owned by the company and its partners, both from reputable, and efficient suppliers, originating from the relationship between the company and the government and the society around it. Relation capital can come from different sections outside the corporate environment which can add value to the organization.

REFERENCES

- Connelly, J. T., P. Limpaphayom, H. T. Nguyen, and T. D. Tran, 2017. "Research in International Business and Finance A tale of two cities: Economic development , corporate governance and firm value in Vietnam," *Research in International Business and Finance.*, vol. 42, no. April, pp. 102–123.
- Fauzia, N., & Amanah, L. 2016. "Pengaruh Intellectual Capital , Karakteristik Perusahaan, Dan Corporate Social Responsibility Terhadap Nilai Perusahaan". *Jurnal Ilmu Dan Riset Akuntansi*. Vol.5: hal. 1–22.
- Gultom, R., Wijaya, S. W., & Agustina. 2013. "Analisis Faktor-Faktor Yang Mempengaruhi Nilai Perusahaan Pada Perusahaan Farmasi Di Bursa Efek Indonesia". *Jurnal Wira Ekonomi Mikroskil*. Vol.3: pp. 51–60.
- Kianto, A., P. Ritala, M. Vanhala, and H. Hussinki, 2018. "Critical Perspectives on Accounting Reflections on the criteria for the sound measurement of intellectual capital : A knowledge-based perspective," *Critical Perspectives on Accounting*, xxx.
- Lee, C. and C. Lin, 2018. "The major determinants of in fl uencing the operating performance from the perspective of intellectual capital : Evidence on CPA industry", *Asia Pacific Management. Review*.xxx, 1-16.
- Mo, J., L. Zhu, and Y. Fan, 2012. "The impact of the EU ETS on the corporate value of European electricity corporations," *Energy*, vol. 45, no. 1, pp. 3–11.
- Nasir, M. Sajid and T. Afza, 2018. "Does managerial behavior of managing earnings mitigate the relationship between corporate governance and firm value? Evidence from an emerging market," *Future Business Journal.*, vol. 4, no. 1, pp. 139–156.
- Nuryaman, 2015. "The Influence of Intellectual Capital on The Firm ' s Value with The Financial Performance as Intervening Variable," *Procedia - Social and Behavioral Sciences* vol. 211, no. September, pp. 292–298.
- Romero, F. Tejedo, L. Lima, and R. Craig, 2017. "Women directors and disclosure of intellectual capital information," *European Research on Management and Business Economics* , vol. 23, no. 3, pp. 123–131.
- Sayyidah, U., & Saifi, M. 2017. "Pengaruh Intellectual Capital Terhadap Nilai Perusahaan Variabel Moderasi". *Jurnal Administrasi Bisnis*. Vol.46 (1): hal. 163–171.

Suda, H. and J. Miyabe, "Practitioners' efforts to communicate corporate values in," *Public Relations Review*, vol. 42, no. 2, pp. 369–371, 2016.

Weiling, Su, and Fang Xin I, 2017. The Correlation Research between Voluntary Information Disclosure and Corporate Value of Listed companies of Internet of Things, *Procedia Computer Science* 112

(2017) 1692–1700.

Walasek, D., Robert Latas, 2016. "Intellectual capital within the project management," *Procedia Engineering* vol. 153, pp. 384–391, 2016.