The Influence of Intellectual Capital on Corporate Value through Financial Performance

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Abstract

This study aims to analyze the influence of intellectual capital on financial performance, the influence of intellectual capital on firm value, the influence of financial performance to firm value and the influence intellectual capital to company value through financial performance. The sample in this research consists of 33 manufacturing companies in Indonesian Stock Exchange from 2013 to 2016. Analysis technique used was path analysis. The results of the analysis show that intellectual capital has an effect on financial performance. This proves that intellectual materials such as knowledge, information, a wealth of experience utilized by the company can create the value of financial performance to the fullest. Intellectual capital affects the value of the company. Companies that have high intellectual capital indicate that the company can combine the presence of resources owned, ranging from financial funds, human capital, structural capital to customer capital, with good management, the value of the company has increased. Financial performance has an effect on company value. Intellectual capital affects the company's value through financial performance.

Keywords: intellectual capital, financial performance, company value

Introduction

Basically, the value of the firm can be measured by several aspects; one of them is the stock market price of the company. The stock market price of the company reflects the overall investor's valuation of every owned equity (Haruman, 2008). The value presented in the financial statements is considered not enough to describe the value of a company. There is a gap between the market value and the book value of the shares considered the benchmark of corporate value. The difference between the two values is widening every year in most countries (Lev and Zarowin, 1999). This distance eventually creates the attention of researchers to explore the value that is not visible in the financial statements. Investors' overview a company by looking at financial ratios as an investment evaluation tool, as financial ratios reflects the high low value of the firm. If investors want to see how big companies generate a return on investment they invest, the first thing to see is the profitability ratio.

The existence of a free trade phenomenon and digital technologies innovation, that creates a global economic structure, allows traffic flow of goods, services, capital, and labor to move easily from one country to another. This results in a paradigm shift from physical capital paradigm to a new paradigm focusing on intellectual capital. The change has not been adequately addressed by the accountant (Suhendah, 2012). Opinions about the paradigm shift from physical capital paradigm to intelectual capital paradigm were supported by Bontis and Richardo (2000). They said that companies generally use traditional accounting, emphasizes the use of tangible assets, whereas along with technological and scientific developments, the level of interest in intangible assets is higher.

The information in financial statement plays an important role in the capital market, both for individual investors and the market as a whole. Opinion on the importance of intellectual capital was supported by Petty and Guthrie (2000). They found that, nowadays, company emphasizes on the importance of knowledge assets. One of the approaches used in the assessment and measurement of knowledge assets is the intellectual capital, which becomes concern of various fields, management, information technology, sociology and accounting (Sunarsih and Ni Putu, 2012). This is a challenge

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for accountants to identify measure and disclose in financial statements. Intellectual Capital is believed to play an important role in improving corporate value and financial performance. Companies that are able to utilize their intellectual capital efficiently will be able to increase they their market value.

Solikhah et al. (2010) found that intellectual capital has a positive effect on financial performance. Wijayanti (2012) found that intellectual capital has a positive effect to financial performance as measured by ROE and EPS, while Hadiwijaya (2013) found that intellectual capital has a positive and significant influence to financial performance. Research Kuryanto and Muchamad (2008) found that intellectual capital does not affect the market value of the company. The results inconsistencies enhance researchers' interest to find out whether the company is able to manage its intellectual resources effectively and efficiently to improve its financial performance. The market will respond positively to financial performance improvement so that company's value will also increase.

This study aims to analyze the influence of intellectual capital on financial performance, analyze the influence of intellectual capital on firm value, analyze the influence of financial performance to firm value and analyze the influence of intellectual capital to company value through financial performance. In this case the research hypotheses are as follows:

H_1 Intellectual capital influences corporate value
H_2 Financial Performance influences corporate value
H_3 Intellectual capital influence on corporate value through company financial performance

Methods

The population in this research was manufacturing companies that listed in Indonesian Stock Exchange (IDX) from 2013 to 2016 as many as 38 companies. The sampling method used in this research was purposive sampling method by taking samples that have been determined beforehand based on intention and purpose with certain consideration in research. With criteria of companies that publish and publish annual reports (annual report) period 2013-2016 and have complete financial statements. Based on these criteria obtained a sample of 33 companies.

There are three variables in this study, namely, intellectual capital, financial performance and company value. First, intellectual capital is a resource that determines company performance, if intellectual capital is a measurable resource for increasing competitive advantages, then intellectual capital will contribute to the company's performance. Intellectual capital is proxied with Value Added Capital Employed (VACA) with the following formulation:

$$\text{VACA} = \frac{\text{VA}}{\text{CA}}$$

where:
VA = Value added company (revenue - cost)
CA = Total equity

Second, financial performance is the level of success of the company in providing information concerning the financial position, especially profitability in certain periods that benefit a large number of users in decision-making. Financial performance is proxied with Return on Equity (ROE) with the following formulation:

$$\text{ROE} = \frac{\text{Earning after tax}}{\text{Total equity}}$$

Third, the value of the firm is the perception of investors to the success rate of the company that is closely related to the stock price. Company value is proxies by Tobin's Q with the following formulation:

$$Q_{it} = \frac{(EMV_{it} + D_{it})}{(EBV_{it} + D_{it})}$$

where:

Q	=	company value
EMV	=	market value of equity = closing price x number of shares outstanding
D	=	book value of total debt
EBV	=	book value of total assets

The data in this study were analyzed using path analysis. Path analysis is used to study the effect that exists between the variables used, in the presence of an intermediate variable, so that the influence of a variable will be interpreted if other variables are known. Furthermore, a complete structure with a purpose to explain and simplify the calculation as follows:

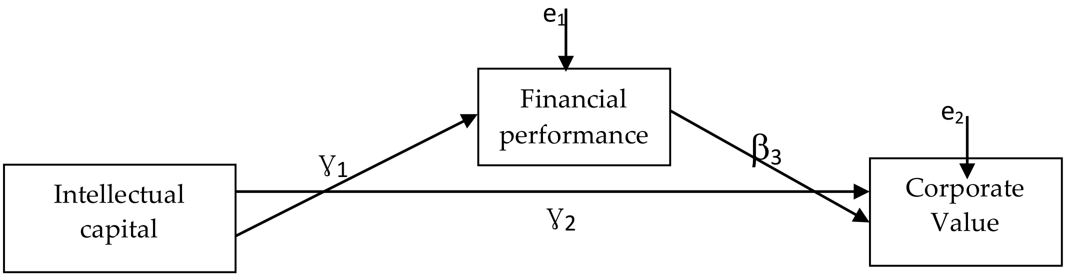

Figure 1 The influence of intellectual capital on corporate value through financial performance

Results and Discussion

The following Table 1 presents the descriptive statistics of each research variable. Table 1 Descriptive Statistics Test Results

Table 1 Descriptive statistics

Variable	Minimum	Maximum	Mean	Std. Deviation
Intellectual Capital (%)	0.01	1.94	0.8894	0.26567
Financial performance (%)	-22.23	45.72	8.7533	11.51700
Corporate Value (%)	0.01	1.45	0.3353	0.24759

Source: Data processed

Based on Table 1, it is known that intellectual capital has a minimum value of 0.01%, a maximum of 1.94%, the mean of 0.8894% with a standard deviation of 0.26567%. Intellectual capital which proxies is skill and capability, the higher the skill and capability indicate that the company has the human resources to perform various tasks in a job. Company performance variable minimum value is -22,23%, maximum equal to 45,72%, mean equal to 8,7533% with standard deviation value equal to 11,51700%. The higher the company performance proxies by ROE mean the company is more efficient to generate profit from each equity unit of shareholders. ROE shows how well a company uses its investment funds to generate revenue growth. The minimum value of company value is 0.01%, maximum of 1.94%, the mean of 0.8894% with a standard deviation of 0.26567%. This indicates that the company can provide maximum shareholder wealth if the company's stock price increases. This can happen because the greater the market value of the company's assets compared to the book value of the company's assets, the greater the willingness of investors to issue more sacrifices to own the company.

The results of hypotheses test examining the influences intellectual capital on company value through financial performance are presented in Table 2.

Table 2 The influence of intellectual capital on corporate value through financial performance

Variable			Beta Coefficients	t-value	p value	Indirect effect	Total Effect	Result
Exogenous	Intervening	Endogenous						
Intellectual Capital	Financial performance	-	0.412	5.153	0.000*	-	-	Accepted
Intellectual Capital	-	Corporate value	0.275	3.133	0.002*	-	-	Accepted
-	Financial performance	Corporate value	0.225	2.569	0.011*	-	-	Accepted
Intellectual Capital	Financial performance	Corporate value	0.275	-	-	0.093	0.368	Accepted

* Significant at the level of α = 5%

Based on table 2 shows that Intellectual Capital has a t value of 5.153, regression coefficient value of 0.412 and p-value smaller than 0.05 (0,000 <0.05). So, intellectual capital affects the financial performance. If Intellectual Capital increases by one unit will lead to increased financial performance, otherwise if Intellectual Capital down one unit will result in the amount of financial performance down. This means that for companies that have a high Intellectual Capital then usually also use a higher financial performance compared with companies that have a lower Intellectual Capital.

Intellectual Capital has a t value of 3.133, regression coefficient value of 0.275 and the value of p-value is smaller than 0.05 (0.002 <0.05), so that intellectual capital affects the value of the company, so that intellectual capital affects the company value, which means that the more Intellectual Capital increases, the more Corporate Value increases.

The financial performance has a t value of 2.569, the regression coefficient value is 0.225 and the p-value is less than 0.05 (0.011 <0.05), so the financial performance has an effect on firm value, so the financial performance has an effect on the firm value, that the higher the financial performance, the higher the Company Value.

The total effect of intellectual capital on firm value through financial performance of 0.368 is greater than direct influence (0.368> 0.275). Financial performance is an intervening variable of the influence of intellectual capital on firm value, because the total value of influence is greater than the direct effect.

Discussion

Intellectual Capital has play a role in establishing value added and contributing to the improvement of the company's financial performance in Indonesia. Moreover, companies can increase its competitive advantage by managing the knowledge assets (intellectual capital), so that intellectual capital will contribute in improving company's financial performance. Intellectual capital positively affects the company's financial performance. If it manages its intellectual capital well, so that it plays an important role to create value added and to contribute to the improvement of corporate financial performance. If the company is able to manage knowledge assets (intellectual capital) well, intellectual capital will contribute in improving the company's financial performance. The results of this study are in line with Solikhah et al. (2010), Wijayanti, (2012), and Hadiwijaya (2013) stating that intellectual capital affects the financial performance. But the results of this study are not in line with research Kuryanto and Muchamad (2008) which states that intellectual capital does not affect the market value of the company.

The Influence of Intellectual Capital on Corporate Value

Intellectual capital serves as a tool for decision making so that the market does not provide a high rating on companies with high intellectual capital. It shows that companies with high intellectual capital have better performance compared to companies with low intellectual capital. investment in intellectual capital will encourage the appreciation of investors to invest in the company so that it will affect the movement of corporate value.

Investors consider the influence of intellectual property owned by the company. Information about intellectual capital owned by the company becomes one of the considerations of investors in assessing the company. As the opinion of Sujoko and Soebiantoro (2007) that the value of the company is the perception of investors to the success rate of companies that are closely related to the price of its shares. High stock prices make the value of the company also high, and increase market confidence not only in the current financial performance but also on the prospects of the company in the future. The price of shares used generally refers to the closing price and is the price that occurs when the stock is traded in the market (Fakhruddin and Hadianto, 2001: 6). The results of this study in line with Suparno and Ramadini (2017), which states that intellectual capital affects the value of the company.

The Influence of Financial Performance on Corporate Value

Financial performance has a significant effect on the value of the company, which means that better financial performance of the company, will create better value of the company. The value of the company can provide maximum prosperity or profit for the shareholders. High stock price will effect in increasing shareholder’s profit. Investor likes this condition since increase the demand of stock will also increase company’s value. This indicates that the information published through the annual financial statements is the information relevant to investors, as the basis and consideration in making investment decisions in the capital market, especially in trading shares on the Indonesia Stock Exchange. The company's profitability level determines the company's ability to generate profits. The company's financial performance for prospective shareholders illustrates the prospect of the company whose shares will be purchased. This is in line with Fahmi's opinion (2011: 2) that financial performance is an analysis conducted to see how far a company has implemented by using the rules of financial implementation properly and correctly. The results of this study are in line with Yendrawati and Patridina (2013) which states that financial performance has an effect on company value.

The Influence of Intellectual Capital on Corporate Value through Financial Performance

Financial performance mitigates the influence of intellectual capital on corporate value. Intellectual capital in the company must be managed by the company because it can affect the financial performance and market value of the company. The main investment is an investment in enterprise system development and internal control. Next, investment in human capital training is also an important investment and has economic value for the company because it can increase the productivity of the company. This shows that the market will provide a higher valuation to companies that have improved financial performance. Improvement financial performance will be responded positively by the market thus increasing the value of the company. The results of this study show that the intellectual capital disclosed in the financial statements can increase the market value of the company as reflected in the company's stock price. According to Sawarjuwono and Kadir (2003), intellectual capital which is the intangible assets of the company becomes a very valuable asset. As the more valuable intellectual capital as a company asset, it provides a challenge for accountants to identify, measure and disclose to the company's financial statements. This is because the existing traditional accounting system has failed to disclose this asset. With the existence of intellectual capital statements in the annual report, companies will support investors in making decisions to invest, so investors will believe with the prospects of the company in the future.

Conclusions

Intellectual capital affects the financial performance of consumer goods companies. It proves that the higher the value of intellectual capital then the company can optimize the company's high financial performance as well because the company can be more competitive. This proves that intellectual materials such as knowledge, information, a wealth of experience utilized by the company can create the value of financial performance to the fullest.

Intellectual capital affects the value of the company. It proved that the value of Intellectual Capital also affects the value of the company. Companies that have high intellectual capital indicate that the company can combine the presence of resources owned, ranging from financial funds, human capital, structural capital to customer capital, with good management, the value of the company has increased.

Financial performance has an influence on the value of consumer goods companies. It proved that the amount of financial performance value is relevant information for investors as the basis and consideration in making investment decisions in the capital market affect the value of the company.

Financial performance mediates the influence of intellectual capital on corporate value. It proves that companies with high Intellectual Capital supported by good financial performance can increase the company's value.

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References

Bontis, K, and Richadson. (2000). Intellectual capital and bussiness performance in Malaysian industries. *Journal of Intellectual Capital, 1*(1)*, 85-100*

Fahmi, I. (2011). *Analisis Laporan Keuangan*, Lampulo: Alfabeta Fakhruddin dan Hadianto, S. (2001). *Perangkat dan Model Analisis Investasi di Pasar Modal*. Buku saku. Jakarta: Elex Media Komputindo.

Gitosudarmo, A. I., and Basri. (2002). *Manajemen Keuangan*. Yogyakarta: BPFE.

Hadiwijaya, C, R. (2013). *Pengaruh intellectual capital terhadap nilai perusahaan dengan kinerja keuangan sebagai variabel intervening.* Skripsi. Jurusan Akuntansi Fakultas Ekonomika dan Bisnis. Universitas Diponegoro, Semarang.

Haruman, T. (2008). Pengaruh struktur kepemilikan terhadap keputusan keuangan dan nilai perusahaan. *Simposium Nasional Akuntansi XI*, IAI.

Ikatan Akuntan Indonesia. *2007*. *Standar Akuntansi Keuangan*. Jakarta: Salemba Empat.

Kuryanto, B., & Syafrudin, M. (2008). Pengaruh modal intelektual terhadap kinerja perusahaan. *Simposium Nasional Akuntansi XI.* Pontianak: 23-24 Juli.

Lev, B. and Zarowin, P. (1999). The boundaries of financial reporting and how to extend them. *Journal of Accounting Research*, *37*, 353-385.

Petty, P and Guthrie, J. (2000). Intellectual capital literature review: Measurement, reporting and management. *Journal of Intellectual Capital, 1*(2)*, 155-75.*

Roos, J., Roos, G., Dragonetti, N., & Edvinsson, L. (1997). *Intellectual capital: Navigating in the new business landscape*. London: MacMillian Business. Solikhah, B., Rohman, A. and Meiranto, W. (2010). Implikasi intellectual capital terhadap financial performance, growth, dan market value: Studi empiris dengan pendekatan simplistic specification. *Simposium Nasional Akuntansi XIII*. Purwokerto.

Suhendah, R. (2012). Pengaruh intelectual capital terhadap profitabilitas, produktivitas, dan penilaian pasar pada perusahaan yang go public di indonesia pada tahun 2005-2007. *Simposium Nasional Akuntansi XV*, September 2012.

Sujoko and Soebiantoro, U. (2007). Pengaruh struktur kepemilikan saham, leverage, faktor intern dan faktor ekstern terhadap nilai perusahaan. *Jurnal Manajemen dan Kewirausahaan, 9, 47.*

Sunarsih, N. M. & Mendra, N. P. Y. 2012. Pengaruh modal intelektual terhadap nilai perusahaan dengan kinerja keuangan sebagai variabel intervening pada perusahaan yang terdaftar di Bursa Efek Indonesia, *Jurnal Fakultas Ekonomi*, Universitas Mahasaraswati, Denpasar.

Suparno & Ramadini, R. (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). *Jurnal Manajemen dan Keuangan*, *6*(1), 710-718.

Wijayanti, P. (2012). Pengaruh intellectual capital terhadap harga saham melalui kinerja keuangan perusahaan perbankan yang terdaftar di Bursa Efek Indonesia (BEI) Periode 2009-2011. *Jurnal Ilmiah Mahaisswa*, Universitas Brawijaya.

Yendrawati, R & Pratidina, D. (2013). Pengaruh pengaruh kinerja keuangan terhadap nilai perusahaan dengan corporate social responsibility dan kepemilikan institusional sebagai variabel pemoderasi (Studi empiris pada perusahaan manufaktur di Bursa Efek Indonesia). *Unisia.* XXXV (78), 17-24.