

Conference Paper

Brand Value, Intellectual, and Financial Performance in Indonesia Stock Exchange

Isfenti Sadalia and Lisa Marlina

Department of Management, Faculty of Economic and Business, Universitas Sumatera Utara, Indonesia

Abstract

The purpose of this research is to analyze the influence of brand value on intellectual, the influence of intellectual to financial performance, and also the influence of brand value to financial performance with control variable. The populations of this research are 76 companies with observation period 2014–2016. According to the outer analysis model, it is found that VAHU and STVA don't fit the criteria, only VACA meets the criteria being an indicator to measure intellectual performance. The age meets the criteria being an indicator to measure performance variable control. Return on equity meets being an indicator to measure financial performance. The result shows that intellectual performance has no effect on brand value. Brand value has no effect on financial performance. Lastly, intellectual has positive effect on financial performance.

Keywords: brand value, intellectual performance, financial performance

Corresponding Author:

Isfenti Sadalia

isfentisadalia@gmail.com

Received: 29 August 2018

Accepted: 18 September 2018

Published: 11 November 2018

Publishing services provided by
 Knowledge E

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Selection and Peer-review under the responsibility of the ICOI-2018 Conference Committee.

1. Introduction

Contemporary Indonesian global economy creates a free competitive market between companies. Service, manufacturing and business industries each competes which each other to survive and thrive to be the best. This encourages each company to bring in innovations and business strategies to avoid bankruptcy. In order to survive against an ever changing situation, businesses adapts their strategies from *labor-based business* to *knowledge-based business*. This adaptation of strategy causes a change to a knowledge based business as the company's main characteristic. With the change to a more knowledge based economy, and with the implementation of knowledge management, a company's prosperity will depend on achieving transformation and the capitalization of the knowledge itself.

With the implementation of knowledge based business, so will change the values of a company the growth of the company will depend on the managing process the company's resources in creating business values that gives a sustainable competitive advantage. In knowledge based management systems, conventional capitals such as;

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natural, financial resources and other physical activities, becomes less important to scientific and technological resources. Rupert (1997) states that with the usage of science and technology, a more efficient and economic use of other resources could be obtained to achieve a competitive advantage.

Edvinson and Malone (1997) states a company's intellectual performance is the sum of a company's human and structural capital. Which later included by other researchers, another category which was customer capital. In this research, intellectual performance, was measured with VAIC. The VAIC Method was developed by Pulic (2004), designed to disseminate information about value creation efficiency from tangible and intangible assets of a company.

Ulum (2009) researched the connection between Intellectual performance(IC) and the performance of BEI registered banking companies during 2004-2006. From the research, IC (VAIC) has an influence to a company's performance. IC (VAIC), also has an influence toward future financial performances. In this research, researchers gauged a company's performance using financial performance. Financial performance in this regard, was measured by 3 (three) indicators; Return on Assets, Return on Equity and Earning per Share.

Intellectual performance has influential relation to brand value, in regards that brands has an important role to a company. Today, brands are not just viewed as just that, with its realization as a company's life. A strong brand will evoke a multiple and recurring demand from the customers in the future. In other words, brands also contributed significantly to the value creation process of a company. Researchers used brand value because of the apparent influential connection between intellectual performance and brand strength of a company. The objects used in this research are Top 100 Companies with the highest brand values according to Swa Magazine. The reason a company entered Swa Magazine's Top 100 list were because they were relatively operates in a large scale and has a highly competitive level. In the highly competitive industry environment, a company needed a competitive advantage, to be able to compete with other companies, in the form of intellectual performance.

2. Literature Review

2.1. Intellectual performance

In general, intellectual performance are knowledge and mental capacity, that is owned/controlled by a company, that doesn't have physical (tangible) form, and with

that intellectual performance, the company will have an added benefit or a more stable business process besides giving more value to the company in comparison to other companies or competitors. Edvinson and Malone (1997) in Ulum (2009) states that an intellectual performance value is the sum of a company's human and structural capital. Which, other researchers would add another category, customer capital.

2.2. Brand value

Brands has an important role for a company. It was used to differentiate and identify a product manufactured by its producers, as well as to protect the customers and the suppliers from other competitors that manufactures the same type of product. Today brands are not just viewed as just that, but also considered as soul of company. A simple way to gauge brand value is to observe a company's acquisition price subtracted by its book value. Brand value in this research is measured with the *Price Premium Method*.

2.3. Firm performance

A company as an organization has certain goals to achieve in order to fulfill its members. The successes of the company's goals achievements is a management achievement. Achievement or performance evaluation can be used as a basis of a virtuous decision-making by external or internal parties. The peroxide of a comp an is an image to the company's financial condition analyzed by financial analysis, so that the financial well-being can be evaluated, that reflects the company's work performance in a specific period of time. A company has to maintain its work performance to maintain its competitive advantage and still viewed as maintaining its competitiveness by its stakeholders.

1. The influence of Intellectual performance to Brand Value

As mentioned before, brands, today, could be considered as a company's life. A strong brand will generate repeated multiple demand and will ensure future demands from customers. In other words, brands contributed significantly to a company's value creation process. To this end, researchers used brand value to observe its influence to intellectual performance of a company. With intellectual performance management as added value, it will also improve brand value.

H₁: *Intellectual performance* has a significant influence to *brand value*.

2. The influence of Brand Value to financial performance.

This research analyzed the influence of brand value to a company’s performance. Investors would prefer to hold shares in well-known companies and gauge their performance by evaluating indicators, such as, brand awareness, research and development intensity, advertising intensity and profitability. Brand value is also a key indicator for investors, and also an important tool for the management in evaluating a company’s performance and risks.

H2: *Intellectual performance* has a significant influence *brand value*.

3. The Influence of Intellectual performance on financial performance.

Firer & William (2003) and Chen et al. (2005) proved that Value Added *Intellectual Coefficient* (VAIC) has a positive influence to financial performance. Also, with an adequate intellectual performance management, it is believed to increase the company’s performance. In this research, financial performance of a company was measured with *Return on Assets* (ROA), *Return on Equity* (ROE), and *Earning per Share*.

H3: *Intellectual performance* has a significant influence to financial performance.

3. Methods

3.1. Operational variable

1. Independent Variable

Intellectual performance of a company is the sum of its *human capital*, *structural capital*, and *costumer capital*.

$$VAIC = VAHU + VACA + STVA$$

2. Dependent Variables

(a) *Brand value* defined as the amount of money willing to be paid by other parties for a specific company’s brand.

$$\text{Brand Value} = \left\{ \left(\frac{E}{S} \right) b - \left(\frac{E}{S} \right) g \right\} \times \text{Sales}$$

(b) *Financial performance* is an analysis done to evaluate a company’s adherence to a suitable and proper financial regulations. Financial performance was measured by ROE.

$$\text{Return on Equity (ROE)} = \text{Net Profit/Total Equity}$$

3. Control Variable

- (a) Firm or company fundamental in this research were the measurement of company age.
- (b) The data used were secondary data obtained from published report from other sources. The data used were the financial reports of publicly traded companies from Swa Magazine's Top 100 Most Valuable Brands. The data collection method were documentation, which was obtaining financially reports data from Indonesia Stock Exchange.
- (c) The population in this research were companies that was in Swa Magazine's Top 100 Most Valuable Brands per 2014–2016 with the use of Purposive Sampling method, there were gained as much 76 samples. The criteria for sample determination were.

3.2. Data analysis technique

The data analysis used in this research was processed by SmartPLS 3.0. Program. The data process was done by *Partial Least Square* (PLS) method. PLS is an alternative method of *Structure Equation Model* (SEM) which can be used to solve problems between complex variables. PLS is a powerful method because it is not based on assumptions. The data analysis covered: (1) *outer* model and *inner* model analysis, (2) hypothesis testing.

4. Results

4.1. Outer Model Analysis

Outer model analysis is a measurement model that connects indicators which ease variable, which is known as a construct. The purpose of this analysis is to observe validity of indicators in measuring their variables, which means, evaluating the accuracy of the indicators in measuring their variables. This research used formative indicator. For the formative indicator, these tests were done:

1. *Significance of weights*. The weight of formative indicator with its construct must be significant.

2. *Multicollinearity.* Multicollinearity were done to observe the connection between each indicators. VIF value is observed to see whether formative indicators experiences multicollinearity. VIF value of 5–10 would state that the indicator experienced multicollinearity.

TABLE 1: Significance of weights results.

	P-Value
VACA	0.002
VAHU	0.069
STVA	0.246
BRAND	0.000
ROE	0.000
AGE	0.003

Source: SmartPLS 3.0 Output.

In Table 1, it was observed that VAHU and STVA does not have a significant weight. These indicators has to be expelled from the model because of that.

4.2. Inner model analysis

Inner model analysis is the structure that connected each variables. The purpose of this analysis is to estimate the coefficient between variables. The greater the coefficient values, the greater the influence. The result of the coefficient values are shown on Table 2, as follows:

TABLE 2: Coefficient values.

	Coefficient
Intellectual Performance → Brand Value	0.165
Brand Value → Financial Performance	0.047
Intellectual performance → Financial Performance	0.723
Control → Brand Value	0.457

Source: SmartPLS 3.0 output.

4.3. Hypothesis test

The proposed hypothesis in this research is tested by using SmartPLS 3.0 program. *Partial Least Square* (PLS) is a powerful analysis method, because it is not based on a lot of assumptions. Normality assumptions are not a problem for the PLS. Bootstrapping method in the PLS, is used to calculate coefficient significance. Hypothesis tests

would be observed from the values of *t*-statistics or the values *t*-scores and probability values.

Hypothesis tests results are shown in Table 3 as follows:

TABLE 3: Complete hypothesis tests results.

No.	Hypothesis	Original Sample (O)	T-Statistic	P-Values	Conclusion
H ₁	Intellectual performance has a significant influence to Brand Value	0.165	1.925	0.055	Rejected
H ₂	Brand Value has a significant influence to Financial Performance	0.047	0.472	0.637	Rejected
H ₃	Intellectual performance has a significant influence to Financial Performance	0.723	6.453	0.000	Accepted

Source: SmartPLS 3.0 output (processed data).

From the obtained results in Table 3, equations could be formed as follows:

1. Brand Value = 0.165 Intellectual Performance + e₁
2. Financial Performance = 0.047 Brand Value + 0.723 Intellectual Performance + e₂

4.4. Coefficient of determination

Coefficient of determination is a value that measured how well independent variables could explain dependent variables.

TABLE 4: Coefficient of determination.

	R Square
Brand Value	0.246
Financial Performance	0.572

Source: SmartPLS 3.0 output.

From Table 4, it can be observed intellectual performance can explain brand value as much as 24.6% and the other 75.4% are explained by other variables outside of this research. Intellectual performance also explained Financial Performance as much as 57.2% and the other 42.8% are explained by other variables outside of this research.

5. Discussion

From the data processing results with SmartPLS 3.0, these analyses were obtained :

5.1. Intellectual performance's influence to brand value

Based on the research results, it was observed that intellectual performance has a positive but insignificant influence to brand value, which means that if when intellectual performance is improved so will brand value. In this case, when intellectual performance improves, it would indicate an improvement of knowledge and intelligence owned/controlled by a company, so that the company would obtain business stability in manufacturing innovative and quality products, which in turn would improve the brand value of that company.

Strong brands will generate multiple and repeated demand from the consumers in the future. This research is concurrent with X (2015) research that stated, intellectual performance's positive influence to brand value.

5.2. Brand value's influence to financial performance

Based on the research, brand value has shown an insignificant positive influence to financial performance, which would mean that brand value's improvement would also improve financial performance. In this case a strong brand value would generate and ensure multiple and repeated future demand from the customers. This would also improve return of equity value, therefore improving a company's performance.

Investors would prefer to hold shares in well-known companies and measures the company's performance by evaluating certain indicators such as, brand awareness research and development intensity, advertising intensity and profitability. Brand value is also a key indicator for investors. Brand value is an important management tool and can be used as performance and risks evaluation indicators. The results of this research is concurrent with the research done by Feng Jui Hsu¹ et al. (2013) that stated Brand Value's positive influence to Financial Performance.

5.3. Intellectual performance's influence to financial performance

Based on the research results, intellectual performance was observed to have a significant and positive influence to financial performance, which translates to if the improvement intellectual captain would improve return of equity values, therefore would show an improvement on the company's performance. In this case when intellectual performance improves, it would indicate that the greater the knowledge and intelligence owned/controlled by a company, thereby the company would see an

added profits margin or improved business stability, and would also would give more value to the company than its competitors.

Financial performance by its nature is very import to the company and its stakeholders with their various interests. Better financial performance would mean that the company has succeeded in exploiting its resources, therefore would generate better profits for it. This research is concurrent with the research done by Pirayesh dan Khojasteh (2016) that stated intellectual performance's significant positive influence to financial performance.

6. Conclusion

This study examined the influence of intellectual performance on brand value, the influence of brand value on financial performance and the influence of intellectual performance on financial performance with control variables. The population in this research is 76 companies with observation period 2014–2016. This empirical research is conducted by using sample companies in Indonesia Stock Exchange from 2014 to 2016. The conclusion of this research is:

1. Intellectual performance has an insignificant positive influence to brand value.
2. Brand value has an insignificant positive influence to financial performance.
3. Intellectual performance has a significant positive influence to financial performance.
4. Control has a significant positive influence to brand value.

Acknowledgement

The authors would like to express their deep appreciation and gratitude to the University of Sumatera Utara for providing the talent funds of 2017 in order to carry out this research; they feel privileged to have got the opportunity to work with them.

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