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THE EFFECTS OF BRAND EQUITY ON FIRM VALUE AND PROFITABILITY IN INDONESIA

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ABSTRACT
The purpose of this study is to analyze the effect brand equity to firm value and profitability. Regression analysis in this research was done by using GSCA. The research sample in this research were enterprises in consumption sector listed in Indonesia Stock Exchanges 2012-2016 and meet the requirements of Hirose method of brand value calculation. As conclusion, brand equity is significantly affecting profitability, but insignificant to firm value.

KEY WORDS
Brand equity, profitability, firm value, business.

As the discussion of merger and acquisition of brand equity has grew popular, it has become an important concept in the study and practice of business. In around 1980, brand equity had become an intriguing topic and research study to business community (Huang, 2015; Hasan, Ullah & Bhattacharjee, 2015). In the theory and practice of contemporary marketing (Davcik, 2013), brand equity was eventually be strategic business asset for a company. The most significant effect of brand equity is its ability to increase firm value (Lindemann, 2003: 29, Wang *et al.*, 2015, as well as Arora *and* Chaudhary, 2016). The relation between brand equity and firm value is important as part of long-term strategy and company sustainable growth (Ukiwe, 2009).

A company with better brand equity will be easier to persuade costumer to use their products and services, resulting in the increase of profitability and firm value (Kotler *and* Keller, 2012: 242-243, as well as Lindemann, 2003: 28).

A research studying the effects of brand equity to the company financial condition is rare, especially in Indonesia. This research studying brand equity was performed to consumption sector listed in Indonesia Stock Exchange during 2012 - 2016 period. This research was analyzed with regression analysis GSCA. Therefore, this study aims to comprehend the effect of brand equity to a company financial performance measured by profitability and firm value.

LITERATURE REVIEW

Brand is the identity of a product used to distinguish products and services from competitors (Aaker, 1991; Hirose *et al,.* 2002). A brand is of the essence or the promise of a product sent to or experienced by the customers (Lee, 2012). Brand is a marketing asset stimulating present and future profit for the company (Keller, 1998).

Brand equity is identified as an ability of a brand to yield a future value, both its ability to have a premium price from consumer and attract investment, or facilitate the relation between interested parties (Arvidsson, 2006). Brand equity is also an additional value that the product achieves past investment of marketing activity of the brand (Keller, 2003).

Brand equity concept can be comprehended from four main perspectives namely investor (or brand owner), producer, reseller and consumer or customer (Ukiwe, 2009), in this case, the brand gives additional value to each respective party. Investors are also motivated by finance problem to take the brand and asset value from other companies (Cobb-Walgren, Ruble, & Donthu, 1996). On the other hand, consumer and reseller are more motivated by the implication strategic brand equity (Keller, 1993). As for producer, the advantage of brand equity are the increase of product soles and better profit margin.

Brand equity serves a strong platform to producer to introduce new products and secure the brand from competitors. While reseller, brand equity gives contribution to their retail outlet and help product circulation in the outlet, sustains the availability of products and reduce the risk of having unsold products (Cobb-Walgren, Ruble, & Donthu, 1996).

Developing and managing brand has been a priority for companies to maximize this asset value significantly (Lehmann *et al.*, 2008). A company with a good branding has competitive advantages in the market, since a good branding is built from a good quality product or good supportive aspects such as different brand image and personality (Keller, 1998).

Companies with good brand equity will get market competitive advantages. This is also in line with RBV concept by Penrose (1959) and Wernerfelt (1984). Wernerfelt (1984) explains that based on RBV concept, a sustainable competitive advantage is derived from various resources optimization of a company. Good brand equity is also identified by a good reputation (Eng & Keh, 2007). A high brand value or reputation is able to improve customers' perceived value (Hodović, Mehić and Arslanagić, 2011), yielding a higher stock price (Barney, 1986) as proxy for firm value.

The present of asymmetric information causes brand equity to be considered as a signal from the company, as in the signal theory, because the management comprehend the potential of the company more than investor does (Bhattacharyya, 1979). This signal is identified as "attribute or activity which gives information and can be manipulated" (Spence, 1994).

Brand signal comprised of strategy and mixed marketing from past and present experience related to branding, and incomplete asymmetric information serves as a credible market signal (Erdem and Swait, 1998). Signaling theory shows that a credible signal describes as to whether marketing signal is giving information effectively (Tirole, 1990). A company with credible brand is a signal of quality level for customer satisfaction, helping them to distinguish and choose products (Kotler *and* Keller, 2012: 242).

According to this assumption, good brand equity can be treated as a signal that the company is in a good condition. Company condition based on the signal of good brand equity is welcomed by the consumer and investor which will eventually increase firm value.

Good brand equity is proven empirically to significantly affect profitability (Ukiwe, 2009; Wang et al, 2015; as well as Arora *and* Chaundhary, 2016). Good brand equity is proven empirically to significantly affect firm value (Wang *et al.*, 2015, as well as Arora *and* Chaudhary, 2016). While the research by Ukiwe (2009) shows the opposite effect that brand equity insignificantly affects firm value.

Based on this review, this research studies the effect of brand equity to profitability and firm value in consumption sector in Indonesia.

METHODS OF RESEARCH

Brand equity in this research was treated as exogenous variable. Brand equity in this research was measured by brand value. Brand value served as a proxy for the reputation and the goodwill of the company (Eng & Keh, 2007). Brand value, as in Hirose theory, *et al.* (2002), was a conception of competitive advantages via branding to increase present and future profit by utilizing competitive price, high customer loyalty and the power of brand expansion. Hirose, *et al.* (2002) assumed that brand value served as a proxy of three main factors, namely:

$$BV = f(PD, LD, ED, r) = \frac{PD}{r} + LD + ED$$

Source: Hirose, et al. (2002)

Where: BV = *brand value;* PD = *prestige driver;* LD = *loyalty drive;* ED = *extension driver; r = risk-free interest* (*discount*) *rate.*

PD was a cash flow arose from price profit or brand value. PD was calculated in more detail by the following formula:

$$PD = \frac{1}{5}\sum_{i=-4}^{0}\left\{\left[\frac{S_i}{C_i} - \frac{S^*i}{C^*i}\right] * \frac{AD_i}{O_i}\right\} * C_0$$

Source: Hirose, et al. (2002)

Where: *S = sales of firms; PD = prestige driver; C = cost of sales of firms; S^* = sales of a benchmark company; C^* = cost of sales a benchmark company; AD = advertising expense and promotion cost; OE = total operation expenses.*

Benchmark Company, in this formula, was a company treated as a standard comparison to assess brand equity. The sales rate of Benchmark Company was defined in two ways namely average sales and the lowest sales of competitors (Hirose *et al.*, 2002).

LD referred to the ability of a brand to sustain long-term sales in stable condition as the consequence of customer loyalty to buy the same product with the same brand. LD was the cost of sales stability. LD was calculated with the following formula:

$$LD = \frac{\mu_c - \sigma_c}{\mu c}$$

Source: Hirose, et al. (2002)

Where: LD = *loyalty driver;* μ_c = *five-year average of firms' cost of sales;* σ_c = *five-year standard deviation of firms' cost of sales.*

ED determined the brand expansion, which reflects the ability of well-known brand to expand their business network to all different industries in different region. In order to quantify ED the following formula was used:

$$ED = \frac{1}{2}\sum_{i=-1}^{0}\left|\frac{SX_i - SX_{i-1}}{SX_{i-1}} + 1\right|$$

Source: Hirose, et al. (2002)

Where: ED = *extension driver; SX* = *sales from non-core and oversea business.*

Endogenous variable in this research was profitability and firm value. Profitability was measured with return on assets (ROA) and return on equity (ROE). Firm value is measured with market to book ratio (MBR) and Tobin's Q.

RESULTS AND DISCUSSION

This research investigated the effect of brand equity to profitability and firm value in consumption sector in Indonesia. The sample of this research were companies in consumption sector in Indonesia fulfilling certain requirements such as frequently publish their finance report during 2012 to 2016 period and their brand value could be calculated by using Hirose method. Based on these criteria, 22 companies were chosen as research sample. There were total of 110 analysis units (22 companies in 5 years). Regression analysis in this research was done by using GSCA software.

Based on table 1, FIT value is 0.364 which means that brand equity, profitability and firm value can be explained in this model by 36.4%, while the other 63.6% were explained by another variables outside the scope of this research. While AFIT value is 0.355 which means that brand equity, profitability and firm value can be explained in this model by 35.5%, while the other 64.5% were explained by another variable outside the scope of this research.

Table 1 – Goodness of Fit

Model Fit	
FIT	0.364
AFIT	0.355
NPAR	10

The result of table 2 indicates that brand equity has 3 indicators. From weight estimation value from each indicator, prestige driver (PD) is the best indicator to describe brand equity. This is because the estimation value of PD is the biggest among the 3, which is 1.019. According to acquired critical point, PD gives dominant and significant effect to brand equity since the acquired critical point value is 21.91* significant at 95% confidence level.

Profitability variable has 2 indicators. From loading estimation value from each indicator, return on equity (ROE) is the best indicator to describe Profitability. This is because the estimation value of ROE is bigger than return on assets (ROA) which is 1.472. According to acquired critical point, ROA gives significant effect to profitability since the acquired critical point value is 14.19* significant at 95% confidence level.

While firm value variable has 2 indicators. From weight estimation value from each indicator, market to book ratio (MBR) is the best indicator to describe firm value. This is because the estimation value of MBR is bigger than Tobin's Q which is 1.403. According to acquired critical point, MBR gives significant effect to firm value since the acquired critical point value is 9.72* significant at 95% confidence level.

Table 2 – Measurement Model

Variable	Loading			Weight			SMC		
	Estimate	SE	CR	Estimate	SE	CR	Estimate	SE	CR
LV_1	AVE = 0.000, Alpha =-0.075								
LnPD	0	0	0	1.019	0.046	21.91*	0	0	0
LD	0	0	0	-0.203	0.157	1.29	0	0	0
ED	0	0	0	-0.129	0.179	0.72	0	0	0
LV_2	AVE = 0.000, Alpha =0.731								
ROA	0	0	0	-0.625	0.155	4.02*	0	0	0
ROE	0	0	0	1.472	0.104	14.19*	0	0	0
LV_3	AVE = 0.000, Alpha =0.721								
MBR	0	0	0	1.403	0.144	9.72*	0	0	0
TQ	0	0	0	-0.442	0.166	2.66*	0	0	0

CR = significant at .05 level.*

Brand equity has a positive relation and significant to profitability since acquired critical value is significant in 95% confident level and consequently brand equity affects profitability. This result is in line with Ukiwe (2009), Wang, *et al.* (2015), as well as Arora and Chaudhary (2016) wherein profitability is measured with EPS. However, the result is different with Arora and Chaudhary (2016) if profitability is measured by RAE and ROE, wherein brand equity has negative relation and significant to capital structure.

Brand equity has an insignificant relation to firm value since acquired critical value is significant in 95% confident level and consequently brand equity affects firm value. This result is in line with Ukiwe (2009) wherein brand equity is insignificant to firm value. This result is different with Wang, *et al.* (2015), Arora and Chaudhary (2016).

Profitability has a positive relation and significant to firm value since acquired critical value is significant in 95% confident level and consequently profitability affects firm value. This result is also align with Yu (2015), Siboni and Pourali (2015), Ansar, Butt and Shah

(2015), Akit, Hamzah and Ahmad (2015), Majanga (2015). This result is different with Sharif, Ali and Jan (2015), Al Masum (2014) wherein profitability has a negative relation and significant to firm value.

Table 3 – Structural Model

Path Coefficients			
n/n	Estimate	SE	CR
Brand Equity -> Profitability	0.383	0.080	4.81*
Brand Equity -> Firm Value	0.057	0.033	1.73
Profitability -> Firm Value	0.949	0.017	56.68*

CR = significant at .05 level.*

Based on this research result, it is known that high brand equity is able to assure consumer of the product quality they bought. This can sustain the sales stability and eventually increase profitability. However, average brand equity is not interesting enough for stockholder or investor who are more interested in a high profitability. A high profitability causes cash flow to progress towards the owner and the operating result of the company will increase. The increment of cash flow will eventually increase the firm value.

CONCLUSION

A research correlating brand equity with profitability and firm value is infrequent, especially in Indonesia. Hence, this research aspires to study the consistency of the effect of brand value to financial performance, specifically in Indonesia.

The research result indicates that brand equity significantly affects profitability. This significant relation between brand equity and profitability supports RBV concept and signaling theory.

The future research should understand the relation between brand equity with financial policy such as capital structure and investment. It is also suggested to study the effect of capital structure and profitability to brand equity, since there is a probability that brand equity is also affected by capital structure and profitability. Lastly, similar researches should be performed in another industry to fully comprehend the implementation of brand equity in Indonesia.

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