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THE EFFECT OF COMPETITIVE ADVANTAGE TOWARD FINANCIAL PERFORMANCE WITH GOOD INFORMATION TECHNOLOGY GOVERNANCE AS MODERATING VARIABLE (An Empirical Studies on Commercial Banking Listed in Indonesia Stock Exchange)

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ABSTRACT

This research aimed to analyze the effect of competitive advantage (CA) toward financial performance with Good Information Technology Governance as moderating variable. Competitive Advantage was represented by assets utilization capability and financial performance was represented by Return on Assets (ROA). This research studied on 13 listed banks in Indonesian Stock Exchange which annually published their financial reports during 2012-2016 periods. 65 Samples obtained by purposive sampling method, and to attain these objectives, a questionnaire was also developed to measure the Good Information Technology Governance value. Moderating Regression Analysis using absolute difference method used to examine the research model and hypotheses. The result found that Competitive Advantage has positive effect toward Return On Assets while also found that Good Information Technology Governance not moderating the causal relationship between Competitive Advantage toward Return On Assets.

Keywords: competitive advantages, good information technology governance, return on assets

ABSTRAK

Penelitian ini bertujuan untuk menganalisis pengaruh *Competitive Advantage (CA)* terhadap kinerja keuangan dengan *Good Information Technology Governance* sebagai variabel moderasi. *Competitive Advantage* diukur dengan kemampuan pemanfaatan asset dan kinerja keuangan diukur dengan *Return on Assets* (ROA). Populasi dalam penelitian ini adalah 21 bank buku 3 dan 4 di Indonesia. Sampel diperoleh dengan metode *purposive sampling* dengan kriteria tertentu dan menghasilkan 65 Sampel dari 13 bank yang terdaftar di Bursa Efek Indonesia yang setiap tahun menerbitkan laporan keuangannya selama periode 2012-2016. Untuk mendukung tujuan penelitian, peneliti juga mengembangkan kuesioner untuk mengukur nilai *Good Technology Technology Governance*. Untuk menguji model penelitian dan hipotesis, peneliti *menggunakan metode absolute difference* dalam *Moderated Regression Analysis*. Hasil analisis menunjukkan bahwa *Competitive Advantage* berpengaruh positif terhadap Return On Assets dan ditemukan juga bahwa *Good Information Technology Governance* tidak memoderasi hubungan pengaruh *Competitive Advantage* terhadap *Return On Assets*.

Kata kunci: ***competitive advantages, good information technology governance, return on assets***

INTRODUCTION

Indonesia has been classified as bank-based country (Levine, 2002) where 78% of financial system are coming from Indonesian banking activities. Indonesia has been entering the global digital economic era and it's indicated by the existence of wider market, virtual social growth and dependency toward technology. Furthermore, since Indonesia conjugated in ASEAN Economic Society, Indonesian banks should be more aggressive to compete each other. Banks provide what society needs by giving it digital services known as electronic banking (internet banking, mobile banking, and phone banking). The e-banking transactions frequency were increasing 169% from 150,8 million in 2012 to 405,4 million transactions in 2016 and Financial Services Authority of Indonesia (OJK) also claimed the e-banking users were increasing 270% from 13,6 million in 2012 to 50,4 million customers in 2016. (Infobanknews.com, January 19th 2017).

The development of information, technology, and knowledge-based economy or widely known as Resource Based Theory (RBT) of the company considered as one of the effective and sophisticated method in this management area (Newbert, 2007). In this economic era, company resources such as human capital became the vital factor in keeping and sustaining competitive advantage and creating performance of the company (Maditinos et al, 2011). Barney (1991) stated that competitive advantage (CA) is the organization ability to earns return on investment can be achieved if the organization implements a value creating strategy that is not simultaneously being implemented by any valuable competitors. Furthermore, sustained competitive advantage is value results from strategic assets (Meso and Smith, 2001). CA is gained by the companies which succeed in gathering its intangible value (intellectual capital) into dynamic form of technological skills, knowledge, experience and strategic planning (Nixon, Augustine, and Joseph, 2013). Companies are racing to give best performance, the effectiveness of a company to gained profits can be seen on its financial reports. Elements of financial report can be reflected into a ratio, called financial ratios. These ratios such as Return on Asset (ROA) is needed by stakeholders to examined whether company get profit. Good value of financial ratios illustrated how the management ran their business. Its investor interest to know how their capital or assets managed by the company. This ratio showed the company's ability to gain profit of capital or assets which had already invested by the company. Sadia (2011) and Emad et al (2017) previously examined that the existence of CA has significant effect on company's financial performance. Considered that intellectual capital as one of competitive advantage forms. It contradicts by the research done by Kurniawan (2005) and Rialdy (2010) who found empirical evidence to the contrary that pricesely the financial performance has a positive effect toward the competitive advantage.

Government trough Financial Services Authority of Indonesia (OJK) already led commercial banking in Indonesia to provides sophisticated electronic services by forming digital branch, a special unit or branch which only accepted digital banking services. This effort aligned to digital branch organization guidance trough letter No. S-98/PB.1/2016 issued in December 21th 2016 addressed to all commercial banking director in Indonesia (OJK news, January 2017). By these recent issues, the good implementation of IT can give a competitive advantage to a bank and when banks can formulate it into a good, functional, efficient and configured system, they can lead the market. This is where the Good Information Technology Governance of each bank plays it function to lead the competition also enhancing customers' satisfaction and profit. Hopefully, those will increase market value and financial performance (Hapsari and Winarno, 2015). The proper implementation of Good Information Technology Governance can maximize the benefit of electronic banking (technology), since the better preparation, implementation, and evaluation toward bank services will empower it sustainability. Becker (2014) found the empirical evidence that IT Governance has positive effect on ROA, ROE, and profit margin. Hapsari and Winarno (2015) also found the empirical evidence that IT Governance has significant effect on ROA.

CA is essential to differ the position between one bank and another. In the other side, this research also wants to reveal the effect of technology's implementation in each bank. This research examined whether CA significantly affect financial performance represented by return on assets (ROA) and if there is any moderating effect of Good Information Technology Governance in the causal relationship between CA toward ROA.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Stakeholder Theory

Many parties can be named as stakeholder as long as they are both directly and indirectly related to the company. They have an interest toward company's operations and performance such as investor, employee, manager, supplier, colleagues, government, business institution, and competitor. According to freeman and Reed (1983) stakeholder can be stated as any identifiable group or individual who can affect the achievement of organization's objectives or is affected by the achievement of an organization's objectives"

Stakeholder can combine the relationship between Competitive Advantage (CA), Good Information Technology Governance (GITG), and financial performance. Since there are many parties included, management are encouraged to do important things and report it to stakeholder. (Deegan, 2004) stated this theory underlined to company's accountability, then management tend to reveal the information beyond stakeholder expectation.

Competitive Advantage and Financial Performance

The great value of competitive advantage in the company depends on three major characteristics of resources and capabilities, such as Durable; which is the period over which a competitive advantage is sustained, Transferable; the harder a resource is to transfer the higher sustainable the competitive advantage, and finally Replicable; means cannot be replicated or purchased from a market (Sadler, 2003). CA is seen as a performance platform which shows a picture of organizational progress such cases, organizational performance, operational efficiency, financial performance, etc. Financial Performances as management control and evaluation tools to a company making betterment and to compete in market (Sabah, 2011). According to Porter (1985), competitive advantage (CA) is the ability to earn returns on investment consistently above the average for the industry. The company who has a unique value can lead the market since the customer will easy to acknowledge them. The previous research done by Sadia M

(2011) and Emad, Yoshifumi, and Idris (2017) have shown that CA positively affect the financial performance. This statement creates a hypothesis:

H_1: Competitive Advantage has positive effect toward Return On Assets

Moderating Role of Good Information Technology Governance In The Effect of Competitive Advantage Toward Return On Assets

Competitive Advantage (CA) as a wide concept deals with business that will put the company in a lead among other competitors within their sector. It specifically addresses what the company has in stock that will achieve advantage in the competitive market (Emad et al, 2017). Good Information Technology Governance is the responsibility of the board of Directors and executive management. It is an integral part of enterprise governance and consists of the leadership and organizational structures and processes that ensure that the organization's IT sustain and extends the organization's strategy and objectives (ITGI, 2009). Transparency, accountability, empowerment of regulation, encourage market integrity, empowerment of cooperation also organization's reformation are forms of IT governance which create an integral system linked IT resource, IT process and, and strategic information for company's goal (Henderi, 2009).

A solid good information technology governance will elevate the value added of technology services given by a bank. Banking is the financial industry where technology cannot be separated. IT Governance implementation also give more protection toward society since banking is a service institution based on trust and safety. (Boritz and Hae-Lim, 2013) stated that IT Governance and IT knowledge have a positive effect toward better financial performance.

There were several previous researches examined CA and financial performance and also good information technology governance toward financial performance, but only few research using moderating variable among them then this is the first research to assess whether good information technology governance can moderate the effect of competitive advantage toward financial performance. Based on technology phenomenon and logical thinking, related with CA, the function of CA is to create positive relationship between stakeholder (customer, market, and other institution) and create upper competitive value of one company than the others. The optimum implementation of good information technology governance in banking, here is a configured system of e banking can satisfy the customer, hopefully will directs to profit increasing then profit can be invested again in future assets. This statement creates a hypothesis:

H_2: Good Information Technology Governance moderating the effect of Competitive Advantage toward Return On Assets

METHODS

Sampling methods

The purposive sampling method was used to determined samples from the population. These research's population are 116 commercial banks in Indonesia. The criteria stated Banks included in Business Group Commercial Banking Bank (BUKU) 3 (total assets IDR 5-30 trillion) and 4 (total assets more than IDR 30 Trillions); Banks already implemented their electronic banking services to the society during research period; Listed in Indonesian Stock Exchange and already published their financial reports continuously from 2012-2016. There were just 13 banks met the criteria. 13 banks consist of five banks of BUKU 4 and nine banks of BUKU 3.

Data Type and Source

Data type in this research is quantitative and used both primer and secondary data. Primer data used to examine Good Information Technology Governance gained by questionnaire filled by manager and IT officer in each bank. Respondents are asked to fill the same questions related to IT implementation and governance at their bank for five years research period (2012-2016). Secondary data were obtained from Annual Financial Reports of each period listed in Indonesian Stock Exchange, downloaded by IDX site and additional relevant information from bank's official sites, and other literatures to examined CA, ROA and other information.

Operational Definition and Variable Measurement

a. Competitive Advantage (CA) as independent variable measured by asset utilization capability, which assess company's effectiveness using its assets to compete and gain profit. This measurement already used in Gani and Jermias (2006) and Mayangtari and Wahidahwati (2016) who indicated how important the efficiency of operational activities in company. Competitive advantage is displayed as a percentage and its calculated as:

$$CA = \frac{\text{TOTAL REVENUE}}{\text{TOTAL ASSETS}} \times 100\%$$

b. Good Information Technology Governance

Good Information Technology Governance as moderating variable measured by Control Objectives for Information and Related Technology (COBIT). This measurement has been used in several research such as Heidari(2012) and Hapsari and Winarno (2015). This research used four main domains of COBIT Framework 5 consist of 12 indicators which Planning and Organization (state IT process, IT investment management, and human resource management); Acquisition and Implementation (identifying automatic solution, user and operation activated, and changes management); Delivery and Support (perform and Capacity Management, security system, and objective management); and Monitoring and evaluation (supervision and evaluation, IT Performance, and external).

c. Financial Performance

Financial performance is represented by return on assets (ROA). ROA is an indicator of how profitable a company is relative to its total assets. ROA gives a stakeholer or analyst an idea as to how efficient a company's management is at using its assets to generate earnings. ROA is displayed as a percentage and its calculated as:

$$ROA = \frac{\text{EARNING AFTER TAX}}{\textit{TOTAL ASSETS}} \times 100\%$$

Data Analysis
Several analysis steps are taken in this research, were:

a. Classical Assumption Test
Classical assumption test was used to test and provide assurance that the regression equation obtained has accuracy in estimation, consistency, and unbiased. The results shown that data have normal distributed residual values, no correlation between independent variables, there is a similarity of variance from one observation to another (homoscedasticity), and no correlation between observations in each different observation period.

b. Instrument Test
Validity test are used to measure accuracy got from the questionnaire. This test meant to examine whether this analysis were effective to measured what we wanted to prove (Suliyanto, 2011). Reliability test is an index showed how far a tester can be trusted and reliable. This measurement tools shows equal or consistent. Validity and Reliability test was used application of Pearson Product Moment and Alpha Cronbach Methods. A construct or variable said to be reliable if the value of Alpha Cronbach > 0.70. the result shown that Rcount is 0.793, then all items of questionnaire were reliable.

c. Regression Test by Moderating Variable
Moderating Regression Analysis using absolute difference method used to examined the research model and hypotheses with equation as shown below:

$$\mathbf{Y = a + b_1ZX + b2ZZ + b3 \left| ZX1\text{-}ZZ \right| + e}$$

Moderating Regression Analysis used absolute difference method in order to examined the research model and hypotheses. Acceptance criteria for two hypotheses were:
H_a accepted if sig value (α) ≤ 0.05 and H_a rejected if sig value (α) > 0.05

RESULTS AND DISCUSSION

Table 1. Hypothesis Analysis Result

	Hypothetical Direction	B	Tcount	P value	Decision
Competitive Advantage	+	0.253	2.365	0.021	Supported
Good IT Governance	+	0.058	0.573	0.569	Not Supported
Moderating	+	0.046	0.370	0.712	Not Supported

Dependent Variable : ROA

From the result of moderating analysis, it can be seen that the regression coefficient of CA is 0.253 with the sig. value of CA (0.021) is less than α (0.05). It means that CA has a positive effect toward ROA. **The first hypothesis that stated Competitive Advantage has positive effect toward Return On Assets is accepted**. The existence of CA search for a fit competitive position in a company which is both profitable and sustainable against forces of competition., those encourage all related parties in a company to make a better quality, give a maximum effort to stakeholders. This result is aligned with previous research done by Sadia (2011) and Emad, Yoshifumi, and Idris (2017) stated that CA has partially and simultaneously effect toward financial performance. But this result is contradicts to the findings of Kurniawan (2005) and Rialdy (2010) who found empirical evidence that pricesely the financial performance has positively affect the competitive advantage.

The regression coefficient of good Information Technology governance is 0.046 with the sig. value of good Information Technology (0.712) is greater than α (0.05). It means that, Good Information Technology Governance not moderate the effect of CA toward ROA. **The second hypothesis that stated good information technology governance moderating the effect of Competitive Advantage toward Return On Assets is rejected.** Somehow the good technology implementation can bridge the elements of CA but seems this aspect not significant enough to strengthen the value of CA. Even though in digital era which the values of good information technology governance can empower it, still the real strength is human capital who run it.

No matter how good the technology, the competent human resources are flexible to connect in any effort to create a profit and connect with any stakeholders. The previous research done by Hapsari and Winarno (2015) and Henderi (2009) stated that good information technology governance have a positive effect toward ROA, and Sadia M (2011) and Emad et al (2017) have shown that CA positively affect the financial performance. Evidently, by this result we formulated the new concept whether good information technology can moderate the effect of competitive advantage toward ROA, then it is rejected. It might be happen since nowaday the existence of good information technology governance tends to be something general to be implemented, somehow. It implementation is a kind of obligation and no longer become unique thing among other banks.

LIMITATION AND SUGGESTION

Based on result explanations, can be concluded that competitive advantage (CA) has positive effect toward ROA. The existence of CA creates distinction among companies. Greater value of CA will elevate the stakeholders's satisfaction then create better financial performance. The result also found that good information technology governance not moderating the effect of CA toward ROA. It can be inferred that somehow both competitive advantage and good information technology governance are independent variable that affect the financial ratio.

The limitation in this research is since the research contains good IT governance variable is have not do before, this result cannot used as the exct justification whether it can moderate the effect of competitive advantage toward ROA.

Further research can be objected to other ratios of financial performance, such as ROE, ROI, GR, PER etc and other sector such as manufactured, insurance, property, or other service company. They might give different results so widen our point of view about these issues and even can generated a comprehensive picture of it. Related to this finding, still management need to adapt with digital era by empower it good information technology governance and create CA of the company. The unique strength point can empower value added of the company thus will achieve higher of financial performance.

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