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The Effect of Corporate Governance, E-Business and Innovation on Competitive Advantage and Implication on Financial Performance

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ABSTRACT

This research examined the effect of implementing corporate governance, e-business and innovation to competitive advantage, and assessed the implication to the company's financial performance. It was conducted among 67 companies in the financial industry listed on the Indonesian Stock Exchange. The research was conducted using a cross-sectional study with a questionnaire to obtain a response from top management, during the period of May to November 2016. Multivariate analysis was done to test the hypothesis, using Structural Equation Modelling based on variance or Partial Least Square (PLS). In the research, it was found that implementation of corporate governance had a negative impact on competitive advantage, but had a positive effect on financial performance. Application of E-Business had a positive impact on financial performance, while the application of innovation had a positive effect on competitive advantage and financial performance. This research also confirmed that competitive advantage had a positive impact on the company's financial performance.

Keywords: Competitive advantage, corporate governance, e-business, financial performance, innovation

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INTRODUCTION

Listed financial companies on the Indonesia Stock Exchange need to improve their performance to become a sector with high growth. The improved corporate performance will increase investor confidence, lower risk levels and improve operational efficiency (Bebchuk & Weisbach, 2010). According to Bianchini et al. (2015), to improve performance, company management needs to implement good corporate governance. In addition to being influenced by corporate governance, Chen et al. (2014) stated that the application of innovation affected the competitive advantage owned by the company, further enhancing the competitive advantage that would eventually affect the company's performance.

As a public company, it is a necessity to provide information access to stakeholders; this is reflected in the company disclosure to the stockholders and stakeholders. In addition, companies need to implement good corporate governance, so it could provide relevant information to external users through financial reports with high quality (Hasnan et al., 2017; Tan, 2015). Furthermore, Becerra (2009) suggested that the corporate governance mechanism to be applied by a company to improve the efficiency of company activity.

In an effort to improve competitiveness, especially in the financial industry, a company needs to develop information technology that supports its operation among them is e-business. Prasad (2008) concluded that the company invested in information technology for various purposes, among them to gain competitive advantage. Hence, many companies try to maintain their quality in applying e-business. Research conducted by Bauer et al. (2005) concluded that e-business application to the financial industry would affect the competitive advantage owned by the company, increasing its competitive advantage and eventually its performance. In general, the management of a company recognizes the importance of using information technology to improve competitive advantage and to stay competitive in the global market.

Monks and Minow (2011) argued that there was a distinction between compulsory rules and regulations that needed to be explained in detail, giving companies an opportunity to adapt to various conditions depending on their circumstances, thus promoting innovation. Hana (2013) stated that the implementation of innovation would affect the company's competitive advantage. Innovation as the application of successful creative ideas within the company in a dynamic environment was expected to increase the company's ability to adapt through producing new innovative products and services, Hurley and Hult (1998) also proposed innovation as a mechanism that companies did to adapt to a dynamic environment.

Various studies have shown the relationship between innovation and firm performance. Han et al. (1998) and Wahid et al. (2017) concluded that innovation improved company performance. Kluge et al. (2000) suggested that innovation was related to company performance in the industry and services sectors. They also found that innovation helped a company to increase its competitive advantage. Furthermore, Zahra and Das (1993) suggested that the dimensions of innovation strategies influenced company financial performance.

Company performance is an evaluation of all the efforts made to realize the company's business objectives (Yildiz & Karakas, 2012). Overall company performance depends on business processes application and the company's position in the market. Companies that have a good position in the industry will have a performance that tends to increase (Ray et al., 2004).

In the discussion that has been given, it could be concluded that the role of good corporate governance, innovation and e-business are important to improve the company's financial performance. These factors affect the ability to increase the competitive advantage of financial companies listed on the Indonesia Stock Exchange. Increasing company competitive advantage will, in turn, increase the company's financial performance.

LITERATURE REVIEW

A company can be defined as a set of resources and owners, who are bound by a coalition of contracts for more effective production (Szenberg & Ramrattan, 2008). According to Hirschey (2009), a company is a combination of management, physical assets, finances and information technology. Thus, the company is essentially an economic unity. The basic model of a company is derived from the company's theory, where a company is seen to have the main goal of profit maximization and to further attempt increasing the company's value. According to Thomas and Maurice (2013), a shareholder that acts as the company's owner and management will try to increase the company's profits and increase the company's value.

Resource-Based View (RBV) as a resource-based strategy theory has become increasingly influential in recent years. Competitive advantage discussion using RBV approach is a company performance model that focuses on capabilities and resources controlled by the company as a source of competitive advantage. The ability and resources of the company can be classified into four broad categories: financial resources, physical resources, human resources, and organizational resources (Barney & Hesterly, 2015).

Agency theory suggests that in a modern corporation, where stocks are widely held, the company's management action could deviate from the one needed to maximize shareholders profit. Ross et al. (2009) found that if left unchecked, managers tended to maximize the number of resources under their control. Therefore, to optimize the company's benefit, it is necessary that management is monitored to act for the optimal benefit of the company.

Information technology is an electronic means used for processing, storing and applying information communications, as well as products and services that produce and support such services (Prasad, 2008).

Along with technological development, the digital era presents a new and exciting way to do business; nevertheless, new market opportunity has a unique basic structure and is an interaction of internal and external company's forces. The internet is increasing in popularity as an additional channel of distribution in the banking sector (Jayawardhena & Foley, 2000). According to Otoritas Jasa Keuangan (OJK, 2015) e-banking is a service that allows bank customers to obtain information, communicate, and perform banking transactions through electronic media.

Information technology application that supports company competitive advantage includes e-business. Carpenter and Nakamoto (1994) stated that e-business involved all commercial activities, dynamic set of technologies, applications, and business processes performed by various computer devices. The purpose is to connect companies with customers, suppliers, and other business partners via electronic services. E-business could also be defined as a process and tools that enable companies to use internet-based information technology to conduct business internally and externally. E-business can also be understood as one of a technology-dependent strategic choice to create competitive advantage (Pilinkiene et al., 2013).

Furthermore, Beheshti et al. (2006) stated that advancement of information and communication technology had enabled various application models developed to support e-business, this application provided a competitive advantage for the company by creating efficiency and cost reduction. Phillips (2003) concluded that the most significant influence of e-business was to cut the cost of interaction, for example in searching, coordinating and monitoring company management when conducting business activities.

In a discussion related to innovation diffusion theory, Rogers (2003) stated that innovation diffusion was a theory of how a new idea and technology become scattered. The theory of innovation diffusion believes that innovation can be diffused throughout society in a predictable pattern. The measurement of innovations made by companies according to Tidd and Bessant (2014) can be divided into five dimensions: strategy, process, organizational innovation, relationships and learning. Tidd and Bessant (2014) provided an example that companies who allocated funds for research and development would have better innovation resources compared to companies who did not allocate funds for research and development.

Companies that take advantage of strategic competitive advantage and exploit their competitive advantage will be able to achieve its main goal of gaining above average profitability (Hitt et al., 2001). The competitive advantage relates to how companies choose and execute the strategy within the company's operation. Ismail et al. (2010) suggested that competitive advantage was a significant factor that supported the performance of a company.

Nag et al. (2007) suggested that companies needed to improve resource-based competitiveness as well as assessments of the company's internal and external environments. Related to the competitive advantage Bowman et al. (2002) and Surjaatmadja and Adriansyah (2016), argued that increased competitive advantage could improve company performance. In other research, Barney and Hesterly (2015) stated that the ultimate goal of management was realizing a competitive advantage to improve company financial performance.

Company performance is an evaluation of all efforts made to realize the business goals of the company. Santos and Brito (2012) argued that company performance was an important topic in strategic management research and was often used as a dependent variable. The measurement of company performance based on financial indicators is assumed as a reflection of the achievement of the company's economic goals. Hence, company performance has become a dominant strategic model in empirical research (Hult et al., 2008).

Based on the literature review for the implementation of corporate governance, innovation, e-business, and their effect to competitive advantage and company financial performance, the framework in this research can be described as seen in Figure 1.

The hypothesis is a logically expected relationship between two or more variables expressed in the form of a testable statement. The relationship is estimated based on the theoretical framework formulated for the study. The hypothesis proposed can be tested empirically, and conclude whether the proposed hypothesis is rejected or accepted (Sekaran & Bougie, 2013).

Research conducted by Madhani (2014) showed that corporate governance was a key driver of competitive advantage and company growth. Corporate governance can be represented as different factors among companies, and it could provide higher market valuation through competitive advantage. Today, corporate governance

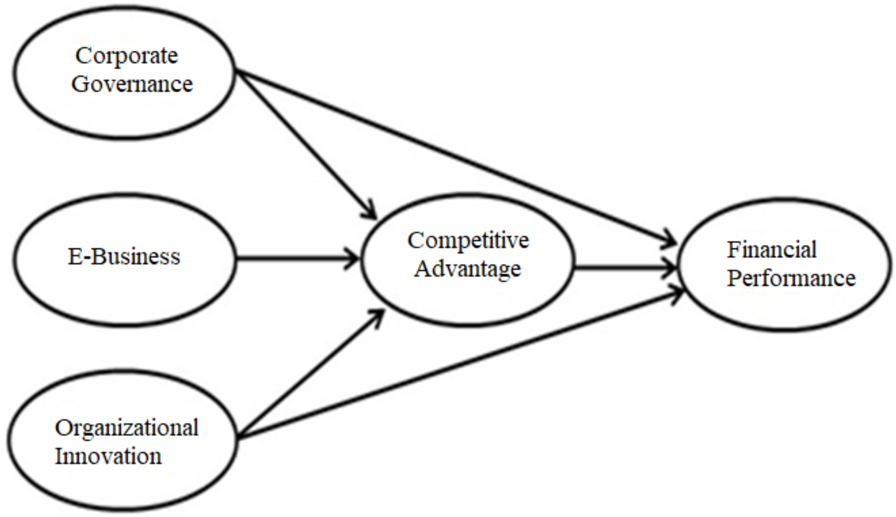

Figure 1. Research model

is indispensable; this is due to the dependencies on new technologies such as the Internet, which has increase company business exposure to technology. As a result, companies require corporate governance of security management and convenience for the users (Robles et al., 2008). This research first hypothesis (H1) is corporate governance significantly impacts company competitive advantage.

Research conducted by Bauer et al. (2005) concluded that e-business implementation in the financial industry would affect company competitive advantage, and increased competitive advantage would affect company performance. E-business application results in competitive advantage in the context of the financial service industry in Australia. Research result by Troshani and Rao (2007), showed that e-business application enabled the company to enhance competitive advantage provide more effective and efficient services. The second hypothesis (H2) is E-business significantly impacts company competitive advantage.

Innovation required is generally identical in many companies, regardless of the company size and industrial sector. The study of innovation in the financial industry states that financial companies received benefits from collaboration with external partners, such as developing new employee, accessing knowledge and technologies, reducing costs and finding new approaches to solving problems (Martovoy et al., 2015). Research conducted by Hana (2013) showed small and large companies placed an emphasis on innovation as the source of competitive advantage that determined the success of company performance. The third hypothesis (H3) is an organizational innovation significantly impacts company competitive advantage.

In a research conducted by Abdullah and Page (2009), which analyzed the relationship between corporate governance and company performance, they concluded that corporate governance affected the company's financial ratios, such as market to book ratio, sales to total assets ratio and profit to asset ratio. The fourth hypothesis (H4) is corporate governance significantly impacts company financial performance.

Research conducted by Hassan et al. (2013) explored the effect of innovation on the company's performance. It was found that innovation produced a competitive advantage for a company and improves company financial performance. The fifth hypothesis (H5) is organizational innovation significantly impacts company financial performance.

Competitive advantage supports a company in achieving high performance (Ismail et al., 2010). Research conducted by Bahri et al. (2015) explores the competitive advantage of Regional Owned Enterprise in Aceh province, Indonesia. It concludes that competitive advantage affects company performance. Research conducted by Koksal and Ozgul (2010) examined exporting company competitive advantage in Turkey and concluded that company, who want to have high performance, must build competitive advantage, and improve its export capability to compete in the international market. The sixth hypothesis (H6) is competitive advantage significantly impacts company financial performance.

MATERIALS AND METHODS

The purpose of this research was to identify the effect of the independent variable on the dependent variable. The research objective was to investigate the effect of corporate governance, e-business, and organizational innovation on competitive advantage and financial performance. The samples for this research were 67 companies top management in the financial industry sector on the Indonesia Stock Exchange. The data was collected using Likert-scale survey questions through the mail, e-mail, or one-on-one interview.

The operationalization of variables aimed to measure the variables used in research. There were five variables in this research: corporate governance, e-business, organizational innovation, competitive advantage, and financial performance. Variable Corporate Governance is the balanced control system for both the company's external and internal interests, ensuring that the company can be held accountable by the stakeholders and is socially responsible for its activities. The five dimensions of corporate governance are transparency, accountability, responsibility, independence, and fairness.

Variables E-Business is the process and tool that allows the company to use information technology to conduct business internally and externally. The five dimensions of e-business are the alignment of business strategies, the quality of the online system, the drivers of investment, the commitment and support of management, and the transaction support services. Variable Organizational Innovation is the process of integrating components that work together to create an environment where innovation can flourish. The seven dimensions of organizational innovation are application, organizational structure, company activity, information systems, objectives, mobilization, and external relationships.

Variable Competitive Advantage is the ability and resources that are owned and controlled by company management. The five dimensions of competitive advantage are service efficiency, cost flexibility, variety of online transaction services, duplication barriers, and learning organization. Variable Financial Performance is the evaluation of efforts made to realize the company's business objectives. The three dimensions of financial performance are net profit margin, return on assets, and return on equity.

Methods used in this research were descriptive analysis and multivariate analysis. Descriptive analysis was done to know the top management perspective regarding corporate governance, e-business, organizational innovation, and competitive advantage in the financial industry sector on the Indonesian Stock Exchange. Multivariate analysis was done to test the hypothesis using Structural Equation Modeling (SEM) based on variance or Partial Least Square (PLS). The result from the test was obtained using the application SmartPLS 3.0 version.

PLS method has an optimal research objective that is oriented toward implication and prediction, the sample used does not have to be large, different type of scales (ordinal, interval and ratio) can be used on the same model, the data does not have to be normally distributed and the estimation of parameter can be done without the goodness of fit test (Latan & Ghozali, 2012). SEM-PLS analysis consists of two sub-models, measurement model or outer model and structural model or inner model.

RESULTS AND DISCUSSIONS

The respondents in this research were representing the population of the financial company listed on the Indonesia Stock Exchange. The samples of 67 companies in the financial industry sector were listed on the Indonesia Stock Exchange. The research used PLS analysis second-order confirmatory analysis, with latent variables of Corporate Governance, E-Business, Innovation and Competitive advantage, and non-latent variable of Financial Performance.

The structural equation analysis section discussed the influence of independent latent variables on dependent latent variables. The discussion of structural equation analysis consisted of Goodness of fit (R-Square) test, significance test, and influence of independent latent variable. Variable Corporate Governance, E-Business, and "Organizational Innovation" effect on Competitive Advantage model gives an R-square value of 0.640, which can be interpreted that 64% of variable Competitive Advantage is explained by the variable Corporate Governance, E-Business, and Organizational Innovation.

Analysis of the measurement model or outer model consisted of a validity test and reliability test. The validity test criteria, according to Latan and Ghozali (2012) was that the loading factor value for all indicators must be greater than 0.6. The validity test results obtained from the indicators in the research showed that the loading factor value all exceeded 0.60, which meant it met the criteria for the validity test. The reliability test was done by using Cronbach's Alpha measurement with a value greater than 0.70. The result of the reliability test is shown in Table 1.

The influence of variable Corporate Governance, Organizational Innovation and Competitive Advantage on Financial Performance provides an R-square value of

Table 1
Reliability test analysis

Variable	Cronbach's Alpha	Decision
GCG	0.904	Reliable
EBS	0.924	Reliable
INV	0.932	Reliable
CAD	0.834	Reliable
CFP	0.850	Reliable

0.026, which can be interpreted that 2.6% of the Financial Performance variable can be explained by the variable Corporate Governance, Organizational Innovation, and Competitive Advantage. The results for path coefficients using $\alpha = 5\%$ are shown in Table 2.

Based on the data analysis, variable Corporate Governance on Competitiveness Advantage has a negative and significant impact. The results of this research support previous research, which suggests that the influence of corporate governance on achieving company goal, involves the responsibility of decision-makers regarding different objectives between company operations and regulations that must be obeyed.

Variable E-Business on Competitive Advantage has a positive and significant impact. Implementation of e-business in the financial industry has a positive influence on competitive advantage, then, increasing competitive advantage will impact on the overall company financial performance.

Variable Organizational Innovation on Competitive Advantage has a positive and significant impact. Organizational innovation as a source of competitive advantage has an impact on the success of company performance. Variable Corporate Governance on Financial Performance has a positive but not significant impact. A company that implements corporate governance can improve the company's financial performance, but the impact of corporate governance on financial performance is not strong.

Variable Organizational Innovation on Financial Performance has a negative but not significant impact. Company in the financial industry must develop products and systems, that support the company operations to develop products and systems,

Table 2
Path coefficients and significance

	Original sample	T statistics	P values	Decision
GCG → CAD	-0.233	2.351	0.010	Negative, Significant
EBS → CAD	0.593	4.370	0.000	Positive, Significant
INV → CAD	0.397	2.659	0.004	Positive, Significant
GCG → CFP	0.192	1.529	0.063	Positive, Not Significant
INV → CFP	-0.306	0.985	0.163	Negative, Not Significant
CAD → CFP	0.144	0.413	0.340	Positive, Not Significant

the company needs to spend more resources and expenses that affect the company's financial performance. Variable Competitive Advantage to Financial Performance has a positive but not significant impact. The results show that competitive advantage is a basis for the company in increasing financial performance.

Based on the research results, the implementation of corporate governance is the decision and mandate of the management, employees should be understood and familiar with the implementation of corporate governance in conducting company operations. E-business applied by the company supported the company's competitive advantage, therefore increasing company activities through the application of information technology is recommended. Organizational innovation becomes an important aspect of improving company business. A company that allocates funds for research and development will have better innovation resources and experience growth in the competitive industry. Furthermore, management needs company competitive advantage to improve financial performance.

CONCLUSIONS

Corporate governance results in better company monitoring and transparency, it has a positive effect on financial performance. These results conclude that corporate governance will eventually be able to improve company financial performance. Implementation of e-business by the company provides services that are more effective and efficient, which then improves the competitive advantage of the company.

Organizational innovation applied by the company gives the company a competitive advantage but has a negative effect on financial performance as organizational innovation depletes resources and increases expenses. However, organizational innovations applied by the company in the financial industry use more resources and expenses, thus negatively affecting company finances. Competitive advantage has a positive impact on company financial performance; this result shows that competitive advantage increases the company ability to have better financial performance.

The suggestion that can be given based on this research is for company management in the financial industry to pursue competitive advantage through the implementation of corporate governance, e-business, and organizational innovation. Competitive advantage is expected to improve company financial performance. For the next research, the researcher can study in other industries, such as companies in the financial technology (FinTech) industry.

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