Competitive Advantage And Implication On Financial Performance: An Empirical Study Of The Indonesia Stock Exchange

Mulyono, Adler Haymans Manurung, Firdaus Alamsjah, Mohammad Hamsal

Abstract: This study discusses the role and dimensions of the implementation of corporate governance, organizational innovation and e-business on competitive advantage and corporate financial performance. The research sample comprises 67 companies listed in the financial sector of the Indonesia Stock Exchange (IDX). The questionnaire is rated using a Likert scale. The data were analyzed using structural equation modelling (SEM) and partial least square (PLS). This study finds that corporate governance has a positive effect on financial performance and organizational innovation has a negative effect on financial performance. Corporate governance has a negative effect on financial performance through competitive advantage, while e-business has a positive effect on financial performance through competitive advantage, while organizational innovation has a positive effect on financial performance through competitive advantage.

Index Terms: Competitive advantage, Corporate governance, E – Business, Financial company, Financial performance, Indonesia Stock Exchange, Organizational innovation.

1. INTRODUCTION

Financial sector companies listed on the Indonesia Stock Exchange (IDX) need to improve their financial performance to become a high growth sector. Improved financial performance would increase investor confidence, operational efficiency, and reduce the level of risk [1]. Companies also need to improve corporate governance to improve performance [7]. Implementation of corporate governance in Indonesia needs to focus on transparency, which is expected to improve the financial performance of public companies [10]. To improve financial performance, a company needs to have competitive advantage, and corporate governance, e-business and innovation affect a company's competitive advantage and its performance [8]; [14]; [40]. To increase competitive advantage in the financial industry, a company needs to develop information technology that supports its operations. One such application of information technology is e-business. Companies develop information technology for various purposes, including the need to gain competitive advantage and maintain quality in applying e-business. Research by [5] conclude that when e-business is applied in the financial industry, it will improve competitive advantage and increase performance. Corporate management recognizes the importance of using information technology to improve competitive advantage and make a company more competitive in the global market. In a dynamic environment, the company is expected to produce new and innovative products and services [19], and [32] suggest that a distinction between compulsory rules and regulations should be explained in detail to give the company the opportunity to changing conditions. Implementing innovation also gives a company a competitive advantage [14]. Research has shown the effect of innovation on financial performance, [25] suggest that innovation affects company performance in the services industry. It will support a company achieve competitive advantage. Furthermore, [54] suggest that innovation strategies affect corporate financial performance. Corporate financial performance is an evaluation of the efforts towards realizing corporate business objectives, and financial performance depends on business processes and its position in the market. A company with a good market position will see improvements in its financial performance [53]; [41] which can be measured using financial ratios [6]; [11]. The discussion that ensues explains why a company needs to increase its competitive advantage for a positive effect on its financial performance. The objective is to examine the role of corporate governance, organizational innovation and e-business in competitive advantage and its impact on financial performance.

2 LITERATURE REVIEW

A company is a combination of management, physical assets, finances, and information technology [16]. Company as a combination of resources and owners who are bound by contracts. Through shareholders and management, the company’s main goal is to maximize profit and increase company value [49]; [50]. Agency theories suggest that in modern corporations, where shares are widely owned, corporate management decisions can deviate from maximizing shareholders profit. When left unchecked, corporate management tends not to maximize the use of resources under their control. Therefore, to achieve the company's goal, it is necessary that corporate management is monitored so that they act in the company’s interest benefit [44]. The Resource Based View as a strategy theory for the use of resources has become progressively influential in recent years [36]. It focuses on the capabilities and resources controlled by corporate management as a source of competitive advantage [3]. Companies that benefit from and exploit their competitive advantage will be able to secure above-average profitability [17]. A company uses and applies information technology to support such services. Developments in information technology create a digital era and present new ways to do business. New market opportunities and the interaction of a company's external and internal forces create unique structures. The internet has increased in popularity rapidly as a means of channel distribution in the financial sector [22]; [40]. E-business is an example of such new opportunities where its application facilitates a company's competitive advantage. [39] state that e-business is a process and tool that enables a company to use Internet-based information technology to operate more efficiently. It also creates competitive advantage. [38] suggests that e-business plays a significant role in reducing interaction costs, like monitoring and coordinating corporate management when conducting
business activities. Innovation diffusion is a theory of how new ideas and technological developments are distributed. Innovation can be diffused through society with predictable patterns [43]. Innovation can be measured based on five dimensions: organizational innovation, process, strategy, relationships, and learning [51]. Companies that allocate funds for research have better innovation resources than companies that do not allocate funds for research. Top management support is also important in a company’s research process [51]. Companies need to improve resource-based competitiveness, assessments of the internal and external environment, as well as the competitive advantage to enhance their performance [33]. In another study [21] state that competitive advantage is a significant factor that supports company performance. The measurement of a company’s performance based on its financial indicators is assumed to reflect the extent to which it has achieved its economic goals [18]; [34]. The financial ratios used in this study are net profit margin, return on asset and return on equity. Net Profit Margin (NPM) measures the company’s ability to generate net profits and reflects its ability to control business expenses. The competitive advantage supports the company to create better economic value from competitors and is related to its financial performance [48]. The net profit margin is calculated by comparing net income and sales.

\[
\text{NPM} = \frac{\text{Net Operating Income}}{\text{Net Sales}} \times 100\%
\]

Return on asset (ROA) measures the company’s ability to generate profits by using company assets. Large ROA indicates good company financial performance [3]. [45] suggest that financial performance reflects the company’s ability to generate profits. The company’s ability to generate profits on company assets can be calculated using the following formula:

\[
\text{ROA} = \frac{\text{Profit}}{\text{Total Assets}}
\]

A company’s financial performance reflects its economic objectives as indicated by the ratio of return on equity (ROE). ROE refers to a company’s profit attributed to shareholders. It is a measure of actual performance [18]; [44]. The value of ROE is calculated as follows:

\[
\text{ROE} = \frac{\text{Profit}}{\text{Total Equity}}
\]

The study is conducted using SEM-PLS analysis to determine the relationship between corporate governance, e-business, organizational innovation as independent variables, and financial performance as the dependent variable, through the mediating variable of competitive advantage. The proposed hypotheses are as follows:

H1: Corporate Governance positively affects Financial Performance.


H3: Corporate Governance positively affects Financial Performance through Competitive Advantage.

H4: E-Business positively affects Financial Performance through Competitive Advantage.

H5: Organizational Innovation positively affects Financial Performance through Competitive Advantage.

### 3 METHODOLOGY

This study is designed to identify the causal relationship between corporate governance, e-business, organizational innovation as independent variables and financial performance as the dependent variable through the mediating variable of competitive advantage. The research subject is the top management of financial companies listed on the Indonesia Stock Exchange. Data was collected using a survey in the cross-sectional timeframe. According to [47], the collection of data in a cross-sectional method is done only once in a certain period. Accordingly, this study is also called a one-shot study. The sample comprises 67 financial sector companies listed on the Indonesia Stock Exchange. Variable operationalization measures the variables used in the study. There are five variables in this study: competitive advantage, financial performance, corporate governance, e-business and organizational innovation. Variable Corporate Governance is a balanced company control system, both internal and external, ensuring company accountability to all stakeholders and social responsibility in all areas of corporate activity. Corporate governance includes accountability, responsibility, transparency, independence, and fairness [20]; [29], [35]. E-business is a process and tool that allows companies to use Internet-based information technology to conduct business activities internally and externally. The dimension of e-business is the alignment, transaction services commitment and support, system quality, and investment drivers [4]; [52]. Organizational innovation is a process of integrating mechanisms to generate an environment where innovation can flourish. It includes corporate activity, organizational structure, mobilization, implementation, objectives, information systems, and external relations [23]; [24]. Competitive advantage is the capability and resources controlled and maintained by the corporate management. It includes service efficiency, duplication barriers, cost flexibility, learning organization, and a variety of services [9]; [28]; [37]. Financial performance is the evaluation of efforts to achieve a company’s objectives. It includes net profit margin (NPM), return on assets (ROA), and return on equity (ROE) [30]; [44]; [53].

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Variable</th>
<th>Dimension</th>
</tr>
</thead>
<tbody>
<tr>
<td>GCG</td>
<td>Corporate Governance</td>
<td>Accountability, responsibility, transparency, independence and fairness</td>
</tr>
<tr>
<td>EBS</td>
<td>e – Business</td>
<td>Alignment, transaction services commitment and support, system quality, investment drivers</td>
</tr>
<tr>
<td>INV</td>
<td>Organisational Innovation</td>
<td>Corporate activity, organisational structure, mobilisation, Implementation, objectives, information systems, external relations</td>
</tr>
<tr>
<td>CAD</td>
<td>Competitive Advantages</td>
<td>Service efficiency, duplication barriers, cost flexibility, learning organisation, variety services</td>
</tr>
<tr>
<td>CFP</td>
<td>Financial Performance</td>
<td>Net profit margin, return on assets, return on equity</td>
</tr>
</tbody>
</table>

Table 1. Symbol, Variable and dimension
The data is analyzed using Structural Equation Modelling based on Partial Least Square (PLS) using SmartPLS 3.0 software. Partial Least Square is a powerful analytical method for identifying research-oriented implications and predictions. The size of the sample does not have to be large and ordinal; interval and ratio scale can be used in the same research model [27].

The structural equation in the study can be explained by mathematical notation as follows: Competitive Advantage = γ2Corporate Governance + γ3E-Business + γ4Organizational Innovation + ζ1
Financial Performance = γ5Corporate Governance + γ6Organizational Innovation + β1Competitive Advantage + ζ2

DESCRIPTION FOR γ IS THE PATH COEFFICIENT THAT LINKS THE ENDOGENOUS VARIABLES AS PREDICTORS AND EXOGENOUS VARIABLES, WHILE ζ IS THE INNER RESIDUAL VARIABLE. THE RESPONDENTS ARE REPRESENTATIVES OF 67 FINANCIAL SECTOR COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE. THE QUESTIONNAIRES RETURNED BY THE RESPONDENTS ARE TESTED USING SPSS STATISTICS 20 VERSION AND SMARTPLS 3.0. THE TEST CONDUCTED USING SPSS STATISTICS TESTED THE EXISTENCE OF MISSING DATA AND OUTLIERS, WHILE THE TEST USING SMARTPLS 3.0 TESTED THE VALIDITY AND RELIABILITY OF THE DATA. MISSING DATA AND OUTLIER TESTS WERE CONDUCTED TO TEST WHETHER THE OBTAINED DATA IS INCOMPLETE OR IF MISSING DATA WILL AFFECT THE OVERALL DATA PROCESSING. BASED ON THE RESULT, THERE IS NO MISSING DATA. THE OUTLIER TEST USING THE LISTWISE AND PAIRWISE METHOD USED A DATA STANDARDIZATION OF Z VALUE BY CHANGING DATA IN THE FORM OF Z VALUE. IF IT EXCEEDS THE VALUE OF 2.5 < Z < 2.5, THEN DATA CAN BE STATED AS OUTLIERS. IF THE DATA EXCEEDS THE VALUE OF Z > 2.5 OR Z < -2.5 COMPRISES LESS THAN 1% OF THE OVERALL DATA, THEN THE DATA CAN BE USED FOR FURTHER DATA PROCESSING [46]. AN INDICATOR OF GOOD VALIDITY IS IF IT HAS AN OUTER LOADING VALUE GREATER THAN 0.70 [13]; [27]. THE TEST OF VALIDITY FOR ALL THE INDICATORS RECORDED OUTER LOADINGS OF 0.70 OR MORE, MEANING THAT ALL INDICATORS MEET THE CRITERIA OF THE VALIDITY TEST. RELIABILITY TEST USING CRONBACH'S ALPHA MEASUREMENT HAS A VALUE MORE THAN 0.70, AS SHOWN IN TABLE 2.

Table 2. Reliability Test

<table>
<thead>
<tr>
<th>Variable</th>
<th>Cronbach's Alpha</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corporate Performance</td>
<td>0.906</td>
<td>Reliable</td>
</tr>
<tr>
<td>E-Business</td>
<td>0.894</td>
<td>Reliable</td>
</tr>
<tr>
<td>Organisational Innovation</td>
<td>0.922</td>
<td>Reliable</td>
</tr>
<tr>
<td>Competitive Advantage</td>
<td>0.826</td>
<td>Reliable</td>
</tr>
<tr>
<td>Financial Performance</td>
<td>0.780</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

Data analysis in this study uses the Partial Least Squares method, in which there are latent multidimensional constructs. The latent variables are corporate governance, e-business, organizational innovation and competitiveness, while the non-latent variable is financial performance. Structural equation analysis consists of the goodness of fit (R-square) test and shows the relationship of the independent latent variable. The corporate governance, e-business and organizational innovation effects on the competitive advantage model result in an R-square value of 0.715, which means that competitive advantage can be explained by 71.5% of the variability of corporate governance, e-business and organizational innovation.

Table 3. R-square Value

<table>
<thead>
<tr>
<th>Variable</th>
<th>R-square</th>
</tr>
</thead>
<tbody>
<tr>
<td>Competitive Advantage</td>
<td>0.715</td>
</tr>
<tr>
<td>Financial Performance</td>
<td>0.031</td>
</tr>
</tbody>
</table>

The effect of corporate governance, organizational innovation and competitive advantage on financial performance provides an R-square value of 0.031, meaning that financial performance can be explained by 3.1% of the variability of corporate governance, organizational innovation and competitive advantage. The results obtained using α = 5% are shown in Table 4 as follows:

Table 4. Path Coefficients, Significance and Hypothesis Decision

<table>
<thead>
<tr>
<th>Path Coefficients</th>
<th>Original Sample (O)</th>
<th>Standard Deviation (STDEV)</th>
<th>T Statistics (O/V STDEV)</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>GCG → CFP</td>
<td>0.204</td>
<td>0.121</td>
<td>1.684</td>
<td>H1: Accepted</td>
</tr>
<tr>
<td>INV → CFP</td>
<td>-0.344</td>
<td>0.235</td>
<td>-1.466</td>
<td>H2: Rejected</td>
</tr>
<tr>
<td>GCG → CAD → CFP</td>
<td>-0.043</td>
<td>0.059</td>
<td>-0.727</td>
<td>H3: Rejected</td>
</tr>
<tr>
<td>EBS → CAD → CFP</td>
<td>0.100</td>
<td>0.128</td>
<td>0.782</td>
<td>H4: Accepted</td>
</tr>
<tr>
<td>INV → CAD → CFP</td>
<td>0.074</td>
<td>0.107</td>
<td>0.691</td>
<td>H5: Accepted</td>
</tr>
</tbody>
</table>

Based on the results, corporate governance has a positive influence on financial performance. This result is in line with other research which concludes that corporate governance affects the company’s financial ratios [1]; [10] states that public companies that have good corporate governance also have improved financial performance. Organizational innovation has a negative effect on financial performance. This result supports previous research that shows company innovation through research and development increases the company's debt ratio [42]. Companies that have product development and systems of support for company operations could spend more resources and costs, which affects the company's finances, especially if the source of funding is obtained from loans or debt [12]; [26]. Corporate governance has a negative effect on financial performance through competitive advantage. This result is in line with a study conducted by [2], which suggests that a company’s perspective on the effectiveness of corporate governance towards achieving company goals can create a conflict between company operations and regulations that must be complied with. It results in agency costs such as compliance with applicable regulations or opportunity costs in managing relationships with institutional investors. Further research conducted by [7] suggests that corporate governance instructs good transparency and monitoring, but places excessive emphasis on the interests of shareholders and decreases the flexibility management for company development. E-business
has a positive effect on financial performance through competitive advantage. The result shows that e-business conducted by the company affects its competitive advantage and impacts on its financial performance. This result supports previous study concluding that the implementation of e-business in the financial industry has an influence on the competitive advantage and affects the company’s financial performance [4]. [52] conclude that the application of e-business results in competitive advantage and provides more effective and efficient services that improve financial performance. Organizational innovation has a positive effect on Financial performance through competitive advantage. The result shows that a company’s innovation affects competitive advantage, which has an impact on the improvement of the company’s financial performance. This result supports previous studies that found that a company benefits from the cooperation and innovation with external partners, which supports its performance [31]. Further research exploring the effect of innovation on company performance concludes that a company’s innovation creates competitive advantage and improves its financial performance [14]; [15].

5 CONCLUSION
Corporate governance has a positive effect on financial performance. This result concludes that a company that applies good corporate governance will eventually improve its financial performance. A company’s implementation of organizational innovation has a negative effect on financial performance. One of the ways companies in the financial industry implement innovation is by using more resources and costs, which could be detrimental to its finances. Corporate governance negatively affects financial performance through competitiveness, while e-business and organizational innovation have a positive impact on financial performance through competitive advantage. These results conclude that competitive advantage can be the basis for the company to improve financial performance. Competitive advantage can enable a company to compete better. Company management in the financial industry needs to increase its competitive advantage through the implementation of corporate governance and to support the company’s activities by implementing e-business and organizational innovation, which is expected to improve its financial performance. Further research could be done in different industries, such as in the emerging industries of financial technology.

REFERENCES
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