# The Effect of External Environment and Low-Cost Strategy on Financial Performance of Banking in Indonesia

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*Abstract*—**The external environment is a challenge for the banking industry in Indonesia. The dynamic changes of the external environment influence the strategy and performance financial in the global competition of the banking sector in Indonesia. The objectives of this study are 1) to analyze the effect of the external environment on low-cost strategy of the banking in Indonesia, 2) to analyze the effect of low-cost strategy on financial performance of the banking in Indonesia, and 3) to analyze the effect of the external environment on the financial performance of banking in Indonesia. Surveys are conducted on 101 banks through a set of questionnaires, which are given to the bank and collected directly by the researcher as well as by post to the president director and director of the banks in Indonesia. Data that have been collected are analyzed by using linear structural relationship (LISREL) using structural equation models (SEM). The results of this study show three paths that influence the external environment, low-cost strategy, and the financial performance of banking in Indonesia. First, the external environment that consists of an environment has no significant influence on the low-cost strategy. Second, the low-cost strategy has a significant influence on financial performance, while the external environment that consists of the environment has a significant influence on financial performance. The results show that the banks need to develop a low-cost strategy to improve financial performance and increase awareness of the external environment that can influence bank performance. Therefore, it is important for decision-makers of the national banking sector to develop a strategy to enhance the profitability and competitiveness of banks given the current competition.**

*Keywords—environmental, low-cost strategy, financial performance, banking*

## I. INTRODUCTION

In the last decade, a major financial crisis has taken place namely the financial crisis which involves European countries. Today, in 2018 financial crisis in Turkey and Argentina caused by the collapse of the Lira and Peso exchange rates against the USD. This kind of situation happened to the Asian currencies including rupiah in Indonesia. Furthermore, the previous financial crisis in 2015 in Greece and the global economic market experienced weakness in 2008 triggered by uncertainty the direction of monetary policy in the United States (US) as well as the

worst hit economy crisis the country Indonesia in 1997 led to the deterioration of Indonesia's financial and economic situation [1]. The level of uncertainty split environment the macro environment and industry environment which is a subsidiary of good, or services [2].

One of the environmental uncertainties is among others natural disasters such as an earthquake, storm on the sea and on land so many submerged vessels, houses collapsed, due to tornadoes and industrial waste pollution in residential areas. With such climate change, the Indonesian government is expected to be able to quickly address this issue for the public and the economic actors particularly in the financial sector. The existence of this climate change can affect the financial sector.[3] states that every business needs a natural resource, involving the sale of eco-friendly products. The occurrence of environmental pollution, illegal logging, flooding, and environmental changes have a negative impact on an area resulting in a delay in business activity.

## II. RESEARCH QUESTIONS

The concept of the environment used to analyze external influences on the concept of low-cost strategy and financial performance. It has attracted interest, to study this concept in the banking industry in Indonesia. The existence of a study that can be a reference to put and combine between environments and low-cost strategies and its impact on financial performance the banking in Indonesia. that is,

1. What is the effect of the environment on a low-cost strategy in banking in Indonesia?
2. What is the effect of the low-cost strategy on financial performance in banking in Indonesia?
3. What is the effect of the environment on financial performance in banking in Indonesia?

## III. LITERATURE REVIEW

Based on the above-mentioned situation, the banking industry is included in Indonesia experiencing the challenges of changing the dynamic external environment in recent years. In the middle of the Indonesian banking structure change in the last 10 years, there are two changes which affect the banking industry. The banking industry landscape changes and the tightening of banking regulations

in Indonesia. Viewed from the external environment and the industrial environment in the last year in 2015 there has been a drastic change from the general environment [1].

The general environment is happening mainly because of the influence of globalization such as the crisis in Greece which has an impact on the whole world including Indonesia. This illustrates the weakening of the rupiah exchange rate at the end of the 1st quarter of 2015 has an impact to the 2nd quarter of 2015 the decline in the combined Indonesia Composite Index (ICI) in addition the NPL/non performing loan bank was relatively higher in that year Bank of Indonesia (2015) [1]. The last is the crisis that occurred in Europe namely there were several developing countries which increased policy interest rates such as, in Mexico and Turkey along with inflationary pressures which stemmed from exchange rate depreciation [4].

Changes in external environments also affect the performance of their companies to facilitate and accelerate service in order to satisfy customer needs. It includes aspects of environmental pollution as well as the continuity of the environment [2] — one of the influences namely the environmental environment. Through environmental aspects, it encompasses all aspects of the environmental aspects such as; environmental pollution, the sustainability of the environment depending on the geographical location of the landscape [2].

According to Porter (2004) [5], differentiate three generic strategies to create competitive advantage in the face of competition namely, (i) differentiation, (ii) costs leadership and (iii) focus. The three strategies are not interconnected one with another. However, since each of these strategies requires organizational commitment and organization the ideal of these three strategies complement each other [6], [7]. In the area of strategy, [8], states that companies that implement integrated strategies have lower performance compared to cost leadership strategies can outperform the competition in the industry. The indicators chosen to measure the strategy in this study refer to King et al. (2010)[9], the cost leadership indicator is a low-cost indicator with emphasis on cost efficiency, cost reduction, operational efficiency, sales capacity, price competence, and general cost control.

From a number of studies, there is an overlap among several concepts including financial performance. Subsequently [3], [10] recommends seven rules in processing in determining performance namely; *Return on Asset* (ROA), *Return On Equity* (ROE), *Net Interest Margin* (NIM), *Operating Costs on Operating Income* (OCOI), *Non Interest Income* (NII), *Loan To Deposit Ratio* (LDR), *Non Performing Loan* (NPL). Meanwhile, [11] states the performance of the company can be further subdivided into three main divisions, namely operating performance, financial performance or accounting, and market-based performance. In addition, [12] states that strategies are empirically considered capable of improving performance, especially in crisis and after the crisis. They also distinguish performance appraisal guidelines based on financial performance, business performance or non-financial performance and organizational effectiveness.

## IV. RESEARCH METHOD

This study uses survey methodology to encourage questions for more reliable information, using the *Statistical Package for the Social Sciences* (SPSS), *Linear Structural Relationship* (LISREL) dan *Structural Equation Models* (SEM). The sample unit of this study is that all commercial banks in Indonesia totaling 120 banks consist of 4 government banks, 29 foreign exchange banks, 26 local government banks, 35 non-foreign private banks, and 16 mixed banks and 10 banks foreign. Analytical units are each bank with the target of a bank's directors' respondents consisting of key directors, marketing directors, human resource directors, organization and information technology directors, and compliance directors, or top-level leaders under directors questionnaire. The total number of questionnaires distributed was 120 banks, and total returns were 101 banks (response rate 84.1%) so sufficient to be analyzed.

## V. RESULTS AND DISCUSSION

The processing and analysis of the (environment) measurement model, which is a latent variable are measured by several indicators namely, (Env1), (Env2), (Env3), (Env4), (Env5).

### A. Environment Variables

The result of the analysis of environment latent variable measurements in Table 1 shows that Env2 and Env4 variables are removed from the model since the standardized loading factor (SLF) <0.50, which is a validity criterion is badly used.

TABLE I.    VALIDITY AND RELIABILITY OF ENVIRONMENT VARIABLES

| Variables | *SLF ≥ 0.5 | Error | *CR ≥ 0.7 | *VE ≥ 0.5 | Conclusion |
|---|---|---|---|---|---|
| Environment | | | 0.82 | 0.51 | Good reliability |
| Env1 | 0.51 | 0.74 | | | Good validity |
| Env3 | 0.78 | 0.39 | | | Good validity |
| Env5 | 0.61 | 0.63 | | | Good validity |

*SLF = standardized loading factor
*CR = construct reliability, *VE = variance extracted

### B. Low-Cost Strategy Variables

The result of the analysis of low cost latent variable measurements in Table 2 shows that LC1 and LC4 variables are removed from the model since the standardized loading factor (SLF) <0.50, which is a validity criterion is badly used.

TABLE II.    VALIDITY AND RELIABILITY OF LOW COST VARIABLES

| Variables | *SLF ≥ 0.5 | Error | *CR ≥ 0.7 | *VE ≥ 0.5 | Conclusion |
|---|---|---|---|---|---|
| Low cost | | | 0.69 | 0.54 | Good reliability |
| LC2 | 0.88 | 0.23 | | | Good validity |
| LC3 | 0.54 | 0.71 | | | Good validity |
| LC5 | 0.51 | 0.74 | | | Good validity |

*SLF = standardized loading factor
*CR = construct reliability, *VE = variance extracted

## C. Financial Performance Variables

The result of the analysis of financial performance latent variable measurements in Table 3 shows that Fin1, Fin2, Fin6, and Fin7 variables are removed from the model since the standardized loading factor (SLF) <0.50, which is a validity criterion is badly used.

TABLE III.     VALIDITY AND RELIABILITY OF FINANCIAL PERFORMANCE VARIABLES

| Variables | *SLF ≥ 0.5 | Error | *CR ≥ 0.7 | *VE ≥ 0.5 | Conclusion |
|---|---|---|---|---|---|
| Financial | | | 0.89 | 0.74 | Good reliability |
| Fin3 | 0.84 | 0.30 | | | Good validity |
| Fin4 | 0.86 | 0.26 | | | Good validity |
| Fin5 | 0.88 | 0.23 | | | Good validity |

*SLF = standardized loading factor
*CR = construct reliability, *VE = variance extracted

## D. Structural Model

This analysis is based on the research hypothesis test. The research hypothesis is accepted if the absolute value of -t ≥ 1.96 with a coefficient sign corresponds to the proposed hypothesis (positive or negative).
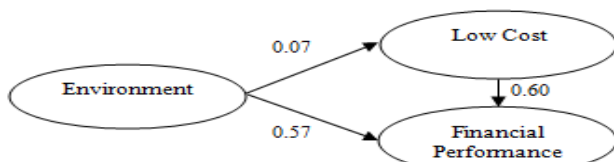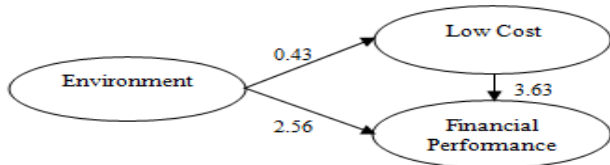


Fig. 1.  Structural Model (t-value)

From the structural model of the restructuring, it can be noted that the path coefficient between the environmental variables with a low-cost strategy of 0.07 with the t-value of 0.43 ≥ 1.96 is an insignificant environment against a low-cost strategy so HO: is not accepted. While the path coefficient between the low cost strategy variables with the financial performance of 0.60 with a value of 3.63 ≥ 1.96 and the coefficient of the path between the environmental variables with a financial performance of 0.57 with the t-value of 2.56 ≥ 1.96 then a significant low cost strategy on financial performance and a significant environmental impact on financial performance so that H1: is acceptable.

TABLE IV.     GOODNESS OF FIT STATISTICS

| GOFI | Calculated Results Value | Standard Value for Good Match | Conclusion |
|---|---|---|---|
| RMSEA | 0.00 | RMSEA ≤ 0.08 | good match |
| NFI | 0.94 | NFI ≥ 0.90 | good match |
| NNFI | 1.01 | NNFI ≥ 0.90 | good match |
| CFI | 1.00 | CFI ≥ 0.90 | good match |
| RFI | 0.88 | RFI ≥ 0.90 | Match pretty good |
| Std. RMR | 0.04 | Std. RMR ≤ 0.05 | good match |
| GFI | 0.97 | GFI ≥ 0.90 | good match |
| AGFI | 0.93 | AGFI ≥ 0.90 | good match |

*Source:* Lisrel Output in Goodness of Fit Statistics

The whole picture of the research hypothesis, shown as follows:

TABLE V.     TEST OF HYPOTHESIS

| Effect Against Latent Variables | t - Value Calculate (>1.96) | Coefficient | Conclusion of Significant Test Result |
|---|---|---|---|
| H1: The environment has a positive effect on the low-cost strategy | 0.17 | 0.02 | Data do not support the hypothesis |
| H2 : The low cost has a positive effect on financial performance. | 1.79 | 0.20 | Data do not support the hypothesis |
| H3 : The environment has a positive effect on financial performance. | 2.56 | 0.57 | Data support the hypothesis |

*Source* : Lisrel Output

Based on the theories a research model was built which combines environment variables low-cost strategies and financial performance as follows,
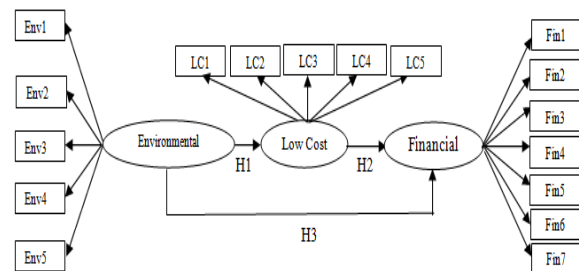


Fig. 2.  Conceptual Framework

The role of the banking world in the context of environmental management has begun to be pioneered by Indonesian banks based on law number 32 of 2009 on environmental protection and management requiring all economic activities to adhere to the preservation of the environment. Banking as part of a business entity believes the green concept of green banking can be implemented effectively [3]. The policy is to be the main concern of the bank given the timing of banking institutions to take part in supporting the business to promote the business-owned environment in the business of providing green products, covering green savings, green current accounts, green

deposits, deposit certificates green, green bonuses and green information product services, so as to save on operating costs [13]. According to the committee, [14] that the strength of the environment is the state of the general environment physically shaped by the environment can support any activity which is derived from natural sources in the vicinity this power includes goegrafi, climate, residents, facilities and infrastructure.

Longer management it is best first to observe the environment to obtain adequate external information as a strategy of decision making [15]. The results of the study Mitchell and Harris (2005) [16] found that there was a positive relationship, between the intensity of the company's management, with the intensity of the environmental scan.

(H1): Environment has a positive effect on low-cost strategy

The annual report Bank of Indonesia (2008) [10] says that strategies with close and appropriate performance are implemented in small industries. The investigation of the Indonesian bank report also implies a positive correlation implication between strategy and achievement. Therefore, strategic is expected to have a positive effect on financial performance (consisting of ROA, ROE, NIM, OCOI, NII, LDR, and NPL). Opinion Porter (2004) [5] believes that investment in information technology has an important role and reduces costs and improves competitiveness and can do differentiating products affecting performance. The study conducted by Abdullah (1985) [17] in Malaysia concludes that the investment carried out by the banking on information technology has impacted on the formulation of transaction costs the number of officers and branch offices. In addition, research conducted Syamsul Ridjal and Akhmad Muhammadin (2018) [18], found that generic strategies, positive influencing on financial performance, and organizations in the banking sector in Indonesia.

(H2): Low-cost strategy has a positive effect on financial performance.

The external environment is an environmental, which sets out the broad scope factors and the factors on the ground are outside and beyond the company's operations. This environment has the implications of direct implications, for the organization of a company organization. These factors include government policies, democracy, inflation, community lifestyles, customer protection, natural disasters, environment, demographics Pearce and Robinson (2013) [2]. In relation to the environmental aspects [19] states that macro and micro effects will grow when the environment and support base macroeconomic environment is well managed stable and predictable, reliable information and access easy with technology and promoting a social environment and appreciating the success of businesses in any sector.

(H3): Environment have a positive effect on financial performance.

## VI. CONCLUSION

The conclusions of this research are (i) the environment has no effect on low-cost strategy; (ii) low-cost strategy has no effect on financial performance, and (iii) the environment has a positive effect on financial performance. Environmental variables have a positive effect on financial performance with a t-value of 2.56 with a coefficient of 0.57 to the data conclusions support the hypothesis. The external environment has no effect on the generic strategy as it is deemed that the environment has an element of uncertainty. Strategy factors can have no effect on the results in a company's performance, especially on low-cost strategy on financial performance. Environment factors can be expected and beneficial to enhance financial performance opportunities in banking in Indonesia.

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