Exploring Environment-Strategy-Performance (E-S-P) Paradigm in General Insurance Companies in Indonesia

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Abstract:
Understanding dan managing the impact of business environment uncertainty and business strategy are critical for organization performance. This research aimed to present a model that generally illustrates the influence of environment uncertainty and prospector strategy toward the organizational performance of general insurance companies in Indonesia. Analytical technique tested with Structural Equation Model (SEM). This study processed data from 238 managers from 21 general insurance companies in Indonesia.
This research found that environmental uncertainty had significant effect on the prospector strategy. The prospector strategy also has a positive effect on company performance. Furthermore, this study also shows that environmental uncertainty directly has a significant positive effect on organizational performance.

Keywords: Environment uncertainty, prospector strategy, company performance

1. Introduction
Managing the ambiguity in the business environment and achieving sustainable competitive advantage has become the company’s main concern in strategy implementation because in the last two decades rapid changes in the environment have been the cause of corporate failure that has not changed its outdated core competencies (Jiang, Mavondo and Matanda, 2015). Understanding of the interrelation within the business environment, corporate strategy and company performance known as the Environment-Strategy-Performance (E-S-P) paradigm is a fundamental thing that must be analysed by top-level managers in companies, where this paradigm shows a strong relationship between environmental changes to the corporate strategy adopted and is expected to improve company performance. Changes in the dynamic external environment will determine how the company will use its resources, adjust its organizational structure, and react by creating new strategies to stabilize and improve company performance (Lo, 2013). The growing number of insurance companies, as well as various product and service innovation, have resulted in increased competition in the overall insurance business in Indonesia. Based on projections carried out by the Indonesian General Insurance Association (AAUI), the general insurance industry will record a resounding growth in 2019. It is estimated that the insurance industry will achieve a minimum premium growth of 10%. Considerable growth in the insurance service sector requires a variety of appropriate strategies for the insurance company to get results that are under the predetermined targets. Competition of insurance companies will be increasingly stringent so that companies need to pay attention to the conditions of the company’s environmental factors and the uncertainty of business conditions, prospector strategy, network capability and network competency that will affect company performance both directly and indirectly. According to Vanderlinden, Millie, Anderson, and Chishti (2018), the insurance industry itself is facing a very big challenge with shifts within business environment by revolution in the insurance industry and the emerge of the InsurTech companies. Insurtech is an insurance company that combines insurance services and technology that has several advantages over conventional insurance company. On the other side, opportunities in insurance industry in Indonesia is still substantial, whereas this sector is supported by strong economic fundamentals and market fundamentals, such as stable economic growth, low market penetration (2.3% of GDP), high market returns, demographic bonuses where the population of the workforce will reach 200 million people in 2035, high consumption patterns and high middle class growth (KPMG, 2016)

2. Theoretical Framework and Hypothesis

2.1. Environmental Uncertainty
Environmental uncertainty refers to conditions where future events are challenging to anticipate and are a significant challenge for managers and entrepreneurs (Song, et. al, 2016). The definition of the environment in this study

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is an external environment that has an impact on the company, commonly referred to as the external environment of the company. According to Kunch (2019), external environment (external environment) consists of three parts related to its proximity to the organization, namely: (1) competition with existing organizations (rivalry with existing organization); (2) industrial dynamics determined by suppliers, new entrants, substitute products and consumers; and (3) the general environment by political, economic, social, technological and environmental factors. According to Ghosh and Guin (2014), environmental uncertainty analysis is very important for companies since it is directly related in terms of decision making. In developing countries, uncertainty is more dominant because of the nature of developing countries themselves, which are determined by poor institutional arrangements, lack of assurance for intellectual property law, and high transaction costs.

2.2. Prospector Strategy

Research by Ingram, Kraśnicka, Pósitoček, Głod, and Głod (2016) and Elhamma and Zhang (2013) suggested four basic typologies of strategy initially proposed by Miles and Snow, and generally implemented by companies, there are: (1) defender strategy (defender strategy), (2) prospector strategy (prospector strategy), (3) analyst strategy (analyzer strategy) and finally the (4) reactor strategy. Specific features of Prospector Strategy are: prospector are seekers, always looking for new opportunities, also companies always as a leader of major service or product innovation to be the market leader. Prospector type has a broad market reach and products that are continuously developing. This type of strategy must develop and maintain the capacity by monitoring environmental conditions within wide range so that to support the activities of this type of prospector company requires a high cost to human resources. Prospectors are also often referred to as creators of change in the industry because change is the primary tool used to deal with competitors. The prospector strategy seeks to determine and make use of all chances both in product development and markets.

Previous research conducted in 155 small medium enterprises in China, it was found that Environment-Strategy-Performance (E-S-P paradigm), especially the change from defender strategy in the past decade, became an aggressive prospector strategy at this time, helping companies overcome changes and improve company performance. (Tang, and Tang, 2012). Also, when looking for opportunities and adjusting to deal with changes in the external environment, the prospector will develop new products and create new technologies and not just revise existing products (Laforet, 2008).

2.3. Insurance Company in Indonesia

In Indonesia, the insurance industry categorized into the non-bank financial industry, which is one of the sub-sectors of the financial services industry, where the sub-sector generally divided into five sub-sectors, namely: (1) general insurance, (2). life insurance, (3). reinsurance, (4). mandatory insurance and (5). social insurance. According to the Indonesian Financial Services Authority data, as of June 2018, there is a total of 138 insurance companies, includes 74 general insurance companies.

Company performance measurement is generally seen from income, net income, and increase in stock prices, but insurance companies measure company performance with its uniqueness where Indonesian Financial Services Authority calculates financial ratios specific to insurance companies such as: (1). The premium adequacy ratio for claim payments, (2). The premium adequacy ratio for claim payments and general costs, (3). The adequacy ratio of premiums and investment returns on payment of claims, (4). Insurance session ratio, and (5). Investment ratio to technical reserves. According to Sukarya and Margaretha (2018), Return on Assets (ROA) is a use as a measurement of the performance of insurance companies in Indonesia, where several factors such as leverage, equity, and management competency index have a positive relationship, while size, ownership, and age have a negative relationship, and overall become an antecedent factor for ROA. Other researchers also see that Return on Assets (ROA) can be a measure of the performance of insurance companies, where earnings assets and investment yields have a positive effect on ROA (Mwangi and Iraya 2014). Based on the theory and results of previous studies, this research will explore the variables that determine the environment uncertainty on company performance, mediated by prospector strategy.

2.4. Conceptual Framework and Hypotheses
Organizations face challenges from the external environment while the competitiveness of companies depends on their ability to monitor the environment and adjust the company’s strategy to environmental dynamics (Talpová, S. Ž., 2016). Research conducted by Parnell, et al., (2012) which examines SME companies in China, Turkey and America states that there is a relationship between environmental uncertainty and its strategy, in which this study concludes that business strategies in Turkey are ambiguous and full of uncertainty in the economic and political fields, different from the strategies in China and America.

Another study by Yang, P. (2019) which examined the relationship between environmental dynamics and strategy stated that there was a relationship between the variables of environmental dynamics on the strategy, where the more dynamic the corporate environment, the more companies tended to implement strategic change. In addition, Köseoglu et al., (2013) examined the relationship between environmental uncertainty and prospector strategies in the hospitality industry and concluded that related to environmental uncertainty, the prospector of the best option strategy was seen from financial and non-financial performance measures. Considering all theories above, the first hypotheses for this study is as follows:

- **H1**: Environment uncertainty positively influences prospector strategy

  Talpová, S. Ž., (2016) examines companies in the Czech Republic and concludes that there is a positive relationship between prospector strategy and performance, indicated by data where companies implementing the type of prospector strategy produce higher performance than other types of strategies.

  Other research by Kiptui (2014) examined the relationship between prospector strategy and firm performance, which stated that prospector strategy affected company performance. In a study conducted by Kalkan, Erdill and Bozkurt (2011), who examined 151 companies in Turkey concluded that the prospector strategy was one of the factors that influenced company performance, where companies using the prospector strategy produced better performance. Other research conducted by Heiens and Pleskho (2010), found that the prospector strategy influences the growth of the company’s market share, which is one of the indicators of growth in company performance. Other research was also conducted on the tourism industry in Turkey by Avci, Madanoglu and Okumus (2011) where this study compared four strategy typologies by Miles and Snow, and concluded that the type of prospector strategy was the most appropriate strategy to produce the best company performance. Considering all above factors, the second hypotheses for this study is as follows:

- **H2**: Prospector strategy positively influences company performance

  High environmental uncertainties are characterized by market changes, competition, and regulations that consistently change, and this is critical for company performance (Lam and Yeung, 2010). Research conducted by Chin, Hamid, Rasli and Tat (2014) conducted by manufacturing companies in Malaysia states that there is a positive relationship between environmental uncertainty and company performance. In other studies, related to the relationship between environmental uncertainty and firm performance, Schulz, Wu and Chow, (2010) who found that environment uncertainty influenced the condition of company performance. This is also in line with the results of research conducted by Kundu and Bhattacharya (2010), which states that environment uncertainty affects firm performance. In a study conducted by Sun, Hsu and Hwang (2009) it was found that environment uncertainty influences firm performance. Considering this, the third hypotheses for this study is as follows:

3. Methods

The research objective is to test hypotheses (hypothesis testing). In this study, the research variables tested were exogenous variables (independent variables), namely environment uncertainty, then endogenous variable (dependent variable) is company performance, whereas prospector strategy is a mediating variable.

The unit of analysis in this study are 21 general insurance companies in Indonesia that registered with the Indonesian Financial Services Authority, and the observation unit is the employees who in managerial positions in those companies. Total respondents in this research are 238 middle-level managers and high-level managers in 21 general insurance companies in Indonesia. Respondents were asked to respond to the statements below based on 6 Likert scales (1= strongly disagree to 6= strongly agree). Furthermore, all data obtained through the distribution of valid and reliable questionnaires will then be carried out data analysis techniques using Structural Equation Modelling (SEM) and proceed using software AMOS version 24.
<table>
<thead>
<tr>
<th>Variable</th>
<th>Dimension</th>
<th>Indicator</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environment Uncertainty</td>
<td>Market Environment</td>
<td>1. In our kind of business, customers’ product preferences change quite a bit over time. 2. Our customers tend to look for new products all the time. 3. Sometimes our customers are very price-sensitive, but on other occasions, the price is relatively unimportant. 4. New customers tend to have product-related needs that are different from those of our existing customers. 5. We cater to many of the same customers that we used to in the past. 6. It is challenging to predict any changes in this marketplace.</td>
<td>Parnell, J.A., et al., (2012), Köseoğlu et al., (2013) (2013) dan Song, et al., (2016)</td>
</tr>
<tr>
<td></td>
<td>Technological Environment</td>
<td>1. The technology in our industry is changing rapidly. 2. Technological changes provide big opportunities in our industry. 3. It is challenging to forecast where the technology in our industry will be in the next 2 to 3 years. 4. A large number of new product ideas have been made possible through technological breakthroughs in our industry. 5. Technological developments in our industry are minor. 6. The technological changes in this industry are frequent.</td>
<td>Parnell, J.A., et al., (2012), Köseoğlu et al., (2013) (2013) dan Song, et al., (2016)</td>
</tr>
<tr>
<td>Prospector Strategy</td>
<td></td>
<td>1. The firm leads to innovations in its industry. 2. The firm product domain is periodically redefined. 3. The firm believes in being ‘first-in’ in the industry in the development of new products. 4. The firm responds rapidly to early signals of opportunities in the environment. 5. The firm operates in a broad product domain. 6. The firm’s actions often lead to a new round of competitive activities in the industry. 7. Not all the firm’s efforts invested in being ‘first-in’ in the industry in development of new products prove to be profitable. 8. The firm does not maintain market strength in all the areas in which it operates.</td>
<td>Song, et al., (2016); Ingram, T., Kraśnicka, Póspiech, M. W., Głod, G. dan Głod, W. (2016) and Elhamma dan Zhang (2013)</td>
</tr>
<tr>
<td>Company Performance</td>
<td>Financial</td>
<td>1. In the last 3 years the company achieve better profit growth 2. In the last 3 years the company achieve greater premium income growth 3. In the last 3 years the company achieve greater investment income growth 4. In the last 3 years the company achieve higher sales growth 5. In the last 3 years the company achieve greater asset growth</td>
<td>Mahmoud et al., (2016); Lin and Lin (2013); Tehseen et al., (2018); Francioli, et al., (2017)</td>
</tr>
<tr>
<td></td>
<td>Non-Financial</td>
<td>1. In the last 3 years the company achieve greater market share growth</td>
<td></td>
</tr>
</tbody>
</table>

**Table 1: Variables, Dimensions, Indicator, and References**
4. Results and Discussion

4.1. Results

<table>
<thead>
<tr>
<th>Goodness-of-fit Measurement</th>
<th>Cut-off Point</th>
<th>Results</th>
<th>Decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Absolute Fit Measures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chi-Square</td>
<td>small</td>
<td>128,506</td>
<td>Good fit</td>
</tr>
<tr>
<td>Probability</td>
<td>≥0.05</td>
<td>0.446</td>
<td>Good fit</td>
</tr>
<tr>
<td>CMIN/DF</td>
<td>&lt;2</td>
<td>1.012</td>
<td>Good fit</td>
</tr>
<tr>
<td>RMSEA</td>
<td>≤0.08</td>
<td>0.007</td>
<td>Good fit</td>
</tr>
<tr>
<td>Incremental Fit Measures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NFI</td>
<td>≥0.90</td>
<td>0.950</td>
<td>Good fit</td>
</tr>
<tr>
<td>GFI</td>
<td>≥0.90</td>
<td>0.944</td>
<td>Good fit</td>
</tr>
<tr>
<td>AGFI</td>
<td>≥0.90</td>
<td>0.925</td>
<td>Good fit</td>
</tr>
<tr>
<td>TLI</td>
<td>≥0.90</td>
<td>0.999</td>
<td>Good fit</td>
</tr>
<tr>
<td>CFI</td>
<td>≥0.90</td>
<td>0.990</td>
<td>Good fit</td>
</tr>
<tr>
<td>Parsimonious Fit Measures</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PNFI</td>
<td>≥0.50</td>
<td>0.788</td>
<td>Good fit</td>
</tr>
<tr>
<td>PCFI</td>
<td>≥0.50</td>
<td>0.830</td>
<td>Good fit</td>
</tr>
</tbody>
</table>

Table 2: Goodness of Fit Criteria, Results, and Decisions
Source: Output from AMOS Ver. 24

The results of the model test of goodness (goodness of fit) above indicate that the value of CFI with criteria that must be achieved is ≥ 0.90, while the test results show the number 0.990 then the model can be said to be goodness of fit. Furthermore, the NFI value with a cut-off value of 0.90 the results achieved are equal to 0.950, so the decision reached is the goodness of fit because it is close to the cut-off value. TLI with a cut-off value of 0.90, the processing results show a value of 0.999, then it is included in the goodness of fit category.

The overall model consistently goodness of fit or feasible to use because some indicators are in the goodness of fit category. According to Hair et al., (2014), if there are one or two goodness of fit criteria that have met, then the model can be said to be good. Thus, a model built statistically can be supported and in line with the specified fit model.

4.2. Discussion

4.2.1. Direct Effect
Hypothesis testing done by looking at the significant value of each relationship that has a significant level (a) set at 5%, which means that the tolerance error that can be tolerated is 5%. In other words, the level of confidence of testing this
hypothesis is 95%. If p-value is <0.05, it can be said that the independent variable has a significant effect on the dependent variable. The following are the results of hypothesis testing in this study:

<table>
<thead>
<tr>
<th>Keterangan</th>
<th>Estimate</th>
<th>S.E</th>
<th>Critical Ratio</th>
<th>P- Value</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>STR &lt;--- ENV</td>
<td>0.741</td>
<td>0.088</td>
<td>8.418</td>
<td>***</td>
<td>H₁ Supported</td>
</tr>
<tr>
<td>PERF &lt;--- STR</td>
<td>0.702</td>
<td>0.108</td>
<td>6.513</td>
<td>***</td>
<td>H₂ Supported</td>
</tr>
<tr>
<td>PERF &lt;--- ENV</td>
<td>0.556</td>
<td>0.103</td>
<td>5.415</td>
<td>***</td>
<td>H₃ Supported</td>
</tr>
</tbody>
</table>

Table 3: Direct Effect Testing Results  
Source: Output from AMOS ver. 24

4.2.1.1. Hypothesis 1  
The first hypothesis examines the effect of environment uncertainty on a prospector strategy. The null hypothesis (H₀) and the alternative hypothesis (H₁) are as follows:
- H₀: There is no effect of environment uncertainty on the prospector strategy.
- H₁: There is an influence of environment uncertainty on the prospector strategy.

The results of the first hypothesis test show a p-value of 0.000 <0.05, so this result indicates that H₀ is not supported and H₁ is supported, which means that there is an influence of environment uncertainty on the prospector strategy. The coefficient value is 0.741 (positive effect). The Critical Ratio (CR) value is 8.418 > 1.96. These results prove that the first hypothesis is acceptable. The more environment uncertainty increases, the higher the prospector strategy.

4.2.1.2. Hypothesis 2  
The second hypothesis tests the effect of a prospector strategy on company performance. The null hypothesis (H₀) and the alternative hypothesis (H₁) are as follows:
- H₀: There is no prospector strategy effect on company performance.
- H₁: There is a prospector strategy influence on company performance.

The results of the second hypothesis testing show a p-value of 0.000 <0.05, so this result indicates that H₀ is not supported and H₁ is supported, which means that there is a prospector strategy influence on company performance. Coefficient value is 0.702 (positive effect). The Critical Ratio (CR) value is 6.513 > 1.96. These results prove that the second hypothesis is acceptable. As the prospector strategy increases, the company performance also increases.

4.2.1.3. Hypothesis 3  
The third hypothesis examines the effect of environment uncertainty on company performance. The null hypothesis (H₀) and the alternative hypothesis (H₁) are as follows:
- H₀: There is no influence of environment uncertainty on company performance.
- H₁: There is an influence of environment uncertainty on company performance.

The results of the third hypothesis testing show the value of p-value of 0.000 <0.05, so this result shows that H₀ is not supported and H₁ is supported, which means that there is an influence of environment uncertainty on company performance. The coefficient is 0.556 (positive effect). The Critical Ratio (CR) value is 5.415 > 1.96. These results prove that the third hypothesis is acceptable. As the environment uncertainty increases, the company performance also increases.

4.2.2. Indirect Effect  
The analysis of direct and indirect effects aims to determine the magnitude of the coefficient of direct, indirect, and total influence, so that it can be seen whether the mediating variable mediates the influence of independent variables on dependent or not. Besides, this analysis is also useful to determine the magnitude of the coefficient of direct, indirect, and total influence, and to be able to find out whether the prospecting variable strategy can mediate the environment variable uncertainty on company performance. and here are the calculations that refer to the Sobel Test calculations, including the following:

\[
\text{ENV} - \text{STR} - \text{PERF} \\
\text{Estimate} = 0.741 \times 0.702 = 0.520182 \\
\text{SE} = \sqrt{(0.741)^2 (0.108)^2 + (0.702)^2 (0.088)^2 + (0.108)^2 (0.088)^2} \\
\text{SE} = 0.101543 \\
\text{CR} = \frac{\text{Estimate}}{\text{SE}} = \frac{0.520182}{0.101543} = 5.122751 \ (\text{CR} > 1.96) \\
\]

Thus, it can be concluded that the mediation of STR for ENV to PERF proved significant.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient Regression</th>
<th>CR (Sobel Test)</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Direct Effect</td>
<td>Indirect Effect</td>
<td>Total Effect</td>
</tr>
<tr>
<td>Environment Uncertainty \rightarrow Prospector Strategy</td>
<td>0.450</td>
<td>0.422</td>
<td>0.872</td>
</tr>
</tbody>
</table>

Table 4: Sobel Test
The direct effect of the environment uncertainty (ENV) on company performance (PERF) is 0.450. Meanwhile, the magnitude of the indirect effect (indirect effect) of the environment uncertainty (ENV) variable on company performance (PERF) through prospector strategy (STR) is 0.872. The total influence in this pathway, namely: direct effect + indirect influence, that is equal to: 0.450 + 0.422 = 0.872.

Thus, through a comparison between direct effects and total influence, it can be concluded that the prospector strategy (STR) is able to provide a positive and significant influence by giving an increase of 0.422, and a CR value of 5.12 > 1.96 so that it can be said that the prospector strategy (STR) can mediate environment uncertainty (ENV) against company performance (PERF).

5. Conclusion and Suggestion

5.1. Conclusion

Based on the result from the discussion from previous chapter, some conclusions regarding the influence of each variable can be explained as follows:

- Environment Uncertainty has a positive and significant effect on Prospector Strategies in general insurance companies in Indonesia. This shows that changes and uncertainties in the environment, especially the market environment and technological environment faced by companies in the insurance industry, encourage these companies to continue to look for opportunities and try to be at the forefront in developing new products.

- Prospector Strategy has a positive and significant effect on Company Performance, which shows that managers in general insurance companies are able to formulate and implement a prospector strategy properly. This research shows that the company’s efforts to innovate through the development of insurance products can increase the Company Performance of general insurance companies.

- Environment Uncertainty has a positive and significant effect on Company Performance in general insurance companies in Indonesia. This shows that uncertainty in the market and uncertainty caused by rapidly developing technological developments are creating enormous opportunities for this industry, and encouraging companies to be able to create new insurance products through technological innovation. In this case the companies believe that Environment Uncertainty can improve Company Performance.

5.2. Suggestion

Taking into account some research limitation such as locations, type of industry and variables used, researchers provide some suggestions for future research. First, for Environmental Uncertainty variable, it is better to develop more specific measurement for developing countries. Developing countries have different characteristics from developed countries, so that measurement of environmental uncertainty can be developed with a new measurement scale, which is more in line with developing country contexts (Ghosh, Bhowmick and Guin, 2014). Second, other research can be done on other insurance companies, for example in life or social insurance companies, or companies outside the insurance industry such as manufacturing and service industries (Surin, et. al., 2017). Third, to complete the research results by conducting direct interviews with high-level managers at these companies so that more complete and comprehensive data can be obtained.

6. References


