DEVELOPMENT OF NEW MEASUREMENT FOR TECHNOLOGY UNCERTAINTY AS A COMPONENT OF ENVIRONMENTAL UNCERTAINTY INDEX IN CONTINGENT FIT OF BUSINESS STRATEGY ANALYSIS

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ABSTRACT

This study aims to examine the contingent fit between business strategy and the environmental uncertainty. This study develops a new measure of technology uncertainty from secondary data source and develops an Environmental Uncertainty Index (EUI). Using a sample of Indonesian listed firms excluding financial sector and holding companies for the period 2009 to 2012, with multinomial logistic regression, this study finds that probability companies to choose prospector is higher than probability of analyzer, otherwise probability companies to choose defender higher than probability of analyzer is not supported. The findings suggest that the new technology uncertainty measure is more general and better than other measures, moreover EUI measures the environmental uncertainty objectively, these new measures can be applied on future research. This study increases the understanding of relation between business strategy and its contingent factor, i.e. environmental uncertainty.

Keywords: business strategy, contingent fit, environmental uncertainty.

INTRODUCTION

This study tried to analyze contingent fit between business strategy with the uncertainty of the environment by developing a new measure of technology uncertainty as one component of the environment uncertainty. Thus, we can establish an index to measure the environmental uncertainty. The study was motivated by the weakness of the measurement method in the literature such as studies about the effect of environmental uncertainty on determining the business strategy (Lopez-Gamero *et al.,* 2011; Amoako-Gyampah, 2003; DeSarbo et al., 2005; Freel, 2005; Tjahjadi 2011; Koseoglu *et al.,* 2013, etc.). The research mostly uses surveys to collect data environmental uncertainty (Amoako-Gyampah, 2003; DeSarbo *et al.,* 2005; Freel, 2005; Tjahjadi 2011; Koseoglu *et al.,* 2013) and the case study method (Lopez-Gamero *et al* ., 2011). Surveys method has a weakness, namely the level of subjectivity and higher levels of low response (Sekaran, 2003: 110), while the weakness of the case studies do not be generalizable (Yin, 1994) it can make bias results of research and interpretation of research

results mistakes (Cooper and Schindler, 2006: 248). Therefore, this study uses secondary data to measure environmental uncertainty.

This study uses 3 component of environmental uncertainty often faced by the company, namely the competitive environment, the market environment, and technological environment (Bourgeois, 1985; Homburg, 2002; Kreiser and Marino, 2002; Davies and Walters, 2004; Gils *et al.,* 2004; DeSarbo *et al.,* 2005). Those three components will be formed into a single index in that environmental uncertainty using the new measurement will be more objective. The development of the size of the uncertainty of the environment using secondary data had been previously developed by Gosh and Olsen, 2009 and Habib *et al.,* 2011 for component market uncertainties; and by Jermias (2008) for the components of uncertainty competition. This research will develop the size of the uncertainty component technology uses secondary data and form a single index of Environmental Uncertainty Index.

The data is using unbalanced panel data. This study obtained two results: first, proved to be in a state of environmental uncertainty, the probability of companies to choose *prospector* strategy is greater than the probability of companies choose a *analyzer* strategy. Secondly, the conditions of environmental uncertainty, did not prove the probability of companies to choose *defender* strategies is greater than the probability of companies choose an *analyzer* strategy.

This study is expected to provide two contributions: first, the measurement uncertainty of the environment using secondary data, especially in measuring the technology uncertainty component that is expected to address weaknesses measurement uncertainty of the environment using primary data. Second, establish an index to measure environmental uncertainty that is expected to measure more objective and thorough.

The next part of this article is about literature review, hypotheses development, research models, sample and variables. The next sections are the results of empirical tests, discussion, conclusions, weaknesses and suggestions for future research.

LITERATURE REVIEW
Contingent fit of Business Strategy with Environmental Uncertainty

According to contingency fit theory, contingent fit between business strategy with environmental conditions encountered by the company can produce different output if the strategy adopted by the company are not appropriate *(misfit)* with environmental conditions (Otley, 1980; Prescott, 1986; Venkatraman, 1989; Jermias and Gani, 2004). Based on empirical evidence, on the environmental conditions with a high level of competition and market changes or consumer tastes that can not be predicted, the company can adapt to face these conditions by implementing *defender* or *prospector* strategies. Some studies show that company which decide to apply the *defender,* able to withstand the high uncertainty environment by using market focus and existing products through cost efficiency in order to excel in price, quality and service improvement. So, it obtain higher performance (DeSarbo, 2005; Koseoglu *et al.,* 2013). Some of the results of other empirical studies showed that companies that implement *prospector* in facing the environmental *uncertainty,* routinely develop new products or markets, achieve competitive advantage of consumers by responding quickly and maintain alignment with the changing environment through innovation of products or unique services and unprecedented that meets the expectations and tastes, implementing autonomy (decentralization) were higher in companies (Jermias and Gani, 2004), so as to obtain higher performance (Russell and Russell, 1992; Freel, 2005; Gyampah 2003, Moon 20 01). Then Hambrick (1983) found that *analyzer* strategy is better suited for applications in environments with low or uncertainty in a stable environment.

Thus in the conditions of environmental uncertainty companies will tend to choose a strategy that has the clarity of a defensive or competing position, not the strategies that are in the middle. The above description, the first hypothesis proposed in this study is:

> H_1: **In such conditions that environmental uncertainty is high, the probability of companies to choose *prospector* or *defender* business strategies will be greater than the probability of companies choose a *analyzer* strategy**.

RESEARCH METHODS

Sample

Samples of the research were companies listed on the Stock Exchange in the period 2009-2012 where their tax is count based on nett method, such as mining, construction, *real estate,* and property. Excluded from the sample is the financial industry sector due to its strict regulation particularly related to *governance.* This sector also has a different business environment with other industries that can not be compared with other industries. Holding companies are also excluded from the sample since the study focus on business strategy so that they do not directly manage the business. The strategy at the holding company is a corporate level strategy. Another criteria is they should have complete data for 5 years of research period to obtain a strategy variable. In that to get strategy data for year 2009, requires a strategy data related from 2004. The sample selection procedure can be seen in Table 1 below:

Table 1. The procedure of sample selection

	Year				Total
	2009	2010	2011	2012	
Total Companies Listed on the Stock Exchange that uses net-based income tax, except for the financial sector	293	293	289	286	1161
Less:					
-The number of observations which complete data is not available	(122)	(100)	(94)	(70)	(386)
-a Holding company	(8)	(8)	(8)	(8)	(32)
The total number of samples (firm-years)					**743**

Table 2 is the number of observations based on typology of strategy. Using survey method, we table 2 showed a consistency with other researchers in Indonesia that the *analyzer* strategy is most widely applied, followed by a *prospector* then the *defender* (Gani, 2002; Rachmawati, 2015).

Table 2. Distribution of observations based on typology of Strategy

Strategy	Total Company-year	Percentage
Prospector	205	27.59%
Defender	97	13:06%
analyzer	441	59.35%
Total	**743**	**100.00%**

Model Analysis

Multinomial logit regression will estimate several models that adjusted for the possibility of the dependent variable (Hosmer and Lemeshow, 2000). Adjusted for one hypothesis there are 3 possible outcomes dependent variable is 0, if companies classified *analyzer;* 1 if the companies belonging *prospector;* and 2 if the company classified as *a defender* (0 if $13 \leq STRA_{it} \leq 23$; 1 if $STRA_{it} > 23$; and 2 if $STRA_{it} < 13$), so that this study requires two (2) logit function. Two of the logit function is the logit function *y = 1* compare to *y = 0* and function logit *y = 2* compare to *y = 0,* where *y = 0* as a base line then will be compared to the probability of each response *y = 0* with all the greater response, *y> 0* . The *analyzer* hypothesis options strategy will be a basis of comparison *(base outcome)* so given category 0.

Based on Hambrick (1982), Freel (2005), DeSarbo *et al.* (2005), Habib *et al.* (2011), and Koseoglu *et al.* (2013), a model for estimating the first hypothesis is as follows:

$$\log \left[\frac{Prob\ (STRA_{it} \geq 1)}{Prob\ (STRA_{it} = 0)} \right] = \alpha_0 + \alpha_1 EUI_{it} + \alpha_2 BME_{it} + \alpha_3 MCAP_{it} +$$

$$\alpha_4 OCAP_{it} + \alpha_5 AGE_{it} + \alpha_6 SIZE_{it} + \varepsilon_{it}$$

(1)

The company's business strategy (proxied by Environmental Uncertainty Index-EUI) is in the form of category variable, which is 0 if the analyzer, 1 if the prospector, and 2 if the defender. This index of is compose from market uncertainty, the competition uncertainty, and technological uncertainties. As a control variable is the effectiveness of supervision by the board of directors (Board Effectiveness Monitoring-BME), consisting of the effectiveness of the board of directors and audit committee effectiveness. The effectiveness of the board of directors is composed of the proportion of independent board, activities, size/number, and the competence of the board of commissioners, while the effectiveness of the audit committee consists of activities, size/number, expertise and competence of the audit committee. Other control variables is that the company's marketing capabilities (Marketing Capabilities-MCAP), fitted value of the regression model (12); is the company's operating capability (Operation Capabilities-OCAP), fitted value of the regression model (13); namely the length of company operates (in years); is the size of the company is the natural logarithm of total assets.

The criteria for selection of a function that compares logit y = 1 to y = 0 (base outcome) is H1: $\alpha_1 > 0$, if the high environmental uncertainty then companies will tend to choose prospector strategy compared to the analyzer. Furthermore, the criteria for selection of a function that compares logit y = 2 to y = 0 (base outcome) is H1: $\alpha_1 > 0$, if the environmental uncertainty is high then the company will tend to select defender strategy compared to the analyzer. Expectations for each control variable is $\alpha_3 > 0; \alpha_4 > 0; \alpha_5 < 0; \alpha_6 > 0$.

Measurement of Variables
The company's business strategy (STRA).
The company's business strategy (STRA) as strategy used by companies that adapt to face the competitive environment. STRA Variable was measured using a composite score of strategy, which is ranked number quintile per industry per year over the six-ratio which has been developed by Ittner *et al.* (1997) and Bentley, *et al.* (2011), namely: (1) *Ratio of Research and Development to Sales* (RDS): ratio of expenditure of research and development (XRD) divided

by sales (SALE), to measure the tendency of companies to develop new products; (2) *ratio of employee to sales* (EMPs): ratio of the number of employees (EMP) divided by sales (SALE), to measure the company's ability to produce and distribute goods efficiently; (3) *Geometric mean of market value of assets* (GMVA): *Logs of market value of assets* (total debt + MVE), to measure the historical growth or investment opportunities; (4) *Turnover* employees (ïƒ (EMP)): standar deviation of the total number of employees (EMP), a measure of stability organization of a company; (5) *Marketing to sales* (SGAS): cost ratio of sales, administrative and general (SGA), the total sales (SALE), measure the focus of company in exploiting new products and services; and (6) *Capital intensity* (CAP): Modal intensity calculated the net capital divided by total PPE a set (PPE / TA), a measure of commitment on efficiency technologies.

In accordance Bentley *et al.* (2011), the company can be categorized as a *defender* when the average rank for the six variable size companies that are in the lowest *quintile* (grades 1 or 2), or have a minimum total score in the *range* of 6 to 12. In contrast, companies categorized as a *prospector* when the average rank for the six variable size companies that are in the highest *e quintile* (worth 5 or 4). Thus, the company had a total score of the *range* 24 to a maximum of 30 as a *prospector* company. If the company has a total score outside *the range* mentioned above, it will be categorized as an *analyzer,* which has a total score in the *range* of 13-23.

Environmental Uncertainty

A business environment of outside the company, which may affect the manager in determining business strategy. Using three variable as a proxy for environmental uncertainty, namely:

1) Market uncertainties (CVSALES), indicate a change in consumer tastes, measured by the standard deviation of sales (Gosh and Olsen, 2009; Habib *et al.,* 2011):

$$CV(Z_i) = \frac{\sqrt{\sum_{k=1}^{5} \frac{(z_1 - \bar{z})^2}{5}}}{\bar{z}}$$
(3)

Where:

CV is the coefficient of variation, Z_i is the observed annual sales for the company *i* and $\bar{Z}$ is the average of the sales during the previous 5 years. The higher the standard deviation value of sales, showed the higher the market uncertainties facing the company.

2) Competition uncertainty *(competitive intensity* / COMPINT), the level of competition faced by the company in a particular market (Jaworski and Kohli, 1993). In accordance with Jermias (2008), its measurement using:

$$HI = \sum_{i=1}^{n}(\text{market share}_i)^2$$
(4)

Where:

HI is the Herfindaal index, *i* is a company in the industry, and *n* is the number of companies in the same industry. The higher value indicates more concentrated HI so that the uncertainty of the competition is getting low.

Because of the limited *market share* data is *non go public* companies, this research focuses on the level of competition among companies *go public* only in the same industry.

3) Technological Uncertainty (TECH), the rate of technological change faced by the company in accordance with the type of industry (Joseph, 2002). Technology as company's resources are

used to develop products and services, such as the system of production and distribution *(delivery)* (Miles and Snow, 1978; DeSarbo *et al.,* 2005). A Changes in the technology associated with the intensity of innovation in companies in an industry (Hambrick, 1983; Buchko, 1994; Agarwal and Audretsch, 2001; Joseph, 2002). Therefore, the uncertainty of Technology (TECH) were measured using a proxy for the intensity of innovations made by the three biggest competitors in the same industry types for a period of 3 years. The use of three biggest competitors in the industry types have previously been used by Hambrick (1983) and has proven its validity. The period between 3-5 years is sufficient to assess the implementation of the strategy and evaluating the performance of actions or changes made companies (Ittner *et al,* 1997; Hambrick, 1983). The innovations of the company could be the launch / introduction the opening of a new product / establishment of a branch / establishment of new factories or departments that support the company's production and distribution systems (Ittner *et al.,* 1997; Geroski, 2007).

The Possible values *(score)* obtained by each company are: worth two (2) if there is more than one innovation; a value of 1 (one) if there are at least one of innovation; and 0 (zero) if there is no innovation or the information contained in the annual report of the company. Third score of companies for each industry and then in number. The total score obtained by each industry shows the technology uncertainty facing every company in the industry. The higher the total number of scores obtained an industry show the higher uncertainty of technology in the industry.

Having obtained the value of each such proxy, then calculated *percentile rank* for each company based on the industry sector. Environmental uncertainties index of each company is the average number *percentile rank* of third Proks (Bushman *et al.,* 2004). If the amount of the average value of 0.5 and above uncertainty is high, if it is less than 0.5, the uncertainty is low.

Variable Control

The control variables in this study are Board Monitoring Effectiveness (BME) as one of the main functions *of corporate governance:* oversight of the activities of managers linked to the establishment and implementation of business strategies and activities of tax evasion. Based Hermawan (2009) and the ASEAN *Corporate Governance Scorecard,* a measure was used the effectiveness score of supervision by the board of directors consists of five proxies are: Independence of the board of commissioners; Activities of the board of commissioners; Size commissioners; Competence commissioners; effectiveness of the audit committee. Measurement of each proxy follow Herman (2009), which uses a questionnaire *(checklist)* to assess how the characteristics of the board of directors of each company.

The capability of marketing *(marketing capabilities-MARCAP),* as measured by the *covariance of sales.* Operations capability (OCAP), measured by how close the actual cost of production at a *frontier* cost (the maximum level of productivity of companies on the level of resources used). Dutta *et al.* (1999) and the Nath *et al.* (2010) found that the first capability positively related to the trend of companies choosing *prospector* while the second with a choice *defender.* Age of Companies (AGE), the length of a company operating in the year, firm age is negatively related to the possibility of the company applying *prospector* and *defender* (Cucculelli, 2014; Coad et al., 2016). The size of the company (SIZE), which is the natural logarithm of the total assets of the company, bigger the size of the company, the greater the resources and capabilities of the company, the more structured organization, so the company chose a focused strategy, either as a *prospector* or a *defender,* do not apply *hybrid* strategy *(analyzer).*

RESULT AND DISCUSSION
Descriptive Statistics
Overview briefly characteristic throughout the study variables are shown in Table 2. For all *outliers* data have done that with the technique of *winsorizing treatment.* the average of the environmental uncertainty by using *the Environmental Uncertainty Index* (EUI), which indicates the average of all samples companies do not face the high uncertainty, though there is a sample of companies years who face conditions of environmental uncertainty (maximum value 0873 7). the average value of BME is 0.6973, which means an average supervisory board of directors on the company observation is within the level sufficient or *fair.*

Table 3. Descriptive Statistics Variable Research

variable	mean	Min.	Max.	Std. Deviation
EUI	0.4345	0.0427	0.8737	0.1691
BME	0.6973	0.3542	0.9375	0.0879
MCAP	20.7115	14 102	26.8804	1.8791
OCAP	20.2639	15.6795	24.3861	1.4395
AGE	32.2180	8	106	15.0948
SIZE	27.1155	9.7240	32.3431	2.5691

Information:

EUI: Environmental Uncertainty Index; BME: Effectiveness Monitoring Board of Commissioners; MCAP: *marketing capabilities;* OCAP: *operational capabilities;* AGE: corporate experience (old operates in years); SIZE: the size of the company, the natural logarithm total assets.

The value MCAP is *fitted value* of the regression model of the company's sales, while OCAP is *fitted value* of the regression model of cost goods sold *(Cost of Good Sold / Cost of Revenue).* From the results of the descriptive statistics Table 2 above shows the average MCAP 20.7115. This value indicates that the average estimates of the company's sales capabilities that are observed are 20.7115 (about USD 988. 283. 344). The average value of OCAP is 20.26392, this indicates that the average estimates of the company's operational capabilities that are observed are 20.2639 (about USD 631. 696. 743). The table showed that observations have MCAP and OCAP value above the average is half of the total 743 observations (372 observations have value MCAP above average; 363 observations have a value above the average).

Components of Environmental Uncertainty Index
The distribution value per component of measurement environmental uncertainty for the all population are shown in Table 3. The value environmental uncertainties component in Table 3 is a value of the entire study population, the entire company to the whole industry for 4 years (2009 to 2012). If the views of market uncertainty, as measured by the standard deviation of sales has an average value of 0346 is compared with a maximum value is quite low. The uncertainty of the competition for the average company in Indonesia which is used as the study population had industry concentration of 32.46% with a maximum value of 1 (highly concentrated). The maximum value is 1, it cause in an industry sector can only be obtained from the data one company who has complete data.

Table 4. Value per Component of Environmental Uncertainty

Component	mean	Min	Max	median	standard Deviation
Market uncertainty	0.346311	0.017722	2.210703	0.245374	0.308002
Competition uncertainty	0.324573	0.095828	1	0.269539	0.201417
Technological uncertainty	4.037657	0	6	4	1.740989

Source: Data processed

The technological uncertainty by using innovation score based on industry. From Table 3, the average score of the innovation of the company in the population of study was 4,038, the value is quite high given the maximum level of innovation undertaken by firms in this study is 6.

Here is the average condition of environmental uncertainty facing the company annually:
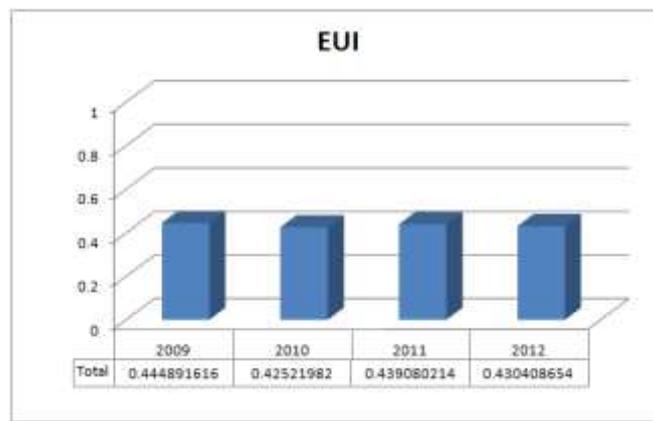
Figure 1. The average environmental uncertainty per Year
Source: Data processed

The average of uncertainty in the business environment that highest in 2009, when seen phenomenon of the year, the global crisis of 2008 has little effect on economic conditions in Indonesia in early 2009, but in the second half and the approaching end of 2009, the Indonesian economy improved (www .bi.go.id). In 2010, 2011 and 2012 durability Indonesia is strong enough economy in facing global economic uncertainties indicated from economic growth of 6.1%, 6.5% and 6.2%. That phenomenon shows that the business environment in Indonesia is quite dynamic and growing, but still relatively stable because it is still in the *range* of 6%. It corresponds to the average of the research data showing that environmental uncertainty period 2009-2012 is not fluctuated. From the test results *of one-way ANOVA,* among the four years was statistically no significant difference in the average value of environmental uncertainty.

EUI comparison between industries can be seen in Table 4. Judging from the industrial sector average EUI each of the six industry sectors that demonstrate the value relatively flat at around 0.4, the highest EUI value is the sectors of basic industry and chemicals while the lowest value contained in the service sector and trade.

Table 5. Descriptive statistics EUI Industry Sector

Industry sectors	mean	Min	Max	median	standard Deviation
Agriculture and Farming	0.4552	0.2083	0.7500	0.4357	0.1672
Chemical and basic industry	0.4441	0.0663	0.8737	0.4290	0.2003
various industry	0.4142	0.1050	0.8377	0.4187	0.1714
Consumer goods industry	0.4311	0.0687	0.7927	0.4363	0.1589
Infrastructure, utilities and transportation	0.4304	0.1170	0.6857	0.4407	0.1323
Services and trade	0.4370	0.0427	0.8277	0.4243	0.1610

Source: Data processed

If viewed from the percentile *rank* each component EUI for all observations, can be seen in the following table:

Table 6. On average percentile rank per Component EUI

Component	mean	Min	Max	median	standard Deviation
Market uncertainty	0.4934	0:01	0.99	0.5	0.2963
Competition uncertainty	0.4993	0:01	0.99	0.5	0.2960
Technology uncertainty	0.3108	0:01	0.96	0263	0.2671
The total average EUI	0.4345				

Source: Data processed.

The average value per component were obtained from all observations are grouped and ranked according to the type of industry. From the table above, the average percentile *rank* component market uncertainty and competition uncertainty is almost the same 0:49 while technology uncertainty 0.3. It shows that the business of environmental uncertainty caused by changes in technology innovation measured by the number of relatively low when compared with the uncertainty of the business environment caused by changeing in market and competition.

Correlation Analysis

Results of correlation between the variables STRA, EUI, BME, MCAP, OCAP, and SIZE AGE in Table 6. The results indicate that the EUI positively correlated significantly with STRA, this means environmental uncertainty makes companies choose a *prospector* strategy compared with other strategies, it gives an early indication that support allegations of research.

Table 7. Correlation Spearman Multinomial Logistic Model

	STRA	EUI	BME	MCAP	OCAP	AGE	SIZE
STRA	1,000						
EUI	0.0769 **	1,000					
BME	0.0137	0.0387	1,000				
MCAP	0.0534	0.1272	0.2598	1,000			
OCAP	-0.0188	-0.0378	0.2998 ***	0.7987 ***	1,000		
AGE	-0.0312	-0.0802 **	0.0568	0.2211 ***	0.2597 ***	1,000	
SIZE	0.0352	0.0411	0.2587 ***	0.6937 ***	0.7026 ***	0.2629 ***	1,000

Information:

STRA: dummy strategy, if the analyzer is 0, 1 if the prospector, 2 if a defender; MCAP: *marketing*

capabilities; OCAP: *operational capabilities;* EUI: Environmental Uncertainty Index; BME: Effectiveness Monitoring Board of Commissioners; SIZE: the size of the company, the natural logarithm of total assets; AGE: the experience of the company (the old company operates in years); SKP: experience of the company (the number of the tax assessment letter received in that year)
*** Significant at the 1% level; ** Significant at 5% level; * Significant at 10% level

Multivariate Result

Results of testing the hypothesis 1 can be seen in Table 7. The result is the logistic function STRA (1), which is to examine the probability of choosing a strategy prospector compared analyzer, EUI coefficient indicates a value corresponding to a prediction that is positive and significant. This means that under conditions of environmental uncertainty, the probability of companies choose *prospector* higher than the probability of selecting analyzer. While the results of the logistic function STRA (2), the probability of choosing a strategy of defender than analyzer, EUI coefficient is not significant. Thus the first hypothesis was supported in part.

T able 8. Results of Contingent Fit between Business Strategy with Environmental Uncertainty (Model 1)

Model 1:

$$\log\left[\frac{Prob\ (STRA_{it} \geq 1)}{Prob\ (STRA_{it} = 0)}\right] = \alpha_0 + \alpha_1 EUI_{it} + \alpha_2 BME_{it} + \alpha_3 MCAP_{it} + \alpha_4 OCAP_{it} + \alpha_5 AGE_{it} + \alpha_6 SIZE_{it} + \varepsilon_{it}$$

Dependent Variable = Log STRA

Independent variables	expectations Signs	Koef.	Sig.
STRA logistic function (1):			
EUI	**H1: +**	1.4026	0006 ***
BME	+/-	-1.8871	0045 **
MCAP	+	0.0239	0398
OCAP	+	0.5124	0000 ***
AGE	-	-0.0036	0284
SIZE	+	0.0898	0015 **
constants	+/-	-8.8032	0000 ***
STRA logistic function (2):			
EUI	**H1: Â +**	0.8224	0160
BME	+/-	1.9719	0107
MCAP	+	0.1463	0068 *
OCAP	+	-0.7713	0000
AGE	-	0.0091	0160
SIZE	+	- 0.1410	0039
constants	+/-	4.5758	0017 **
LR chi2			102.73
Prob> chi2			0.0000
pseudo R2			8:18%
N			743

Information: STRA: dummy business strategy, 0 if the analyzer, 1 if the prospector, 2 if a defender; MCAP: *marketing capabilities;* OCAP: *operational capabilities;* EUI: Environmental Uncertainty Index, an index of market uncertainty, the uncertainty of competition and

technological uncertainties; BME: Effectiveness Monitoring Board of Commissioners; SIZE: the size of the company, the natural logarithm of total assets; ROA: the probability of the company, the ratio of income before taxes plus interest expense after tax to total assets; AGE: the company's experience, length of companies operating in the year; SKP: the experience of the company, the tax assessment letter. *** Significant at the 1% level; ** Significant at 5% level; * Significant at 10% level.

Implications Managerial

The results of this study proved that d natural environmental conditions of high uncertainty, the probability of companies to choose *prospector* business strategy will be greater than the probability of companies choose a *analyzer* strategy. The results are consistent support of Russell and Russell, 1992; Jermias and Gani, 2004; Freel, 2005; Gyampah 2003, Bastian and Muslich, 2012; and Moon, 2013. These results have implications, especially if government wants high growth for the company, improvement and distribution of the public welfare, the regulator to support the company in the face of environmental uncertainty. An example is the regulator glittering fields of taxation, The tax Inspectorate need to issue policies to support innovation activity, namely by removing tax incentives for the company *growth* - is high as *prospector;* implementing a policy *of double deduction* for research and development costs for companies that create new innovation in products / services, processes, and markets, as it has done in many other countries.

Results of testing did not find evidence that the probability of selecting the company's business *defender* strategy is higher than the probability of companies choose a *analyzer* strategy. The results of this study are consistent with the results of Moon (2013) which proves that the good environmental uncertainty is high, performance of *prospector* and *analyzer* higher than the *defender* and explained that the *defender* is more suitable when operating in conditions of low environmental uncertainty.

CONCLUSION AND SUGGESTIONS

This study aims to analyze contingent business strategy fit with the uncertainty of the environment by developing a new measure of uncertainty technologies using secondary data and form a new index on the three components of environmental uncertainty, the Environmental Uncertainty Index (EUI). This study uses unbalanced panel data that companies listed on the Stock Exchange in 2009-2012 except for the financial sector and holding companies as well as using regression methods mutiomial regression.

There 2 findings of this study, namely: first, contingency *fit* between business strategy and environmental uncertainty in Indonesia is proven under conditions of high environmental uncertainty, the probability of the company to choose a *prospector* strategy will be greater than the probability of companies choose a *analyzer* strategy. Secondly , in conditions of high environmental uncertainty, not proven probability of companies to choose strategies *defender* is greater than the probability of companies choose a *analyzer* strategy.

This study has several weaknesses, namely: first, the uncertainty of the competition using the Herfindal Index to measure the intensity of competitive in an industry, in this study only used data of companies go public because there are no available its market share data companies non *go public* . The use of enterprise data *go public* have been less able to describe the real intensity of competition in an industry, because there are companies non go public on the type of industry the same operating and market share by a certain amount. Future studies may use a number of companies in the same industry to assume the intensity competition.

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