

THE EFFECT OF MARKET ORIENTATION ON PERFORMANCE WITH ENVIRONMENTAL UNCERTAINTY AS A MODERATING VARIABLE

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ABSTRACT

Market orientation of banks is related to business performance through the environmental uncertainty as moderator. Environmental uncertainty is an important factor in both the marketing and management literature. In this case, it is important to see how an increase in environmental uncertainty influences the market orientation – performance relationship. Data for this study were collected using questionnaires mailed to the top executives throughout 132 local development banks (BPD) in 30 state-regions (province) in Indonesia, representing all the local development banks. The responses were obtained from 26 BPD as a response rate with 96 respondents. First, result indicates market orientation has a strong effect on banks performance through the degree of environmental uncertainty faced by the banks. Second, the relationship between market orientation and performance weakens much for banks in high uncertainty of the environments. Higher uncertainty of the environment can weaken the relationship between market orientations and business performance. Environmental uncertainty complicates the management in determining market orientation; the impact, business performance is unlikely to be achieved at the maximum conditions.

Key words: Market Orientation, Business Performance, Environmental Uncertainty.

PENGARUH ORIENTASI PASAR TERHADAP KINERJA DENGAN KETIDAKPASTIAN LINGKUNGAN SEBAGAI VARIABEL MODERASI

ABSTRAK

Orientasi pasar bagi bank berhubungan dengan kinerja bisnis melalui ketidakpastian lingkungan sebagai moderator. Ketidakpastian lingkungan merupakan faktor penting baik dalam literature manajemen maupun pemasaran. Dalam hal ini, sangat penting untuk memahami bagaimana ketidakpastian lingkungan berpengaruh pada hubungan orientasi pasar dan kinerja bisnis. Data diperoleh dengan menggunakan kuesioner yang disebarkan 132 pimpinan Bank Pembangunan Daerah (BPD) pada 30 provinsi di Indonesia, yang mewakili semua BPD. Jawaban diperoleh dari 26 BPD dengan 96 responden. Pertama, dinyatakan bahwa orientasi pasar berpengaruh kuat pada kinerja melalui ketidakpastian lingkungan yang dihadapi bank. Kedua, hubungan antara orientasi pasar dan kinerja melemah pada bank dengan ketidakpastian lingkungannya. Ketidakpastian lingkungan yang tinggi bisa melemahkan hubungan antara orientasi pasar dan kinerja. Dengan demikian, ketidakpastian lingkungan menyebabkan berpengaruh pada manajemen dalam orientasi pasar yang berdampak pula pada kinerja bisnis..

Kata Kunci: Orientasi Pasar, Kinerja Bisnis, Ketidakpastian Lingkungan.

INTRODUCTION

Market orientation is defined as an organizational culture where employees are committed to continuously creating superior customer value that is the sequence of marketing activities leading to better performance. Some studies have concluded that market-oriented companies perform better than those which are less market-oriented. In addition, they focus on adapting their products and services to the needs and expectations of their customers instead of those who are product oriented and focus on developing a product or service that is then marketed and hopefully sold (Grönroos, 2006). To achieve this customer focus, a firm with a high degree of market orientation cultivates a set of shared values and beliefs about putting the customer first and reaps results in form of a defendable competitive advantage, decreased costs, and increased profits (Desphandé 1999). Therefore, the market orientation concept focuses on coordinated business intelligence generation, dissemination, and responsiveness to market information for efficient and effective decisions (Sundqvist, Puumalainen and Saminen, 2000; Kohli and Jaworski 1990).

Market orientation is one of the concepts in the discovery of corporate strategy. The literature suggests that market orientation is one key to success for the company to improve its competitiveness. Market orientation has been considered as an important action for the company, if the company wants to succeed in the industry. In the marketing field, the early studies of Kohli and Jaworski (1990, 1993) and Narver and Slater (1990, 1995) stand out. Market orientation involves an implementation of the marketing concept since it facilitates firms' ability to anticipate, react to, and capitalize on environmental changes, thereby leading to superior performance (Shoham, Rose, & Kropp 2005).

Market orientation is related to organizational culture that emphasizes some aspects such as intelligence generation and dissemination, customer orientation, competitor orientation, responsiveness, and inter-

functional coordination. Kohli and Jaworski (1990), who have conducted some of the pioneering work on market orientation, offer the following formal definition of market orientation, "the organization wide generation of market intelligence pertaining to current and future customer needs, dissemination of the intelligence across departments, and organization wide responsiveness to it" (p. 6). This particular definition obviously emphasizes the three components of intelligence generation, intelligence dissemination, and organizational responsiveness. Jaworski and Kohli (1993) have designed a 32-item instrument to measure market orientation that has subsequently been revised into a 20-item instrument called MARKOR (Kohli, Jaworski, & Kumar 1993). It is also well accepted in the literature that market orientation is related to organizational performance.

Indonesia market orientation literature has several limitations. Rani (2006) argued that marketing techniques to analyze market-oriented competitors and its customers on an ongoing basis is only used by a few companies. Not all companies in Indonesia do it, but the concept is very suitable for the market in Indonesia. Throughout the last two decades researchers have investigated several antecedents and consequences of market orientation to better understand its role in organizations and markets. Furthermore, although a significant volume of research on the relationship between market orientation and business performance, the findings regarding these relationships often differ substantially in terms of magnitude. As a result, the literature shows mixed results from the association. Pengeran (2011) showed that risk taking and proactive has positive influence on the performance of new product development. Marketing and innovation orientation is positively associated with new product development performance.

Some special studies also confirm this relationship in recent years both in the business context in general and in particular in the context of health care (Kumar, Subramanian, & Yauger 1998; McDermott, Franzak, & Little 1993; Narver & Slater 1990). In a series of

studies, the present authors have also confirmed the existence of a strong market orientation - performance relationship in the hospital industry (Raju, Lonial, & Gupta 1995; Raju, Lonial, Gupta, & Ziegler 2000; Raju & Lonial 2001). However, although the strength of the market orientation – performance relationship appears to be fairly strong, as illustrated by these studies, the robustness of the relationship across different environments is not clear. Several researchers have proposed that environmental factors might moderate the relationship of market orientation and performance (Jaworski & Kohli 1993; Han, Kom, & Srivastava 1998; Kumar, Subramanian, & Yauger 1998; Slater & Narver 1994).

This is evidenced by the multiple chapters that marketing textbooks typically devote to various aspects of the environment such as environmental trends, consumer behavior, and environmental forecasting (see Perreault & McCarthy 1999 for an example). Specific techniques have also been designed to systematically analyze the effects of the environment on business strategy such as impact analysis and scenario analysis (Aaker 1998). An Importance of environmental factors for organizations focus in this paper is on the impact of one aspect of the environment, namely environmental uncertainty, on the market orientation – performance relationship.

As it is well known, in recent times the environment faced by banks industry has been characterized by intense competition, government regulations, and uncertainties regarding costs. Supreme Audit Agency of Indonesia (BPK) to assess the design and implementation of internal control systems (SPI) and the operation of regional development banks (BPD) in Indonesia have not effectively supported regional development. BPD was not optimal due to the role of credit growth is relatively low and less productive.

There are some indications such as Credit growth below 20 percent, earning 40 percent credit, and raising funds from local governments over 70 percent. However, In 2012, the assets of BPD nationally throughout Indone-

sia reached Rp 368.35 trillion or grew 27.20% compared to June 2011 period. In terms of assets, BPD Entire Indonesia ranks fourth largest after Bank Mandiri, Bank BRI and Bank BCA. Yet, saving product of Simpeda BPD throughout Indonesia during the period of June 2012 has been amounted to 5,792,758 savers, saving as much as 9.26 trillion rupiahs. BPD throughout Indonesia is committed to increasing capital and improving efficiency in order to achieve adequate levels of profitability, providing credit at competitive interest rates to the public. However, some banks have faced greater environmental uncertainty than others based on environmental factors such as labor supply, competition, and public opinion. Consequently, the bank industry provides an ideal situation for examining the moderating effect of environmental uncertainty.

The research question is on whether environmental uncertainty strengthens or weakens the effect of market orientation on performance. Objective was to compare the strength of the market orientation - performance relationship of banks that face high environmental uncertainty to those that face low environmental uncertainty in moderating of the market orientation - performance relationship. An additional objective is to determine whether the two sets of banks are different with respect to their market orientation or performance. Finally, this research also hopes to shed some light on the measurement of constructs such as market orientation, organizational performance, and environmental uncertainty in a bank context.

THEORETICAL FRAMEWORK AND HYPOTHESIS

Market Orientation

The purpose of market orientation capability is to align the company with the specific market environment. The market is believed to be a number of customers and clients who use a company or organization's products and competitors' product replacement (Frishammar and Horte 2007). The main idea is the concept of market orientation of marketing,

which is a policy or business philosophy. In simple terms, market orientation is to meet the needs and wants of the target customers more effectively and efficiently than competitors to determine compliance with corporate objectives (Kotler and Armstrong 2009). Market orientation means basically implementing the marketing concept. Although research on the marketing orientation has a long historical, some researchers (Kohli and Jaworski 1990; Narver and Slater 1990) revive interest in research on this issue.

Narver and Slater (1990), defined market orientation as three behavioral components, customer orientation, competitor orientation, and inter-functional coordination, and two decision criteria, long-term focus and profitability. They interviewed managers in 113 strategic business units in one corporation and they viewed market orientation as an organization culture. Narver and Slater argued that market-oriented firms focus not only customers but equally much on competitors. Additionally, they place emphasis on inter-functional coordination that is meant to create unison between all functions in the organization and become part of the organizational culture. Contribution of this opinion to the study was that coordination between divisions can share information between parts, so it can help reduce environmental uncertainty.

Relationships Market Orientation and Business Performance

Narver and Slater (1990) studied the relationship between market orientation and performance using a sample of 140 strategic business units of a major corporation consisting of commodity product businesses and non-commodity businesses. Performance was measured using a subjective measure in which respondents were asked to compare the return on assets for their strategic business unit (SBU) in relation to all other competitors in the SBUs principal market over the past year. Results showed that for both commodity and non-commodity businesses market orientation was an important determinant of profitability, although the nature

of the relationship was somewhat different for the two types of businesses.

Slater and Narver (1994) investigate how competitive environment affects the strength of the market orientation-performance relationship and whether it affects the focus of the external emphasis within a market orientation—that is, a greater emphasis on customer analysis relative to competitor analysis, or vice versa, within a given magnitude of market orientation. Their results provide very limited support for a moderator role for competitive environment on the market orientation-performance relationship. The benefits of a market orientation are long term though environmental conditions are often transient, and thus being market oriented is cost-effective in spite of any possible short-term moderating effects of the environment.

A research was conducted by Jaworski and Kohli (1993) using two samples of sizes 222 and 230 selected from the membership rosters of the Marketing Science Institute (MSI), the Dun and Bradstreet *Million Dollar Directory*, and the American Marketing Association. Market orientation was measured using a 32-item instrument designed by the researchers. They found that market orientation was significantly correlated with business performance when overall performance was assessed using judgmental measures but was not related to performance using the objective measure of market share. In relation to market share as a measure of performance, they point out that for many companies that adopt a focus or niche strategy this may be an inappropriate measure of performance.

Previous research by Han, Kom, and Srivastava (1998) did not find a significant direct effect of market orientation on performance. However, they found that market orientation does make a significant contribution to performance when account for the moderating effects of technical (relating to products, services, and production process technology) and administrative (relating to organizational structure and administrative process) innovations. Their sample consisted of 134 banks from a Midwestern state.

Hypothesis Development

Some experts of market orientation such as Gainer and Pandanyi (2005), Carr and Lopez (2007) have argued that market orientation traces its origins from the market concept and has consequences to overall business strategy. The marketing concept is concerned with customer-orientation, competition-orientation, innovation and profit as an inducement for creating satisfied customers (Narver and Slater 1994; Hunt and Morgan 1995). Market orientation has been widely accepted by scholars as the implementation of the market(ing) concept, as an organizational culture, or as a mix of those two (Greenley 1995; Han, Kom and Srivastave 1998). There is sufficient evidence in the literature indicating that market orientation is positively related to organizational performance. This seems to be true in the general business context as well as in the banks industry. However, the strength of the relationship is not clear since it is difficult to compare across studies and across contexts. It is also clear that several researchers have intuitively reasoned and hypothesized moderating effects for environmental variables, especially those relating to market turbulence and competitive intensity.

The studies above have consistently hypothesized a stronger relationship between market orientation and performance under conditions of higher environmental uncertainty. However, most of these studies have not found any significant moderating effects for these environmental variables. Since the present study also focuses on this hypothesis, it might be appropriate to briefly review the reasoning behind it. There is some evidence in the literature to suggest that organizations in more competitive environments have higher levels of market orientation (Lusch & Laczniak 1987). Jaworski and Kohli (1993), on the basis of several earlier works (Bennett & Cooper 1981; Houston 1986; Tauber 1974), argue that organizations that face more turbulent conditions are more likely to modify their products and services continually based on consumers' changing preferences, changes that force such organi-

zations to be more market oriented.

In the competitive condition, the customers have the freedom to choose their needs, and organizational excellence. On the basis of these arguments, it seems intuitively reasonable to assume that organizations facing "high uncertainty" environments will tend to be more market oriented. However, for reasons that are somewhat unclear from the literature, there seems to be an intuitive leap from these arguments to suggesting that the market orientation – performance relationship will also be stronger in "high uncertainty" environments (Jaworki & Kohli 1993; Slater & Narver 1994).

Study by Abd. Aziz and Yassin (2010) revealed that customer-competitor orientation and information dissemination were positively related to business performance. In terms of the role of external environment, two dimensions produced by factor analysis, market-technology turbulence and competitive intensity did not moderate the relationship between market orientation and business performance. Based on the above discussion, this study following two hypotheses:

Hypothesis 1: Market orientation is positively associated with business performance.

Hypothesis 2: Banks in high environmental uncertainty will be characterized by a stronger relationship between market orientation and performance.

RESEARCH METHOD

Sample

Data for this study were collected using a questionnaire that was mailed to the top executives of 132 local development banks (BPD) in a 28-state region (province) in Indonesia as a sample. This represented all the local development banks. Useable responses were obtained from 26 BPD for a response rate, and 96 respondents.

Four surveys were mailed to the chief executive of each bank. They were requested to complete one survey and forward the other three surveys to three other senior executives in the bank, preferably vice-presidents in the areas of quality, marketing,

and operations. A total of 96 responses were received from the top executives of the 26 banks. Preliminary analysis revealed no major differences on relevant variables between banks that sent in a single response and those that sent in multiple responses. Since the analysis in this study was at the banks level, any multiple responses from a single bank were averaged across the respondents for that bank for each variable in order to come up with an aggregated response for that bank.

Measurement

Market orientation: Instrument of Jaworski and Kohli's (1993) consisting of 32 items was selected to measure market orientation. However, since the original instrument had been developed within a manufacturing setting, appropriate modifications were made to this instrument for use in the banking context. The wording of the original items was modified and two items were deleted resulting in a 30-item instrument. Response to each item was measured using a five-point Likert scale ranging from "strongly disagree" (1) to "strongly agree" (5) following the procedure adopted by Jaworski and Kohli (1993).

Based on an exploratory factor analysis with varimax rotation, four factors were extracted from the 30 market orientation items. Sixteen of the 30 items loaded on these four factors explaining 60.5% of the total variance. The factors were labeled "intelligence generation" (factor 1), "customer satisfaction" (factor 2), "responsiveness to customers" (factor 3), and "responsiveness to competitors" (factor 4). While this factor structure is somewhat different from the factors postulated by Kohli and Jaworski (1990), the dimensions themselves are consistent with the Kohli and Jaworski (1990) and Narver and Slater (1990) frameworks. The Cronbach's alpha measure of reliability for the four factors was 0.82 for factor 1, 0.73 for factor 2, 0.69 for factor 3, and 0.71 for factor 4. The factor structure was also tested using confirmatory factor analysis at several lev-

els. These measurement models are well documented in earlier works by the authors and, in order to conserve space, the results are not reproduced here. Results of these measurement models supported the identified factor structure quite well. The items loaded on the four factors are shown in Table 1.

Business Performance: performance can be measured using objective measures (such as ROI, market share, etc.) or judgmental measures that are based on executives' perception of how the organization is performing relative to the competition. Since most banks might be unwilling to reveal objective performance data and since such measures might exhibit lagged effects in relation to market orientation, this research chose to use subjective judgmental measures to assess organizational performance. Such judgmental measures have been used in the past by Jaworski and Kohli (1993), Narver and Slater (1990), and Kumar, Subramanian, and Yaeger (1998). The bank executives were asked to rate their banks on 19 performance variables relative to their competitors. A scale of 1 (much worse than the competition) to 5 (much better than the competition) was used. The 19 performance variables were generated based on a review of the bank performance related literature as well as on interviewing key executives at local banks.

Exploratory factor analysis of the 19 performance variables extracted three factors explaining 69.3% of the total variance. Thirteen of the 19 variables loaded on these three factors. The factors were labeled "financial performance" (factor 1), "market/product development" (factor 2), and "quality outcomes" (factor 3). The Cronbach's alpha reliabilities for the three factors were 0.95 for factor 1, 0.86 for factor 2, and 0.57 for factor 3. Although the reliability of the quality outcomes factor is somewhat below the normally acceptable value of 0.70 we decided to retain this factor in the analysis since it had an Eigen value above 1 and the four items that loaded on this factor all had factor loadings above 0.6. Additionally, there is a precedent

Table 1
Market Orientation Dimension

<i>Intelligence Generation</i>
1. In our bank we meet with customers (i.e. personal, businesses, and employment) at least once a year to find out what products or services they will need in the future.
2. Individuals from our operations interact directly with customers to learn how to serve them better.
3. In our bank we do a lot of in-house market research.
4. We survey customers at least once a year to assess the quality of our products and services.
5. We often talk with or survey those who can influence our customer's' choices (i.e. personal, businesses, and employment).
6. We collect industry information.
<i>Customer Satisfaction</i>
7. Data on customer satisfaction are disseminated at all levels in this bank on a regular basis.
8. Customer complaints fall on loss ears in this bank.
9. When we find out that customers are unhappy with the quality of our service, we take corrective actions immediately.
10. When we find out that customers would like us to modify a product or service, the departments involved make concerted efforts to do so.
<i>Responsiveness to Customers</i>
11. We are slow to detect changes in our customers' service preferences.
12. We are slow to detect fundamental shifts in our industry (e.g. competition, technology, regulations).
13. There is minimal communication between marketing and operations concerning market developments.
14. Our business plans are driven more by technological advances than by market research.
<i>Responsiveness to Competition</i>
15. If a major competitor were to launch an intensive campaign targeted at our customers, we would implement a response immediately.
16. We are quick to respond to significant changes in our competitor's pricing.

for using quality outcome variables as a dimension of performance (Morgan & Piercy 1998). Just as in the case of market orientation, confirmatory factor analysis revealed that the measurement models supported the factor structure quite well. The thirteen items that loaded on the three performance factors are shown in Table 2.

Environmental Uncertainty: This was assessed by having respondents rate the degree of uncertainty associated with three different aspects of the banks environment. A five- point scale was used to rate the uncertainty associated with each particular item with 1 being “very low stable” and 5 being “very high stable.” The three elements included: economic, technologies and government regulations. These environmental

variables were adapted from a study by Schulz et al. (2010).

DATA ANALYSIS AND DISCUSSION

Environmental uncertainty moderating the relationship between the market orientation and performance constructs was examined for each of the groups using structural equations modeling with PLS approach. This relationship could be formulated follows:

$$P = \alpha_1 MO + e_1 \quad (1)$$

$$P = \beta_1 MO + \beta_2 EU + \beta_3 (MO * EU) + e_2 \quad (2)$$

Where:

$P(Y)$ = Performance

$MO(X)$ = Market Orientation

$EU(Z)$ = Environmental uncertainty

According to formulation of equation above, Figure 1 shows a relationship be-

Table 2
Performance Dimension

<i>Financial Performance</i>
1) Net Profits
2) Return on Investment
3) Cash Flow from Operations
4) Return on Assets
5) Profit to Revenue Ratio
<i>Market/Product Development</i>
6) New Product/ Service Development
7) Investments in R&D Aimed at New Innovations
8) Capacity to Develop a Unique Competitive Profile
9) Market Development
<i>Quality Outcomes</i>
10) Mortality and Morbidity Rate
11) Service Quality as Perceived by Customers
12) Cost Per Adjusted Discharge
13) Employee Turnover

tween market orientation and performance and environment as a moderator variable.

The research model describes the effect of market orientation on business performance. Market orientation as a means of cross-functional activities and processes aimed at creating and satisfying customers through assessment or ongoing needs assessment. On the other hand, the benefits of market orientation will be determined also by the uncertainty of the external environment.

Result and Discussion

Multi-item scales were used for each variable. All scales were based as closely as possible on previous empirical research. Table 4 presents the items comprising each scale in my study.

This study uses partial least squares (PLS) to test the hypotheses. PLS provides a composite reliability score (*equivalent to Cronbach alpha*) for assessing the convergent validity of each construct, and the average variance extracted (AVE) to assess its divergent validity, see Schulz et al. (2010). The generally acceptable level of AVE is 0.50 or higher, sees Hair et al. (1998). In addition, the square root of the average AVE for each construct should exceed the correlations shared between the construct and other constructs in the model, (Fornell and Larcker 1981).

Table 4 describes all the indicators included in the PLS model as well as the composite reliability score for each construct. It shows that all of our constructs exceed the suggested 0.70 cut-off for composite reliability, (Nunnally and Bernstein 1994). This study report the AVE for each construct and the comparison of the square root AVE in Tables 4 and 5 respectively. All of constructs meet both thresholds. Further, this study report the loadings as well as the t-statistics for each item making up a particular construct in Table 5. All items load above 0.65 and all loadings are significant.

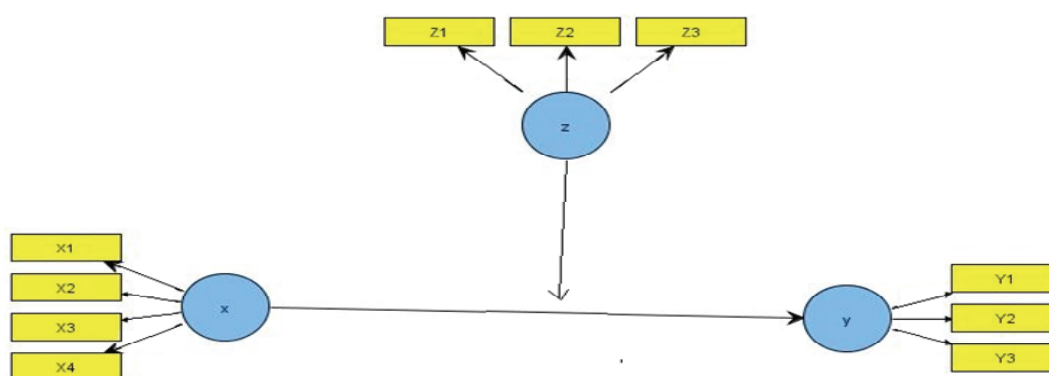
Given the high internal consistency of each measured variable, this study creates a latent variable for each construct by obtaining the arithmetic average of its component scores. Table 6 presents the descriptive statistics, and Table 7 provides the bivariate correlations among the main latent variables of interest. The latter shows that Environmental Uncertainty (Z) is significantly correlated only with the use of Performance (X). X in turn is significantly correlated with both Performance and Market Orientation (Y).

This research uses partial least squares (PLS) to simultaneously test all of the hypothesized linkages. PLS is a causal modeling technique that overcomes many theoretical and estimation problems present in some

Table 3
Environmental Uncertainty

Economics
1) How stable is the economic external environment facing this company
Technology
2) How stable is the technological external environment facing this company
Political
3) How stable is the political/regulatory environment facing this company

Figure 1
Research Model



of the more well-known structural modeling programs, such as LISREL and AMOS, (Hulland 1999), and has become increasingly popular in management accounting studies, see Chenhall (2004, 2005) for examples of PLS applications in management accounting research). In particular, this method does not make assumptions about (a) data distributions to estimate model parameters, (b) observation independence, or (c) variables' metrics (Barclay et al. 1995).

Figure 2 shows the overall model used to test hypotheses. Table 4 presents the standardized path coefficients and t-statistics. It is inappropriate in PLS to use overall goodness-of-fit measures, which are traditionally reported in LISREL or AMOS, as PLS does not make distributional assumptions (Chin (1998). Instead, fit is determined in terms of convergence and discriminate validity between the constructs used as well as the R^2 (reported in Table 8) associated with each endogenous variable.

Hypothesis 1 stipulated that market orientation is positively associated with business performance. Results (reported in Table

4 and Figure 1) show that MO is significantly and positively related to business performance ($\beta=0.632$, $t=4.307$). Thus, H_1 is supported.

This finding consists of Lonial & Raju (2001) that the fact that environmental uncertainty does not seem to affect any of the dimensions of performance means that hospitals are successful in doing whatever is necessary in order to maintain their performance over different environmental conditions. However, it should be noted that in this study performance was assessed subjectively relative to the competition. It should be noted that in this study performance was assessed subjectively relative to the competition. It is possible that if one considers objective indices of performance such as actual net profits, return on assets, etc. these could be lower for all hospitals facing high environmental uncertainty conditions.

Hypothesis 2 stipulated that Banks in "high uncertainty" environments will be characterized by a stronger relationship between market orientation and performance. Results (reported in Table 4 and Figure 1)

Table 4
**Composite Reliability and AVE Scores for Environmental Uncertainty,
 Market Orientation and Performance**

Panel A. Performance (Composite Reliability=0.990, AVE=0.970)
Intelligence Generation
Customer Satisfaction
Responsiveness to Customers
Responsiveness to Competition
Panel B. Performance (Composite Reliability=0.988, AVE=0.965)
Financial Performance
Market/Product Development
Quality Outcomes
Panel C. Environmental Uncertainty (Composite Reliability=0.981, AVE=0.944)
Economic external environment
Technological external environment
Political/regulatory environment

Table 5
Loading of several Indicators of Construct

Variables	Original Sample Estimate	Standard deviation	T-Statistic
<i>X</i>	<i>Market Orientation</i>		
<i>X</i> ₁	0.980	0.009	113.022
<i>X</i> ₂	0.989	0.005	191.425
<i>X</i> ₃	0.977	0.009	106.675
<i>X</i> ₄	0.234	0.226	1.036
<i>Y</i>	<i>Performance</i>		
<i>Y</i> ₁	0.986	0.005	196.439
<i>Y</i> ₂	0.989	0.004	256.749
<i>Y</i> ₃	0.972	0.010	100.829
<i>Z</i>	<i>Environmental Uncertainty</i>		
<i>Z</i> ₁	0.966	0.016	61.960
<i>Z</i> ₂	0.980	0.008	118.398
<i>Z</i> ₃	0.968	0.015	65.027
<i>x</i> * <i>z</i>	<i>Interaction Between Market Orientation and Environment Uncertainty</i>		
meanXZ	1.000	0.000	

show that environment uncertainty weaken, relationships MO related to business performance ($\beta = -0.057, 0.248$). Thus, H_2 is not-supported. This implies that higher uncertainty environment then it will weaken the relationship between market orientations to business performance. Uncertainty environment will complicate the management of the environment in determining the market orientation; the result is the business performance will be difficult to achieve the maximum condition.

The results support the hypothesis that the relationship between market orientations

but for the hypothesis 2 not supported, performance is lower for bank in the high environmental uncertainty group. Although this has been suggested by several researchers, most studies have not found any empirical support for it. The only exception was a study in the hospital industry (Kumar, Subramanian, and Yauger 1998). Since this study was also conducted in the bank industry, it suggests that there might be some unique industry characteristics that bring about support of this hypothesis.

Previous research from Lonial & Raju (2001) for hospitals, the result clearly shows

Table 6
Presents the Descriptive Statistics

Variables	Mean	Standard Deviation	N
Market Orientation (X)	3.446	1.127	96
Performance (Y)	3.276	1.076	96
Environmental Uncertainty (Z)	3.354	1.055	96

Table7
Bivariate Correlations among the Main Latent Variables

	X	Y	Z	X*Z
X	1.000			
Y	0.891	1.000		
Z	0.809	0.843	1.000	
X*Z	0.912	0.889	0.945	1.000

that it would be beneficial for them to monitor their marketing activities and to see that they maintain a high level of market orientation in times of high environmental uncertainty. However, this does not mean that hospitals facing low environmental uncertainty should not be market oriented. This is evidenced by the fact that the relationship between market orientation and performance is quite strong even in the low uncertainty group.

Based on the analysis above, the acquired R-square value (R^2) for the endogenous market orientation (X) can explain the variance of changes in business performance by 83.8 percent, while the remaining amount (100% - 83.8%) 16.9 percent is influenced by other variables not included in this research model.

Applying the partial least squares causal modeling technique to data from 96 Indonesian Local Development Banks, results provide support to the following picture: firms respond to environmental uncertainty by increasing their use of comprehensive performance. This increase, in turn, enables an increased use of performance-based, and the market orientation to increase sales and market share. Finally, the increased market orientation positively impacts business performance. Beyond the path to organizational performance from market orientation, neither comprehensive performance measurement nor performance-based compensation has

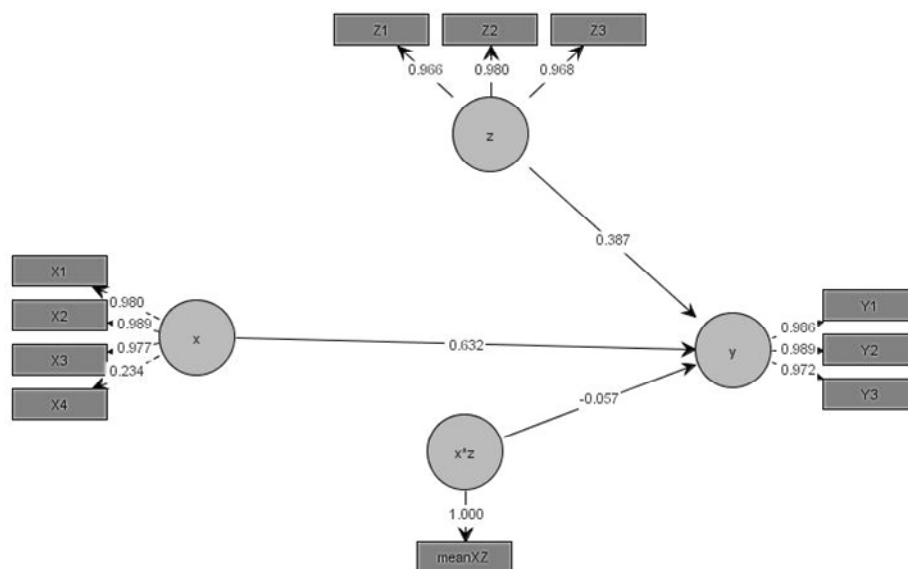
additional impacts on business performance.

The forms of uncertainty will be differentially related with business performance. On the one hand, the resource uncertainty and a non-munificent environment can be expected to have a negative effect on firm performance. Resource uncertainty approximates being a success measure, as it reflects directly the hold a banks has on resources, and banks can be expected to perform worse in an environment with many competitors relative to limited profit and investment opportunities. Changing or complex markets on the other hand should not be more or less profitable than average, a priori. Knowledge uncertainty will be influenced by change and complexity on the one hand and by performance on the other, as performance gives feedback on the value of the knowledge one has (Miner, Smith and Bracker 1989).

Jaworski and Kohli (1993) hypothesized different effects for market turbulence, competitive intensity, and technological turbulence. However, their data did not lend support to these multiple hypotheses, and therefore it is not clear if these are indeed separate aspects of environmental uncertainty. This suggests that there perhaps needs to be further refinement of the environmental uncertainty measure in the future.

Lonial & Raju (2001) argue many elements of the environment mentioned in the literature, a question remains as to whether

Figure 2
Research Model in Moderated PLS Model



X = Market Orientation
Y = Business Performance
Z = Environmental Uncertainty

Table 8
Standardized Coefficients and t-statistics

	Original Sample Estimate	Mean of Sub Samples	Standard Deviation	T-Statistic
x → y	0.632*)	0.577	0.147	4.307
z → y	0.387*)	0.351	0.168	2.304
x*z → y	-0.057	0.024	0.230	0.248

R-Square 0.838

*) $t > 1.960$

there are multiple dimensions of environmental uncertainty and if these dimensions have different effects on the market orientation – performance relationship.

CONCLUSION, IMPLICATION, SUGGESTION, AND LIMITATIONS

Market orientation has a strong effect on banks performance irrespective of the degree of environmental uncertainty faced by the banks. Second, the relationship between market orientation and performance is much weakens for banks in high uncertainty environments.

Higher uncertainty environment then it will weaken the relationship between market orientations to business performance. Uncertainty environment will complicate the man-

agement in determining the market orientation; the impact, is the business performance will be difficult to achieve the maximum condition.

There are some of the limitations of this study. First, research object only limited to banking industry, it's only at scope of local development bank, until have low generalizing level. *Second*, size of environment uncertainty only limited to economy, technology and politics, though still many measures for environment uncertainty that can be adapted for research object that used. *Third*, approach that used to measure moderating effect for environment uncertainty variable is conducted concurrently, not differentiated maximum bank that have "high level" and "low level" uncertainty.

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