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Autonomy and innovativeness: understanding their relationships with the performance of Indonesian SMEs

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Publication Details

Kusumawardhani, A., McCarthy, G. & Perera, N. (2012). Autonomy and innovativeness: understanding their relationships with the performance of Indonesian SMEs. The Joint ACERE-DIANA International Entrepreneurship Conference (pp. 1-16). Fremantle, Western Australia: ACERE-DIANA.

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Keywords

era2015

Disciplines

Business

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**AUTONOMY AND INNOVATIVENESS: UNDERSTANDING THEIR
RELATIONSHIPS WITH PERFORMANCE OF INDONESIAN SMES**

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Autonomy and Innovativeness: Understanding Their Relationships with the Performance of Indonesian SMEs

Abstract

This paper reports on two Entrepreneurial Orientation dimensions: autonomy and innovativeness since there has been no significant research in this area in Indonesia, particularly related to the context of SMEs. The purpose of this paper is to report on an empirical investigation of the role of autonomy and innovativeness in the firm performance of Indonesian SMEs, using a mixed methods approach. Findings from the quantitative data analysis confirmed that autonomy and innovativeness were adopted by Indonesian SMEs. However, these EO dimensions were found to have no significant relationships with firm performance. The qualitative data analysis clarified these findings, indicating that autonomy has not been utilised fully in these companies due to the cultural background of the managers/owners. For innovativeness, the characteristics of the sample industry contribute to the innovation behaviour demonstrated by respondents. This study makes important contributions to entrepreneurship research and has meaningful implications for managers and policy makers.

Key words: *autonomy, innovativeness, entrepreneurial orientation, firm performance, SMEs, Indonesia, mixed methods*

Introduction

Today it is widely claimed that entrepreneurship is a vital component in the process of economic growth and development (Carree et al. 2002; Henderson 2002). It provides millions of job opportunities, offers a variety of consumer goods and services, and generally increases national prosperity and competitiveness (Covin & Slevin 1991; 1999; Henderson 2002; van Praag & Versloot 2007). Numerous scholars have been attracted to investigate entrepreneurship as its activity contributes not only to macroeconomic outcomes, but also business performance. Brown, Davidsson et al. (2001) argued that entrepreneurship is relevant to firm performance, regardless of the firm's size, type or age.

In the last two decades, Entrepreneurial Orientation (EO) has become a salient concept within strategic management and entrepreneurship literature (Kreiser, Marino & Weaver 2002; Morris, Kuratko & Covin 2008; Rauch et al. 2009). EO is a key ingredient for organisational success (Covin & Slevin 1989; Wiklund & Shepherd 2005) and source of competitive advantage (Lumpkin & Dess 1996; Runyan, Droge & Swinney 2008). Firms that possess higher levels of EO have been found to perform better than those with lower levels of EO (Lumpkin & Dess 1996; Rauch et al. 2009) It is not a surprise that ample research has been conducted conceptually and empirically to investigate EO and its significant implications for firm performance (Wiklund & Shepherd 2005; Miller & Le Breton-Miller 2011).

Rauch, Wiklund et al. (2009) stated that even though EO studies include a wide range of research across many business contexts, the influence of EO on performance is more obvious in small firms. The reason is that while EO adoption is typically examined through top management (Covin & Slevin 1989), in small firms the managers/owners who lead the firm greatly influence the culture and entrepreneurial manner of the firm (Becherer & Maurer 1997).

Similar to other countries, Indonesian Small and Medium Enterprises (SMEs) play a vital role in economic development and income growth. SMEs account for more than 98.8% of the total number enterprises in Indonesia (Indonesian Ministry of Cooperative and Small Medium Enterprises 2011). As a source of employment creation, SMEs are recognised as alleviating poverty by generating primary or secondary sources for many households (Tambunan 2008). In terms of their important role in the nation's economy, SMEs' contribution to the Indonesian Gross Domestic Product accounted for 56.5% in 2009 (Indonesian Ministry of Cooperative and Small Medium Enterprises 2011).

Despite their contribution to the national economy, increasing business competition has placed SMEs in a vulnerable position. It has been argued that the main problem for SMEs is that a lack of resources (capital, physical, knowledge) makes some SMEs unable to survive in the marketplace.

Previous research suggested that SMEs with an EO are more likely to perform better than those that lack such an orientation (Knight 2000; Zahra & Garvis 2000; Wiklund & Shepherd 2005). EO enables SMEs to survive or even to outperform the competitors.

Due to the multidimensional nature of the concept, the effect of each EO dimension on firm performance can be observed independently (Lumpkin & Dess 1996). While all five EO dimensions have been investigated, only autonomy and innovativeness dimensions are discussed in this paper due to the fact that there has been no significant research in the field under investigation in Indonesia, particularly related to the context of SMEs. Furthermore, previous studies on innovation and its effect on firm performance have mainly focused on large firms (Oke, Burke & Myers 2007).

Previous research has suggested that autonomy and innovativeness play a significant role for firms in achieving competitive advantage (Coulthard 2007). Lumpkin and Dess (1996) argued that, to be successful, a firm requires autonomy from strong leaders or creative individuals, without any restrictions from the firm's bureaucracy. Similarly, Prottas (2008) suggested that autonomy offered by firms would motivate employees to work in a positive manner that could lead to higher firm performance.

Covin and Miles (1999) believed that innovation is an essential part of a strategy and that entrepreneurship cannot exist without it. The innovation ability of firms to renew their market offers becomes crucial when product and business model life cycles are shortening (Pérez-Luño, Wiklund & Cabrera 2011). Hult, Hurley et al. (2004) suggested that innovativeness plays a significant role in solving business problems and challenges, which in turn provides firms with the ability to succeed. Similarly, Otero-Neira, Lindman et al. (2009) and Ireland, Hitt et al. (2003) emphasised the importance of innovation in creating a firm's competitiveness that will lead to superior performance.

Interestingly, empirical studies of the relationship between autonomy and firm performance as well as innovativeness and firm performance are inconclusive. Furthermore, most studies have been conducted using samples from western or developed countries. Naldi, Nordqvist et al. (2007) and Mueller & Thomas (2001) suggested that due to cultural and institutional differences, the implementation of EO dimensions may differ across countries.

Therefore the purpose of this paper is to empirically investigate the role of autonomy and innovativeness in the firm performance of Indonesian SMEs. Specifically, this study addressed the research questions: (1) Have autonomy and innovativeness been adopted by

Indonesian SMEs?; (2) Do autonomy and innovativeness influence the performance of Indonesian SMEs?; (3) How are autonomy and innovativeness implemented by Indonesian SMEs?.

To answer these research questions, a mixed methods (quantitative and qualitative) approach was conducted to analyse the sample of Indonesian SMEs. The use of mixed methods allows the researcher to provide a better understanding of the phenomena under investigation and in addressing the research questions than a single approach alone.

This study contributes to entrepreneurship research in three respects. First, unlike the numerous studies in entrepreneurship, which were conducted using quantitative methods, mixed methods in this study have provided interesting findings which differ from those reported by previous research. Second, this study focuses on SMEs. Despite the widely acknowledged importance of EO in small business research (Wiklund & Shepherd 2005; Rauch et al. 2009), the empirical literature lacks evidence regarding the implementation of EO dimensions, particularly autonomy and innovativeness in enhancing SMEs' performance. Third, using a sample of SMEs in a developing country, this study attempts to provide empirical evidence that entrepreneurship theories, which mostly have been developed in western or developed countries, need to be adapted when applied in developing countries or in different cultures.

This article is organised into four sections. After this introductory section, a literature review is presented in section two followed by methodology in section three. The results of the data analysis are explained in section four, followed by discussion. Finally a concluding section summarises the findings along with their implications.

Literature Review

Entrepreneurial orientation (EO) is a process, practice and decision-making style of the firm (Lumpkin & Dess 1996). Rauch, Wiklund et al.(2009) who conducted an assessment of previous EO - Performance relationship studies revealed that an increase in the quantity of such studies has occurred around the world. Therefore, Rauch, Wiklund et al. (2009, p778) suggested that "It is reasonable to conclude that EO represents a promising area for building a cumulative body of relevant knowledge about entrepreneurship".

The specific dimensions of EO were introduced for the first time by Miller (1983). He identified the salient dimensions of EO as innovative, risk- taking, and proactive. More than a decade after Miller's work (1983), Lumpkin and Dess (1996) proposed five dimensions of EO, namely: autonomy, innovativeness, risk-taking, proactiveness and competitive aggressiveness. In other words they added two additional dimensions, i.e., autonomy and competitive aggressiveness to complement the three dimensions proposed by Miller (1983). Lumpkin and Dess (1996) argued that, to be successful, a firm requires autonomy from strong leaders or creative individuals, without any restrictions from the firm's bureaucracy. The other dimension, competitive aggressiveness, describes Miller's idea (1983, p771) of "beating competitors to the punch". It represents how firms respond to threats and not only seize opportunities as indicated by Miller's proactive dimension. Clearly, EO refers to the specific organisational-level behaviour to perform risk-taking, autonomous activities, engaged in innovation and react proactively and aggressively to outperform the competitors in the marketplace (Miller 1983; Covin & Slevin 1991; Lumpkin & Dess 1996). Many studies have since adopted Lumpkin and Dess' five EO

dimensions (e.g., Wiklund & Shepherd 2005; Coulthard 2007; Hughes & Morgan 2007; Li, Huang & Tsai 2009).

Opinion is divided among researchers about the extent to which EO dimensions need to be present for a firm to be considered entrepreneurial. Miller (1983) suggested that only firms that possess all three dimensions (i.e., innovative, risk-taking, proactive) to a similar extent should be considered as entrepreneurial. In other words, Miller (1983) and supported by Covin and Slevin (1991) emphasised that the EO dimensions are best viewed as a unidimensional concept.

On the other hand, Lumpkin and Dess (1996) argued that any firms which engage in an effective combination of autonomy, innovativeness, risk taking, proactiveness, and competitive aggressiveness can be considered as entrepreneurial. This suggests that to become an entrepreneurial firm, it is not necessary for all five dimensions to co-exist (Chow 2006). As a multidimensional concept, the effect of each dimension of EO on firm performance can be observed independently (Lumpkin & Dess 1996). Furthermore, in examining the entrepreneurial process, it is beneficial to identify the unique contribution of each sub-dimension of EO such that firms could seek the best combination to improve firm performance (Kreiser, Marino & Weaver 2002).

Autonomy and firm performance

Autonomy refers to the ability to make decisions and to proceed with actions independently, without any restrictions from the organisation (Lumpkin & Dess 1996). It also reflects the strong desire of a person to have freedom in the development of an idea and in its implementation (Li, Huang & Tsai 2009). Several scholars (Coulthard 2007; Prottas 2008; Lumpkin, Cogliser & Schneider 2009) suggested that giving autonomy to all players in the organisation may motivate them to act entrepreneurially, and in turn improve firm performance. Despite the acknowledgement of autonomy's role in enhancing firm performance, some studies were not able to demonstrate a positive effect of this relationship (e.g., Hughes & Morgan 2007).

Innovativeness and firm performance

Innovativeness reflects a firm's ability to engage in new ideas and creative processes that may result in new products, markets, or technological process (Hult, Hurley & Knight 2004; Rauch et al. 2009). Covin and Miles (1999) argued that innovation is a crucial part of a strategy and that entrepreneurship cannot exist without it. Hult, Hurley and Knight (2004) suggested that innovativeness plays a significant role in solving business problems and challenges regardless of market turbulence, which in turn provides firms with the ability to succeed. Similarly, Otero-Neira, Lindman et al. (2009) and Ireland, Hitt et al. (2003) emphasised the importance of innovation in creating a firm's competitiveness that will lead to superior performance. By increasing commitment to innovative products or processes, firms can renew their operations in marketplace and improve their profitability (Lumpkin & Dess 1996; Zahra & Garvis 2000). Nonetheless, the effect of innovativeness on firm performance in the existing literature is inconclusive (Massa & Testa 2008).

Methodology

Research design

A mixed methods (quantitative and qualitative) approach was conducted in this study to analyse the sample of Indonesian SMEs. This approach allows the investigator to provide generalisation of data derived from quantitative methods, yet at the same time, it enables

the researcher to generate “thick and rich” data acquired from qualitative methods (Teddlie & Tashakkori 2009).

The research design for this present study consisted of two phases, i.e., quantitative methods in phase one and qualitative methods in phase two. The findings of both methods are integrated in the interpretation phase.

Population, sample and respondents

The population for this study was Indonesian SMEs as defined by Statistics Indonesia (*Badan Pusat Statistik*) (2008) i.e., firms that employ five to 99 workers. The wood furniture in Central Java Province was selected as the single industry in this present study due to its significant contribution to the regional as well as the nation’s economies. This industry contributed 26.5 percent of national wood furniture production and provided 27.8 percent of employment in the wood furniture industry in 2006 (Central Java Industrial and Trade Office 2008). Moreover, the majority of the players in the wood furniture industry are SMEs (Tambunan 2009).

The number of SMEs in six centres of the wood furniture industry in Central Java Province: Jepara, Semarang, Klaten, Sukoharjo, Surakarta and Karanganyar, were used as a sampling frame. Based on statistical data analysis and population representativeness, a sample of 150 SMEs was proportionally and randomly selected from these six areas. These chosen areas were also suggested by Government agencies and a trade association to represent the population. The criterion for selecting SMEs as a sample was independently-owned and well-established furniture firms that might serve domestic as well as foreign markets.

Respondents of this study were the managers or CEOs of SMEs in the furniture industry. As Otero-Neira, Lindman et al. (2009) stated, managers/CEOs are considered to have the most comprehensive knowledge about the organisation’s characteristics, strategy and performance, including EO adoption in their firms.

Phase One: Quantitative methods

This approach was conducted to answer the following research questions:

1. Have autonomy and innovativeness been adopted by Indonesian SMEs?
2. Do autonomy and innovativeness influence the performance of Indonesian SMEs?

The EO scale used in this study were adopted from Miller and Friesen (1982), Covin and Slevin (1986; 1989) and Lumpkin, Cogliser and Schneider (2009) with a total 20-item scale.

Firm performance in this study was evaluated using financial and non-financial measures in order to have a comprehensive picture of a firm as suggested by Knight (2000) and Wiklund and Shepherd (2005). Growth, as one of the essential indicators of business survival (Watson 2007), was used to assess firm performance. This means, firm performance was evaluated by comparing firm’s current performance with the previous period (Becherer & Maurer 1997).

Subjective or self-report measurement was employed in this study due to the difficulty in obtaining objective measures from managers/owners of the SME respondents. Previous studies have showed that subjective measures of performance are generally consistent with objective measures (Dess, Lumpkin & Covin 1997).

The items of EO and firm performance were measured using a continuous rating scale (an interval scale), from '0' that indicates 'strongly disagree' or 'much worse' to '100' that indicates 'strongly agree' or 'much better'.

A face-to-face survey was conducted with 150 respondents, all of whom were SME managers/owners in the furniture industry. Data collection methods were selected in line with the Indonesian culture that emphasises social relationships (including face-to-face communication) to increase the likelihood that a respondent would be willing to participate in this study. In line with recommendations for survey research, the survey instrument was tested in a pilot test to identify and eliminate any problems that may exist in a questionnaire design (Malhotra et al. 2006; Zikmund, Babin & Griffin 2010). As the present study employed a face-to-face survey, five enumerators were employed to assist the researcher in distributing the questionnaires to respondents.

Phase Two: Qualitative methods

The purpose of qualitative method in this study was to address the research question:

3. How are autonomy and innovativeness implemented by Indonesian SMEs?

As many as 35 SMEs respondents who had participated in the first phase of this study agreed to participate again in the second phase (interviews). However, during the period of data collection in this phase, only 13 of them were available to be interviewed due to their business activities and their individual reasons. Face-to-face interviews using a semi-structured interview guideline was employed to gather information from the respondents. These interviews, which lasted about thirty to sixty minutes, allowed the researcher to acquire rich and detailed information from the respondents, who expressed their own experiences, feelings, and opinions.

Data Analysis and Findings

Phase One: Quantitative methods

As expected from a face-to-face survey (phase one), all 150 questionnaires were filled out, resulting in a 100% response rate. However, after the questionnaires were checked, there were five questionnaires that could not be used due to several reasons, such as the main products of respondents were rattan rather than wood furniture, the questionnaires were filled out not by the intended respondents (i.e., managers/owners of SMEs). As the final result, there were 145 usable questionnaires (96.7 percent of returned questionnaires) that were processed in quantitative data analysis

Descriptive Statistics of Sample

About 84% respondents were male and 16% were female, their ages ranging from 23 to 70 years old (mean = 42.03, std. deviation=10.82) with the majority (62.1%) between 30 to 49 years old. The most common education background of respondents (43.4%) was senior high school. In terms of working experience, 53.8% of respondents had worked in the furniture business before they established their current business. This means, the other 46.2% did not have any experience or knowledge about furniture business. When they were surveyed, most of the respondent's firms (62.8%) had been established for more than 10 years. The majority of the respondents (59.3%) hired five to ten full time workers. However, all respondents acknowledged that they employed part time workers when their current full time workers could not manage the workload as the number of orders increased. In marketing their products, 52.4% of respondents served domestic market only, while 26.9% serve foreign markets only. The remaining (20.7%) marketed their

product in domestic as well as foreign markets. From those who sold their products to foreign markets, 60.8% utilised agents/traders/middlemen.

Exploratory Factor Analysis (EFA)

EFA was applied in this study to derive factors that best represented the data. Only items with 0.45 or greater loadings were accepted (Hair Jr. et al. 2010). Five factors were derived with a total of nineteen items loaded in these factors, with one item deleted due to cross loading. Two of these factors represent the scales of Autonomy and Innovativeness. Autonomy dimension was loaded with six items and eigenvalues of 3.99. It contributed 20.98% of total variance, which is the highest variance in explaining the data set. Innovativeness dimension was loaded with three items with eigenvalues of 2.29 and 12.04% of variances.

Confirmatory Factor Analysis

CFA was carried out subsequently to examine unidimensionality, convergent validity and scale reliability of the measurement used in the model (Garver & Mentzer 1999). Unidimensionality of autonomy construct was proven by its Goodness of Fit (GOF) indices ($\chi^2 = 6.825$ (df=5, $p=0.234$), GFI = 0.982, CFI = 0.904, TLI = 0.994, RMSEA= 0.050 and CMIN/df= 1.365). Convergent validity of Autonomy construct was verified as all of the standardised regression weights were above the minimum acceptance level of 0.5 and t-values of all indicators were also higher than 1.96 (C.R. > 1.96). Scale reliability of Autonomy construct was shown by high construct reliability (0.810) and Cronbach's coefficient alpha (0.803), which exceeded the acceptable level of 0.7. The AVE estimate shows the moderate value of 0.473.

Since only three indicators were assigned to the Innovativeness construct, the measurement model of this construct denotes as just identified model (Byrne 2010; Hair Jr. et al. 2010) where it produced 0 degrees of freedom. As a consequence, the GOF indices could not be computed. However, diagnostic indicators (standardised residual covariance and modification indices) that were examined to identify the model errors and to respecify the model did not suggest any improvement to the model. Convergent validity of Autonomy construct was confirmed. Scale reliability of Autonomy was shown by high construct reliability (0.825), Cronbach's coefficient alpha (0.823) and moderate AVE estimate (0.613)

GOF indices of Performance with GFI = 0.964, CFI = 0.979, TLI = 0.959 and CMIN/df= 2.534 support unidimensionality of this model. Convergent validity and scale reliability were also verified with high construct reliability (0.874) and Cronbach's coefficient alpha (0.870). The AVE estimate shows the moderate value of 0.588.

The Relationship of Autonomy and Innovativeness with Firm Performance

Multiple regression analysis shows that both autonomy and innovativeness were related non-significantly (at p-value > 0.05 and C.R. < 1.96) to firm performance with standardized regression weights of - 0.020 and 0.087 respectively.

Phase Two: Qualitative methods

Autonomy

The manager who is also the owner of SME is the only person in the firm who is responsible for all operations and therefore is dominant in determining firms' direction

and policies. In other words, power and decision making are concentrated in the entrepreneur. Nonetheless, the interviews revealed that the majority of respondents acknowledged providing opportunities for their employees to be involved and to participate actively in some firm activities. Autonomy that is given by SMEs managers/owners to their employees comprises proposing ideas and deciding their own work methods. Compared to autonomy measures used in the questionnaires (phase one study), only one form of autonomy was mentioned by respondents, i.e., freedom to decide their own methods.

It is interesting to note that SMEs managers/owners who do not have a background or experience in the furniture business, were likely to provide more opportunities to their employees to share their ideas than those who had experience in the furniture business. The reason is because the unexperienced managers/owners believe that employees, based on their experience, have better knowledge about furniture making process than these firm managers/owners.

R4: *“It’s very common in many furniture firms that the managers do not always know the practice or the technique. Like me, I used to work in marketing, so if the problem related with timber exist, the workers or the carpenters are more expert than me. They know the techniques for processing and sawing timber better than me”.*

Innovativeness

Innovativeness for respondents in this study is perceived as an effort to offer any improvements in their product, market and/or process to be competitive on the market. Innovative behaviour for them is related to their creativity in response to customer needs and in turn generates a profit for them. Majority of the respondents considered their firms are innovative by producing some changes, which are perceived to be new for the firms, even though it might not be new for the industry. Three types of innovation were identified in this study:

A. Product Innovativeness, which consist of:

- *Augmented product design oriented*, which refers to the ability of SMEs to improve the existing design that is provided by buyer or customer to enhance product value. Most SMEs commonly apply this practice by conducting minor improvements to the existing design for new orders from buyers, but not for repeat orders.

R11: *“For the design, buyer brought us a picture or a photo, sometimes a sample. Sometimes I propose a different design, a small change from the sample they brought here or I proposed for a steadier product construction. If buyer agree, I will make that product”.*

- *New product design oriented*, which refers to the ability of SMEs to seek, create and introduce new product design to market. Some SMEs who serve final customer provide custom-made product and make-to-market product.

R13: *“For customised product, the design is completely from us. They only provide information about the function (of the furniture) and the measurements. We propose design and send it to the customer”. Besides, we also make new product and we offer it through trade fairs.*

- *Global product oriented*, which refers to firm’s ability to produce global product standard. All respondents interviewed in this study produce products fro export.

By receiving orders, directly or indirectly, for international markets, SMEs have been introduced to global product standards. In turn, this may influence the traditional practice in furniture making that has been adopted from generation to generation.

B. Market Innovativeness

Market innovativeness appeared less noticeable in the sample in this study. The majority of respondents were involved in informal and unplanned marketing efforts. Only a few respondents felt the necessity to engage in market innovation strategy so that they would not depend largely on the current market, as described by one respondent below.

R13: *"I do not want to put the eggs in one basket; I cannot rely on one buyer. So I have expanded our production capacity to serve other buyers. I make different products for these buyers"*.

At least there are four marketing strategies that are commonly practiced by the SMEs respondents as follows:

1. Word-of-mouth marketing that is conducted by majority of respondents. In this informal marketing strategy, they utilise their networks, such as friends and relatives, to promote their products.
2. Participate in Trade Fairs. Four of the thirteen respondents acknowledged their participation in trade fairs, either regularly or irregularly, with the hope of meeting potential buyers.
3. Provide showrooms. Only two respondents stated that they displayed their product in showrooms to attract potential customers or buyers. The majority of respondents do not have showrooms, and are commonly located in clusters that are mostly in the villages.
4. Using websites. The use of websites as one of the promotional methods is largely determined by the ability of SMEs in mastering information technology. Not surprisingly those respondents who utilise website to promote their products are relatively young (in their early thirties) and graduated from universities.

C. Process innovativeness

Lack of process innovation was demonstrated by most respondents who instead applied modest equipment and technology in production process. Only two respondents had built relatively modern workshops using automated machines. These two respondents were relatively young (in their early thirties) and graduated from universities. They did not have any experience in the furniture business before managing the current family business. Their companies were considered growing with more full time employees as compared to other respondents. This suggests that age and education background may be some of the factors influencing the willingness to change from existing SME practices in the furniture industry.

Discussion

RQ 1: Have autonomy and innovativeness been adopted by Indonesian SMEs?

Results from EFA confirm that autonomy and innovativeness have been adopted by Indonesian SMEs. These findings suggest that SMEs may benefit from providing autonomy and increasing in innovativeness in order to survive and grow. It also verifies the multidimensional nature of the EO construct and independence of autonomy and

innovativeness dimensions. Since the formulation of the EO model and the original tests were mainly conducted in the United States context (e.g., Miller 1983; Covin & Slevin 1989; Lumpkin & Dess 1996), the findings of this study suggest that the EO concept, particularly for autonomy and innovativeness dimensions, is also applicable in other countries with very different social institutions, such as Indonesia. This supports Rauch et al. (2009) who examined EO literature and found that EO instruments are robust across countries and cultures.

In phase one of this study, the autonomy dimension within SMEs was operationalised in the form of freedom for employees to decide their own methods and targets, seeking and deciding business opportunities that will be pursued, and authority for employees to act alone if they think it is in the best interest of the firm. Using an interval scale from 0 to 100, mean values of autonomy scale that ranging from 24.3 to 57.2 suggests a relatively low level of autonomy provided by respondents.

The innovativeness dimension was represented in the form of creativity, the use of own problem solving approaches as well as own production methods. One item of innovativeness scale (X9) was dropped during EFA due to cross loading. This implies that this item (a reverse question of “*In the last three years, this firm has marketed no new lines of products or services*”) may not be able to represent the type of innovation adopted by SMEs respondents in this industry. Mean values of innovativeness scale ranged from 62.1 to 68.2 implying moderate innovation proclivity of respondents. These findings also provide additional empirical evidence to support some scholars’ view (De Toni & Nassimbeni 2003; Oke, Burke & Myers 2007) that innovative behaviour can be found not only in large firms but also in SMEs.

RQ 2: Do autonomy and innovativeness influence the performance of Indonesian SMEs?

Multiple regression analysis shows that both autonomy and innovativeness influence firm performance non-significantly (at p-value > 0.05 and C.R. < 1.96). This supports empirical findings from previous studies (e.g., Hughes & Morgan 2007; Lee, Lim & Pathak 2011) implying that some dimensions of EO are responsible for improving firm performance, while other dimensions may have little or even no influence at all.

Even though Rauch, Wiklund et al. (2009) confirmed the robust nature of EO instruments across countries, Lyon, Lumpkin and Dess (2000) asserted otherwise, arguing that this may be due to problems with operationalisation and measurement.

The absence of a relationship between autonomy-firm performance relationship in this study may be associated with the relatively low mean values of autonomy measures as discussed in addressing RQ1. This is in line with a study by Hughes and Morgan (2007) who found that autonomy does not affect firm performance of emerging young high-technology firms in the United Kingdom.

Innovation activity in SMEs has attracted researchers to investigate (Oke, Burke & Myers 2007; Varis & Littunen 2010). While innovation is essential to renew firm’s market offers to be competitive, particularly when product and business model life cycles are shortening (Pérez-Luño, Wiklund & Cabrera 2011), SMEs possess limited resources and capabilities to conduct innovation (Susman, Jansen & Michael 2006; Massa & Testa 2008; Otero-Neira, Lindman & Fernández 2009). For this reason, previous studies on

innovation, particularly its effect on firm performance, have mainly focused on large firms (Oke, Burke & Myers 2007).

RQ 3: How are autonomy and innovativeness implemented by Indonesian SMEs?

Previous studies show that EO has been empirically investigated across countries and cultures. Kreiser & Davis (2010) suggested that national culture, which is represented by cultural values and several institutions, influence the willingness of entrepreneurial firms to demonstrate entrepreneurial orientation dimensions. As all respondents in this study are indigenous Indonesian (*pribumi*) from Javanese ethnic, the Javanese culture, directly or indirectly, influences the way individuals behave in firms. Undoubtedly, it also shapes the entrepreneurial orientation dimensions demonstrated by these SMEs.

The limited autonomy granted to employees in this study is related not only with the dominant position of managers/owners of SMEs but also with a hierarchical system of Javanese culture. This hierarchical system is also reported by Hofstede (1984) that Indonesia is one of the Asian countries that have a high ranking of Power distance. In this system, a leader is considered as a father figure within the organisation and a reliable patron who should be honoured and followed (Magnis-Suseno 1997). Individuals must understand their positions and accordingly they will speak and behave according to these. Therefore, those who are in the higher position must care and the lower must obey and follow.

The lack of a positive relationship between autonomy and firm performance in this study may also be associated with the core Javanese values of maintaining social harmony and avoiding conflict (Magnis-Suseno 1997). Employees are low down in the firm hierarchy and fear that proposing their own ideas could create conflict with their managers and damage the harmony in their relations.

SMEs in this study perceived innovation as an effort to offer any improvements in their product, market and/or process in order to be competitive on the market and in response to customer need, that in turn, it may generate a profit for SMEs. Clearly, for SMEs, “innovation is anything that makes money” (Massa & Testa 2008, p396). This suggests that innovation carried out by the majority of respondents in this study is considered as incremental rather than radical innovation. The reason is because SMEs possess limited resources and capabilities to conduct innovation, particularly radical innovation (Susman, Jansen & Michael 2006; Massa & Testa 2008; Otero-Neira, Lindman & Fernández 2009). In terms of ‘newness’, incremental innovation adopted by respondents refers to any idea or practice that is perceived to be new to the firm but is not necessarily new to the market. This may be the reason why X9 as one of the innovative measure in questionnaire (as discussed in addressing RQ1 above) had to be dropped from the analysis.

Characteristics of the furniture industry, from which the sample was selected, may also provide a reason why SMEs in this study demonstrate their proclivity toward incremental innovation in products. The furniture market is not as dynamic as other markets such as apparel, electronics and information technology, in which the product life cycles in these markets are shortening as the result of the constant change of market preferences and technology turbulence (Otero-Neira, Lindman & Fernández 2009). Therefore, the furniture sector is considered as low-technology industry (Schiller & Schiller 1997; Andadari 2008; Otero-Neira, Lindman & Fernández 2009). For specific hand-crafted wood furniture, its traditional process drives its market value to be significantly higher than machine-crafted. In other words, hand-crafted wood furniture does not need high

technology with machines. This implies that for particular furniture (e.g., hand-crafted), the market will not appreciate or value radical innovation in a firm's production process. As a consequence, they are not willing to pay extra for the product (Otero-Neira, Lindman & Fernández 2009). For this reason, Schiller & Schiller (1997) suggest that a huge leap in mastery of technology and management is not necessary in the furniture industry.

Conclusion

This study aims to investigate the role of autonomy and innovativeness in the firm performance of Indonesian SMEs. Findings from the quantitative data analysis confirmed that autonomy and innovativeness were adopted by Indonesian SMEs. Although EO has been formulated and tested mainly in the U.S. context, these findings suggest that the EO model, particularly for autonomy and innovativeness dimensions, is also applicable in Indonesia. However, these EO dimensions were found to have no significant relationships with firm performance. The qualitative data analysis clarified these findings, indicating that autonomy has not been utilised fully in these companies due to cultural backgrounds. As all respondents of this study are indigenous Indonesians (*pribumi*) from the Javanese ethnic group, the Javanese culture affects firm behaviours. In terms of innovativeness, respondents are more inclined toward product innovation rather than market or process innovation. Furthermore, it is related with incremental innovation in which new ideas or practices are perceived to be new to the firm and are not necessarily new to the market. It is suggested that characteristics of the furniture industry, from which the sample was selected, contribute to the form of innovation behaviour demonstrated by respondents in this study.

The contributions of this study to entrepreneurship literature comprise the use of mixed methods, the focus on SMEs and the use of a sample in a developing country. The limitations associated with this study are related to the sample and the cross-sectional design applied. This study used single informants (manager/owner of SMEs) and was restricted to the furniture industry in Central Java Province. The sample under investigation, therefore, may not represent other populations well. The findings of a cross-sectional design are not able to capture the dynamics of EO dimensions adoption process, particularly their effects on Indonesian SME performance over time. Future research may consider these limitations.

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