PRIMARY RESEARCH

Women's entrepreneurial intentions in micro and small enterprises (MSEs) in Indonesia: The influence of environmental factors on perceived behavioral control

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Abstract. The significant population of women in Indonesia has indicated a huge potential of the development of women entrepreneurs in the country. Among other ones, intention is considerably a key predictor in determining one's behavior in making decisions; hence, it is necessary to conduct researches underlying women's decision to run a business. This study aims to analyze the influence of environmental factors on perceived behavior control (PBC) towards women's entrepreneurial intentions, particularly to those involved in the micro and small enterprises (MSEs) sector in Indonesia. This study is quantitatively conducted through a survey approach. Questionnaires are distributed, which have gathered responses from 222 women entrepreneurs in Indonesia. Structural Equation Modeling (SEM) is taken to analyze those responses for doing tests on proposed hypotheses. The results show that PBC significantly influences women's entrepreneurial intentions. Besides, PBC is significantly influenced by competitive environment rather than governmental support; while the support does not have a direct influence on PBC, yet significantly influence competitive environment. This study implies that the government is expected to expand its role in the making of related policies or programs for developing women entrepreneurship.

INTRODUCTION

The number of women entrepreneurs in developing countries, *e.g.* Indonesia, is experiencing a significant increase. In fact, Statistics Indonesia (2013) has noted that women in Indonesia currently account for 49.96 percent of the country's population (242 million), meaning that the country has a huge potential to develop women's entrepreneurship within women groups. The development may aim at women's empowerment and social transformation, which in turn may contribute in reducing poverty and support economic development in the country.

According to Ajzen (1991), entrepreneurship is an attitude that may reflect motivation and ability to identify opportunities and to generate new values for an economic success. Besides, entrepreneurs are ones who run entrepreneurship activities. Theoretically, a country is stated as having a prosperous future if it has a minimum number of entrepreneurs, which covers about 2 percent of its total population (McClelland, 1978). In fact, the total number of entrepreneurs in Indonesia is 1.56 percent, with women entrepreneurs cover less than 0.1 percent of the country's total

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population (Statistics Indonesia, 2013). Looking at these numbers, Indonesia has a statistical opportunity to increase the number of entrepreneurs, particularly among women, in the country.

Among socio-cultural reasons that may influence the presence of women entrepreneurs, intention has been recognized as an early behavioral predictor in influencing the decision or desire of a woman to be an entrepreneur, including her ability to survive in doing entrepreneurial activities (Ajzen 1991). In the literature, many scholars have attempted to focus on intentions (Bird, 1988; Krueger, Reilly & Carsrud, 2000). Intentions have been proven to be the best predictor of one's behavior, especially when the behavior is difficult to observe (Krueger & Brazeal, 1994). The literature has identified individual domains and contextual variables as a two-dimensional aspect responsible for the formation of entrepreneurial intentions (Bird, 1988; Fini, Grimaldi, Marzocchi & Sobrero, 2009). Furthermore, other scholars have learned that environmental influences (Morris & Lewis, 1995) and support (Luthje & Franke, 2003) have a distinguished impact over the intentions. In fact, studies on the intention that consider the context of women entrepreneurship are limited.

This study aims to analyze the influence of competitive environment (Man, Lau & Chan, 2002) and governmental support (Beck, Demirgüç-Kunt & Maksimovic, 2005; Fini *et al.*, 2009) on perceived behavioral control (PBC) over the formation of entrepreneurial intentions among women entrepreneurs in micro and small enterprises (MSEs) in Indonesia. An alternative approach taken to identify the entrepreneurial intentions is based on the theory of planned behavior (TPB; Ajzen, 1991). TPB predicts that individual intention is a positive key to influence next actions, and focuses on how intentions are developed. This study uses quantitative methods with a survey approach. Total respondents who have participated in the survey are 222 women entrepreneurs in Indonesia. The responses are analyzed using structural equation modeling (SEM) to test the hypothesis.

This study consists of 6 sections. The following section explains literature review and theoretical framework as the basis of this study, while the third section contains research methodology. Next, the fourth section explains analysis and its result over responses. Then, the fifth section is discussion, while the last section proposes conclusions and implications.

LITERATURE REVIEW AND THEORETICAL FRAMEWORK
Women Entrepreneurs in MSEs in Indonesia

Women entrepreneurs refer to women who have participated in entrepreneurship activities totally, able to take risks, and able to identify opportunities in their environments to combine resources in a unique way as a means to take advantage of the business they do. Women entrepreneurs have an important role in social life. Besides as housewives and primary children educators, they have a significant role in economic development. Productive activities of women is aimed as an effort to empower them economically and enable them to contribute more to economic growth. Women are largely involved in home businesses, particularly in the form of micro and small enterprises (MSEs), or formal and informal sector (ILO, 1998) as their entrepreneurial activities. These activities are not only taken for fulfilling their economic needs but also for gaining social impacts to the women themselves and their social environment (de Groot, 2001).

Currently, the number of micro, small and medium enterprises (MSMEs) in Indonesia has reached 56.5 million units. They have contributed approximately 57 percent of the country's total Gross Domestic Product (GDP) (Statistics Indonesia, 2013). In short, a further research is required, especially on the intention of women entrepreneurs in running MSEs. In fact, they are closely linked to the development of MSEs. At large, MSMEs are the real strength of the nation's economy, with more than 92 percent of Indonesian workforce is involved in the sector. The government aims at encouraging women to increase the number of entrepreneurs because their share is still far from ideal. Evidence have suggested that MSEs sector in Indonesia has the highest survival through financial, economic, food, and energy crises that hit the country in the last 10 years. In short, MSEs in Indonesia have possessed a strong basis as a good starting point for the mobilization of women talents as entrepreneurs.

Women's Entrepreneurial Intention

Several studies have shown that intention is the most effective predictor of behavior, either theoretically or empirically (Bagozzi, Baumgartner & Yi, 1989; Ajzen, 1991; Sutton, 1998). Bird (1988) has defined intention as a state-of-mind to direct one's attention toward a particular goal or a way to achieve something. Identification over incoming opportunities is clearly a deliberate process and therefore important for the explanation of entrepreneurial intentions (Krueger *et al.*, 2000). In particular, entrepreneurship aims at the
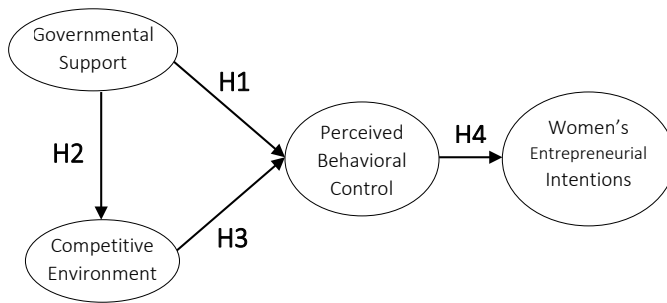
FIGURE 1. Theoretical framework

formation of a new independent company and to create new values for the new company or add value to existing companies (Bird, 1988; Shane & Venkataraman, 2000). Intention may occur as an indicator to measure planned efforts taken by an individual to perform the behavior of firm creation. This study attempts to analyze the formation of intentions based on individual PBC and several factors from surrounding environment (Figure 1).

Governmental support. External support may affect an individual's control to have an ability to apply entrepreneurial behavior. The government has a significant role in supporting economic development initiatives to strengthen local economy. In Indonesia, the government has a role in improving the performance of MSEs by initiating programs and incentives, *e.g.* infrastructure strengthening, capacity and capability building, and improving financial access. When individuals have believed that they have particular external supports from the government, they feel more confident (high behavioral control) and have a strong intention to show their entrepreneurial behavior. Therefore, the first two hypotheses are:

H1 Governmental support significantly influences PBC
H2 Governmental support significantly influences competitive environment

Competitive environment. Surrounding environment is known to influence the formation of entrepreneurial intentions and behavior. Competitive environment is an enabling environment in which entrepreneurs have to take action for ensuring the competitiveness and acceptance of their product in the market. It relates to any opportunities available to companies, including the influence of competitive rivalry, competitors and product differentiation (Porter, 1980). In fact, gender-related competition indicates that women find men entrepreneurs as a strong competitor. Zahra (1993) has argued that the industry should be able to give

values on new products for creating and maintaining a competitive position. In a dynamic competitive environment, the greater the need for innovation means the greater the likelihood that the company would be innovative (Meyers & Marquis, 1969). Hence, the third hypothesis is:

H3 Competitive environment significantly influences PBC

Perceived behavioral control. PBC describes the feeling of a self-efficacy or ability of an individual to perform a behavior. Ajzen (1991) has explained that one's behavior is controlled not only by themselves, but also require an external control, *e.g.* availability of resources, opportunities, or certain skills. PBC is a belief on whether or not any factors may facilitate or hinder an individual to perform a behavior. Therefore, the last proposed hypothesis is:

H4 PBC significantly influences women's entrepreneurial intentions

RESEARCH METHODOLOGY
Population and Sample
This study aims to analyze the influence of factors from surrounding environment, *i.e.* governmental support and competitive environment, and PBC on women's entrepreneurial intention by testing the hypotheses. Population under investigation includes women entrepreneurs in MSEs in Indonesia. Non-probability method based on a purposive sampling, in which respondents do not have the same probability of being selected as a sample (Sekaran, 2003), is taken. This research is focused on women who have run their own businesses and property. Sample is selected from several cities/districts in Indonesia, which have been famous for their small industries. According to Indonesian Law no. 20/2008, MSEs include: (1) micro-enterprises, with the amount of assets less than 50million IDR and sales revenue less than 300million IDR/year; and (2) small enterprises, with the amount of assets between 50–500million IDR and sales revenue 300million–2.5billion IDR/year. There is no limit on the duration of running a business. In total, 222 women entrepreneurs involved in MSEs in any field participate in the survey.

Data Collection and Measurement
This study uses a set of questionnaires to gather data for being analyzed using structural equation modeling (SEM). The questionnaires conducted are distributed by visiting and explaining directly to participating

women entrepreneurs as the respondents. Data are measured by using six Likert scales, ranging from 1 (strongly disagree) to 6 (strongly agree). These six scales are taken to avoid any neutral or biased opinion.

As aforementioned, four variables are taken, *i.e.* women's entrepreneurial intentions, governmental support, competitive environment and PBC. Measures for the intentions and PBC adopt Liñán & Chen's work (2009). Besides, competitive environment is measured based on the importance of new products or services (Zahra, 1993) and competitors as well as product differentiation (Porter, 1980). Then, measures for governmental support are taken based on the role of government in the MSES sectors, as listed in the Indonesian Law no. 20/2008.

Furthermore, all measures and structural models are tested using LISREL 8.80 (Jöreskog & Sörbom, 1986). In particular, a test over the proposed model may state a variable as having a good validity of the construct or latent variable if the *t*-value of loading factors is above or equal to 1.96 (*t*-value ≥ 1.96) and the standardized loading factors is above or equal to 0.70 (SLF ≥ 0.70)

(Rigdon & Ferguson, 1991: Doll, Xia, & Torkzadeh, 1994). To measure the reliability of a construct, the value of the Construct Reliability must be higher or equal to 0.70 (CR ≥ 0.70) and the Variance Extracted is higher or equal to 0.50 (VE ≥ 0.50) (Hair, Anderson, Tatham, & William, 1998). Overall model fit occurs when: chi-square test is not significant; RMSEA is smaller than 0.08; SRMR is lower than 0.05; and both NNFI and CFI are smaller than or equal to 0.90 (Browne & Cudeck, 1992; Hu & Bentler, 1995:76-79; Bentler & Bonnet, 1980).

RESULTS AND ANALYSIS
The Measurement Model

Table 1 indicates that almost all indicators have passed validity test, except for Y4. Although having a good *t*-value (*t*-value of Y4 ≥ 1.96), but it does not meet the requirement for standardized loading factors (SLF > 0.50); hence, Y4 is removed because it cannot represent women's entrepreneurial intentions.

Apparently, reliability test over all latent variables produces a good construct reliability (CR ≥ 0.70). Thus,

TABLE I. Measurement on observed variables

Component and Manifest Variable		SLF	t-value	CR	VE
Women Entrepreneurial Intentions					
Y1	My career's goal is to become an entrepreneur	0.78	**		
Y2	I am ready to do anything to be an entrepreneur	0.75	11.02		
Y3	Self-employment can make more money	0.55	7.36	0.86	0.56
Y4	Being an entrepreneur may balance work and personal life	0.44	5.00		
Y5	I want to create jobs for others	0.58	7.60		
Perceived Behavioral Control					
Y6	Easy for me to start a business and keep working	0.54	**		
Y7	I can control the creation process of a new firm	0.85	8.63		
Y8	I know the details necessary for starting a business	0.79	6.84	0.89	0.62
Y9	I know how to develop a business	0.85	9.19		
Y10	If I try to start a business, I would have a high chance to succeed	0.62	6.80		
Governmental Support					
X1	The government has provided easy accesses in setting up business licensing	0.74	**		
X2	The government has provided facilities for information and technology	0.91	14.17		
X3	The government has provided easy accesses to funding (capital loans to banks)	0.82	12.37	0.85	0.58
X4	The government has provided facilities for business development (training, mentoring, business fairs, *etc.*)	0.84	17.56		
Competitive Environment					
X5	Businesses I run have advantages over other competitors	0.72	**		
X6	My strong competitor is men entrepreneurs who run businesses in the same field	0.55	6.24	0.74	0.49
X7	People can receive new products that I created	0.76	6.98		

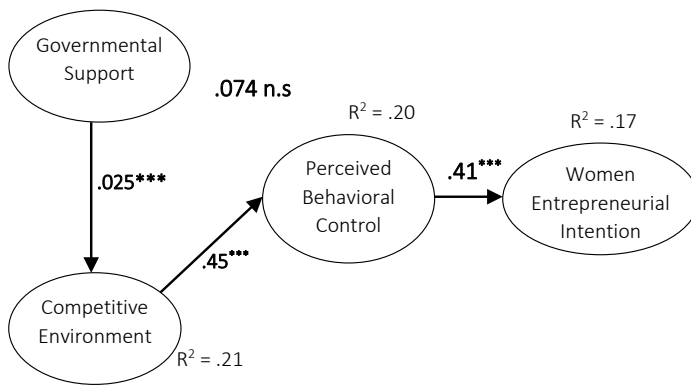Note: ** Default set by LISREL; t-value is not estimated

FIGURE 2. The structural model

Note: Standardized Coefficients, Two-sided significance tests
        * $p < .05$; ** $p < .01$; *** $p < .001$

they are stated as having a good consistency. Then, VE is required to see the reliability of construct. In fact, almost all VEs are revealed to achieve a value higher than or equal to 0.50. Looking at Table 1, competitive environment is the only variable that shows VE lower than or equal to 0.50; however, this way is neither optional nor required (Hair *et al.*, 1998). Thus, all latent variables are stated as having a good reliability.

Structural Model
Furthermore, an analysis over overall model, so-called Goodness of Fit (GoF) is conducted to reveal whether the resulting model is fit or not. Table 2 presents the GoF of the proposed research model. It appears that the NFI and CFI are higher or equal to 0.90, which indicates a good fit. Besides, the RMSEA shows 0.084 value, which is higher than 0.08 but demonstrates a marginal fit (0.08-0.10) (McCallum, 1996). Next, the AGFI value is 0.81 (lower than 0.90), which shows a marginal fit (0.80 < AGFI ≤ 0.90) (Jöreskog & Sörbom, 1986). Then, the SRMSR falls into a higher or equal value to 0.05, which indicates a poor fit. Looking at the combination of various sizes, the overall model has a good fit in general.

Next, an analysis over the proposed hypotheses are exhibited in Figure 2. PBC (β = .41; *p* < .001) is proven

TABLE 2. Goodness of Fit index for Structural Equation Model

χ^2	Df	RMSEA	SRMSR	NFI	CFI	AGFI
255.02**	100	0.084	0.080	0.91	0.94	0.81

Notes: N = 222
       ** $p < 0.01$
       SRMSR = Standardized root mean squared residual
       NFI = Norm fit index
       CFI = Comparative fit index
       AGFI = Adjusted goodness of fit index

as being able to predict women's entrepreneurial intentions. Factors from surrounding environment that influence the PBC is competitive environment (γ = .45; *p* < .001), while governmental support does not directly influence the PBC (γ = .074, ns) but does significantly influence competitive environment (γ = .025; *p* < .001). Therefore, PBC as an exogenous dimension of TPB is the best direct predictor of intentions, and mediates the influence of competitive environment. Then, governmental support is proven to have no direct influence on PBC, yet significantly influences competitive environment.

DISCUSSION
The results show that H1 (governmental support significantly influence PBC) has failed to predict women's entrepreneurial intentions. It indicates that governmental support is irrelevant in forming the intentions. Therefore, the government is expected to take a role in enhancing intentions in entrepreneurial communities. On the other hand, a test on H2 shows that governmental support significantly influences competitive environment (γ = .025; *p* < .001), meaning that governmental policies have a significant role in shaping an enabling competitive environment.

Next, a test on the third hypothesis (competitive environment significantly influences PBC) shows that H3 is accepted (β = .41; *p* <.001). It indicates that competitive environment influences an individual's control to have required abilities for implementing entrepreneurial behaviors. When individuals believe that they are able to survive in a competitive environment, then the individuals have a high control to demonstrate their entrepreneurial intentions.

Then, a test over H4 has proven that women's entrepreneurial intentions are significantly influenced by PBC (β = .41; *p* <.001). Based on the TPB (Ajzen, 1991), PBC is proven to directly influence their intentions and serves as a mediator of factors from surrounding environment on the intentions.

CONCLUSION AND IMPLICATIONS
This study is aimed at analyzing the entrepreneurial intentions from women entrepreneurs' perspective. The results attempts to validate a correlation between competitive environment and governmental support as two factors influencing women's entrepreneurial intentions. The results have shown that PBC is significantly influenced by competitive environment. In fact, competitive environment is a powerful control

that is perceived by women to start a business, in which they may feel that they have been competitive compared to male entrepreneurs and produce competitive products in the market. In short, it may have caused a strong intention to establish their entrepreneurship behavior. Besides, the results show that governmental support has no direct influence on the PBC but may influence competitive environment. Looking at the results, the government's role still lacks in enhancing women's entrepreneurial intentions. Entrepreneurship training conducted by the government has not reached rural areas. Many women entrepreneurs hence lack of managerial knowledge. To enhance the intentions, the government must have an active role in facilitating women to be entrepreneurs.

Coaching and mentoring programs are an effective way to enhance their intentions, especially in rural areas. Thus, promoting women entrepreneurship as a social choice is quite a relevant instrument to enhance their intentions.

FUTURE RESEARCH

Further works may need to conduct a qualitative study for the promotion of the findings proposed by this study to stakeholders, *e.g.* governments, banks, NGOs, and others. Thus, they may refer those findings in the development of policies and programs for women entrepreneurs in the MSEs sector.

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