

## **Developing a Measuring Instrument for Entrepreneurial Motivations and Obstacles in the Philippines**

**Ringgold P. Atienza**

**College of Business and Management, Misamis University,**

**H. T. Feliciano St., Ozmaiz City, Philippines**

**Corresponding author: Ringgold P. Atienza, email: [ringgoldatienza@yahoo.com](mailto:ringgoldatienza@yahoo.com)**

### **Abstract**

Entrepreneurship is a tool that can drive up the economy and decrease the unemployment rate of a country. This catalytic nature of entrepreneurship makes it an important priority for the government and educational institutions to promote entrepreneurial activities in the community. However, most studies have not considered both motivation and obstacles when modeling entrepreneurial intentions. This study contributes to the body of knowledge by providing tested and validated measuring instrument on entrepreneurial motivation and obstacle specifically in the Philippine context. This study was conducted in Ozamiz City, Misamis Occidental province, Philippines. The drop-off/pick-up method was employed in selecting the establishments in the locality targeting employees with intentions to start a business but have not yet acted on their intention. The principal components analysis was used in this study. Based on the results, this study provides two factors for entrepreneurial motivation, namely, intrinsic and social motivation, and need for personal and financial autonomy, and three factors for entrepreneurial obstacles, namely, capital obstacle, skills and support obstacle, and economic sentiment obstacle. Results also showed that financial security provides the highest motivation among others, and access to financial capital is the greatest obstacle. With this, the government may focus on these issues on providing help among those who want to create business start-ups.

**Keywords:** business, capital, economy, financial, unemployment

## Introduction

The entrepreneurial intention has become a widely studied topic because of the catalytic nature of entrepreneurship to improve a country's economy (Yu, 1998; Audretsch & Keilbach, 2004). Entrepreneurship generates economic growth because it serves as a vehicle for innovation and change, and therefore as a conduit for knowledge spillovers (Carree & Thurik, 2005). Even in times when the effect of entrepreneurship to economic growth is less obvious, it still serves as a measure against high unemployment rates (Stel et al., 2005).

Entrepreneurship is a worthy career option for students and even employees (Beeka & Rimmington, 2011). It can function as a driving factor to derive more income for individuals while studying or working. Many individuals opted for entrepreneurship as a full-time endeavor at times when it provides higher expected income as compared with an employment opportunity (Arenius & Minniti, 2005).

Unemployment has become an enormous challenge for the Philippines as it has been having problems on creating more jobs for the country (World Bank, 2014). Despite the robust economic growth in the country, unemployment among college graduates is still high due to a mismatch between the degrees completed and the jobs that are available (DOLE, 2015). Pushing the Filipinos to have a career in entrepreneurship offers significant opportunities for the country to reduce poverty and decrease unemployment.

The Philippine government has taken action in promoting entrepreneurship in the country. It provided credit, technology, and marketing support to new enterprises from P24 billion in 2004 to P309.98 billion in 2010 (Banastao & Frias, 2008), yet recent report still showed decreasing startup activities among Filipinos (Velasco et al., 2016). This observation prompts the researcher to examine the motivations and obstacles on entrepreneurship among Filipinos, specifically among those who are employed but had considered entrepreneurship as an alternative career choice. The researcher chose employed individuals with entrepreneurial intention since they may have the means when it comes to capital and borrowing capability as

compared to the students. Also, most studies focused on students' motivations and obstacles to entrepreneurial intentions (Franke & Luthje, 2003; Fatoki, 2010; Kim-Soon et al., 2013; Ooi & Ahman, 2012).

Motivations and obstacles influence entrepreneurial intention and eventually the decision to start a business or not. The motivators encourage an individual to start a business whereas the obstacles prevent them. There can be many motivational factors that can lead to entrepreneurial activity such as life experience, social networks, economic situation, demographic variables, attitudes, values, or needs. These factors that form the decision to create a business represent both personal and subjective motives, as well as the environment (Barba-Sánchez & Atienza-Sahuquillo, 2012). The vast number of alternative motivational factors can be too many to consider individually that it can prove challenging for researchers to reasonably predict satisfaction related to the consequences of the decision to start a business. For this reason, this research would focus on building the motivational factors identified by the study of Barba-Sánchez and Atienza-Sahuquillo (2012) which explored needs as motivation. One of the needs motivation, as they posited, is the need for achievement (McClelland, 1967). This need has been associated with entrepreneurial behavior.

The need for achievement is manifested to an individual's desire for making significant accomplishment, doing things well that are better than others, or obtaining excellent results by setting higher standards. People with a higher need for achievement enjoy challenging tasks. Empirical studies recognize the need for achievement in the form of the entrepreneurial intentions of a given population, as well as in retrospective studies of the attitudes and characteristics of existing entrepreneurs (Barba-Sánchez & Atienza-Sahuquillo, 2012).

Another motivator found in most studies for entrepreneurial intention is the need for autonomy (Choo & Wong, 2006). It has been suggested as one of the innate personalities for entrepreneurs (Kuratko et al., 1997). Moreover, several studies also suggest that intrinsic and extrinsic motivations play a great role in entrepreneurial intentions (Brännback & Carsrud, 2011; Robichaud et al., 2001). Barba-Sánchez &

Atienza-Sahuquillo (2012) proposed seven specific need motivations rather than the broader categorization of the motivations as intrinsic or extrinsic. The need motivations include the need for achievement and self-realization, financial need and professional autonomy, need for affiliation and institutional power, need for continuity, social needs and personal power, and need for competition.

On the other context, entrepreneurial obstacles play a big role in entrepreneurial intentions and are usually not considered in modeling such in the literature. Even when an individual's entrepreneurial motivation and intention is high, the presence of obstacles or barriers to starting a business might hinder actual action. This research addressed the deficiency of knowledge on entrepreneurial obstacles, especially in the research locale. This research focuses on the scales provided by Fatoki (2010) on entrepreneurial obstacles. The study identified five main obstacles namely capital, skill, support, risk and macro-economy.

Access to capital is necessary to support the process of starting a business, and the lack of it was noted as one of the main obstacles among entrepreneurs (Barba-Sánchez & Atienza-Sahuquillo, 2012; Kim-Soon et al., 2013). The existence of financial support is insufficient if it is not accompanied by adequate social support, training, and development of skills that support other motivations. Aside from the innate entrepreneurial supporting traits of an individual (Zhao et al., 2010), technical knowledge and business intelligence is also important (Sánchez, 2011).

While these two constructs, motivation and obstacles, were emphasized as the key elements for entrepreneurial intentions, our knowledge on it is still sketchy. Hence, the objective of this study is to provide a measurement instrument to determine the Filipino's motivations and obstacles to become entrepreneurs. This empirical paper was framed by several previous theoretical studies as a means for the initial analysis of the determinants of motivations and obstacles to provide local contextual determinants.

## Materials and Methods

The lack of secondary data on entrepreneurial motivation and obstacles in the country prompted the researcher to conduct fieldwork survey. Ozamiz City in Misamis Occidental province was a viable research setting as it is one of the centers of commerce, health, transportation, and education in the southern part of the Philippines (Atienza, 2014). The modified questionnaire used was adapted from the studies of Robichaud et al. (2001), Fatoki (2010), and Barba-Sánchez and Atienza-Sahuquillo (2012). The survey instrument contains 14 items for motivation and 19 items for obstacles that were measured on the five-point Likert scale, as follows: 5 – Very important, 4 – Important, 3 – Moderately important, 2 – Of little importance and 1 – Unimportant. The drop-off/pick-up method was employed in selecting the establishments in the locality targeting employees with intentions to start a business but have not yet acted on their intention. The survey characteristics are shown blow.

### Survey characteristics

Study area:	Ozamiz City, Misamis Occidental	
Sample size:	353 respondents	
Respondents:	Employees	
Sampling unit:	Individual	
<i>Respondents characteristics</i>		
Industry/sector of employment:	Agriculture/Forestry/Wildlife/Natural Resource	9.7%
	Business/Information/Finance	22.5%
	Education/Health/Food/Hospitality/Personal/Gaming Services	40.1%
	Transportation/Motor Vehicle	10.4%
	Safety/Security/Legal	3.5%
	Real Estate/Housing/Construction/Utilities/Contracting	13.8%
Gender	Male	45.6%
	Female	54.4%
Personal Monthly Income	Php 15,000 below	72.1%
	Php 15,000 above	27.9%
Age (years)	18-27	51.4%
	27 and above	48.6%

Following the procedures of Robichaud et al. (2001), Fatoki (2010), and Barba-Sánchez & Atienza-Sahuquillo (2012), this study used the principal components factor analysis to reduce the number of dimensions on both motivations and obstacles. The results of the analysis are essential to the creation of reliable and valid measures of the entrepreneurial motivations and obstacles among Filipinos (DeVellis, 2016). The Kaiser-Meyer-Olkin (KMO) test, Bartlett's test of sphericity, and Cronbach's alpha were done to ensure the validity of the principal components. The KMO test checks the sampling adequacy of the measures in a completed factor model. A KMO value greater than 0.60 indicates factorability or sampling adequacy (Mulaik, 2009). The Bartlett's test of sphericity tests the null hypothesis that the population correlation matrix is equal to an identity matrix. These two tests provide the minimum standard to proceed in analyzing factors (Bartlett, 1950). The Cronbach's alpha ( $\alpha$ ) values must be above 0.60 to confirm the construct's internal consistency and reliability.

An informed consent was secured from each respondent before the survey. The scope, objectives, anonymity of identity, and the right to refuse participation were explained to the target respondents. None of them expressed refusal to participate.

## **Results and Discussion**

The two highest motivations for starting a business pertain to the desire to be financially secured and to increase personal income and achieve a comfortable living (Table 1). The result points out that the most enticing reward of entrepreneurship is the economic viability. Entrepreneurship as an activity for personal growth also emerged high as successful entrepreneurs are highly regarded in the Philippine community (Velasco et al., 2016). The motivation to enter into business for family tradition shows the lowest motivating factor. It reflects a society that encourages people to pursue a professional career other than entrepreneurship.

**Table 1. Entrepreneurial motivation scale, mean scores, and standard deviation.**

Code	Measures	Mean	SD
MOT1	I want to utilize my creative talent in entrepreneurship.	4.003	1.001
MOT2	I want to overcome a challenge.	4.042	0.926
MOT3	I want to prove to myself that I can succeed as an entrepreneur.	4.102	0.911
MOT4	I want an activity that can provide me personal growth.	4.164	0.905
MOT5	I want to help the people in the community by providing employment.	3.986	1.021
MOT6	I want to increase my prestige and status in the society.	3.819	1.023
MOT7	I want to be self-employed and be my own boss.	4.079	0.941
MOT8	I want to maintain my personal freedom by doing what I want and making my own decision.	4.037	0.969
MOT9	I have the desire to be independent.	4.048	0.953
MOT10	I want to follow the example of someone I admire who is a successful entrepreneur.	4.045	0.961
MOT11	I have to follow a family tradition.	3.663	1.009
MOT12	I want to be secured financially (e.g., be rich or debt free).	4.227	0.947
MOT13	I want to increase my personal income and achieve a comfortable living.	4.278	0.924
MOT14	I want to build up wealth for my retirement.	4.142	1.004

MOT - Motivation

Likert scale: 5 – Very important, 4 – Important, 3 – Moderately important, 2 – Of little importance and 1 – Unimportant.

The top three greatest obstacles for starting the business pertain collectively to financial capital requirements (Table 2). Most respondents reported that they do not have enough savings for capital, have difficulty in obtaining loans, or have no enough funds to start their business. While the least obstacles pertain to their ability to start or run a business which shows that most respondents are optimistic about their entrepreneurial capabilities which are consistent in the Philippine Entrepreneurship Report (Velasco et al., 2016).

**Table 2. Entrepreneurial obstacle scale, mean scores, and standard deviation.**

Code	Measures	Mean	SD
OBS1	Lack of enough savings as starting capital	3.810	1.020
OBS2	Difficulty in obtaining a loan or bank financing	3.552	0.996
OBS3	Cost of business start-up is too high	3.720	0D.990
OBS4	Existing debts	3.292	1.181
OBS5	Lack of necessary business skills (operation, finance, marketing, management, etc.)	3.334	1.136
OBS6	Problems in convincing or negotiating with other people	3.116	1.165
OBS7	Lack of knowledge on how to make a plan	3.003	1.149
OBS8	Lack of perfect business idea	3.181	1.100
OBS9	Stress in doing business	3.249	1.087
OBS10	Easily become discouraged	3.042	1.098
OBS11	Lack of time for entrepreneurship due to other personal activities	3.190	1.014
OBS12	Lack of knowledge about government assistance	3.085	1.119
OBS13	No partners or people to work with	3.042	1.151
OBS14	No persons to turn to for help	3.054	1.138
OBS15	Uncertainty about the future if I start my own business	3.283	1.115
OBS16	Fear of failure such as losing my investment	3.467	1.135
OBS17	Less opportunity in the market	3.249	1.014
OBS18	Too much competition in the market	3.470	1.022
OBS19	No appropriate location for my business	3.416	1.107

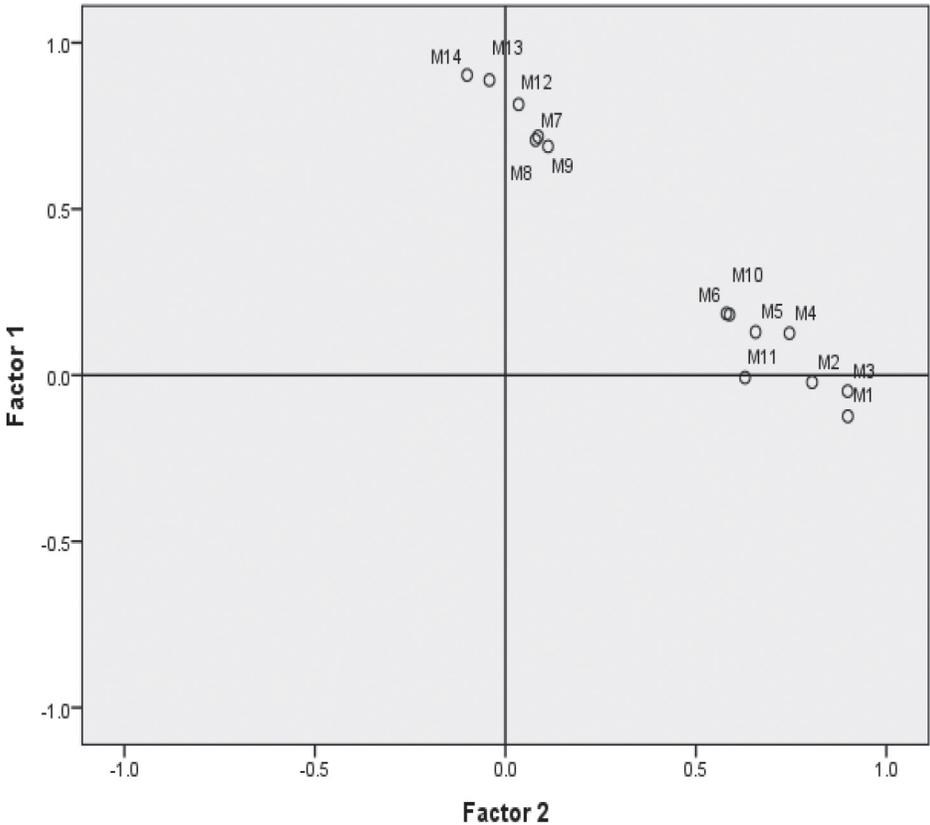
OBS - Obstacle

Likert scale: 5 – Very important, 4 – Important, 3 – Moderately important, 2 – Of little importance and 1 – Unimportant.

The entrepreneurial motivation scale showed a KMO value of 0.925 and Bartlett's test of sphericity,  $\chi^2(91) = 3088$ ,  $p < .001$ , which indicate that the scale produced a good factor results. The two-factor result of the entrepreneurial motivation scale provided good Cronbach's alpha values. The results of the principal component factor analysis on this study have substantially reduced the number of dimensions in the original scale, and the original structure was not retained (Robichaud et al., 2001; Fatoki, 2010; Barba-Sánchez & Atienza-Sahuquillo, 2012).

The Promax rotation (Kappa = 4) with Kaiser normalization was performed to interpret factors more easily. The loadings plot of the rotation results shows the visual representation of the two-factor

entrepreneurial motivation scale (Figure 1). The graph shows which measures load highly on factor 1 or factor 2. Measures that are closer together are considered to be as part of one dimension of the scale. Results showed that MOT1, MOT2, MOT3, MOT4, MOT5, MOT6, MOT10, and MOT11 loaded highly on factor 1 while MOT7, MOT8, MOT9, MOT12, MOT13, and MOT14 loaded highly on factor 2.



**Figure 1. The component plot in rotated space (motivation).**

Based on factor scores, an interpretation of the resulting factors was established from the analysis (Table 3). The **first factor** combines motivational factors that pertain to the needs for personal growth (MOT1 & MOT4), achievement (MOT2 & MOT3), affiliation (MOT5), social power (MOT6) and continuity (MOT10 & MOT11). This study was not able to delineate the dimensions in terms of personal (intrinsic) such as the need for personal growth and achievement, and external (extrinsic) such as affiliation, social power, and continuity as suggested in the literature (Brännback & Carsrud, 2011). Although affiliation, social power, and continuity constructs are considered as extrinsic to an individual, these constructs specifically relate to building social identity. It is more appropriate that the first factor be denoted as **intrinsic and social motivation**.

The **second factor** was strongly saturated to the desire to be independent in terms of decision making (autonomy) as loaded by MOT7, MOT8, and MOT9, and financial security (financial independence) as loaded by MOT12, MOT13 and MOT14. The factors indicate a classical motivation of money as synonymous to the financial strength and the innate need for independence among entrepreneurs (Douglas & Shepherd, 2002; Nishantha, 2009). This factor is denoted as the **need for personal and financial autonomy**.

The result on this study shows the simplistic attitude of Filipinos specifically those in the Southern part of the Philippines towards entrepreneurship (Fatoki, 2010; Neneh, 2012; Ooi & Ahman, 2012). The locales view entrepreneurship as a tool to provide personal and economic independence. Outside of that is considered as one whole different dimension of motivation. In other words, the motivations to take risks, challenge oneself, provide employment to the community, and follow a social norm are viewed as secondary and that the motivation is either personal and financial autonomy or the rest as one.

**Table 3. Principal component factor analysis on entrepreneurial motivations scale.**

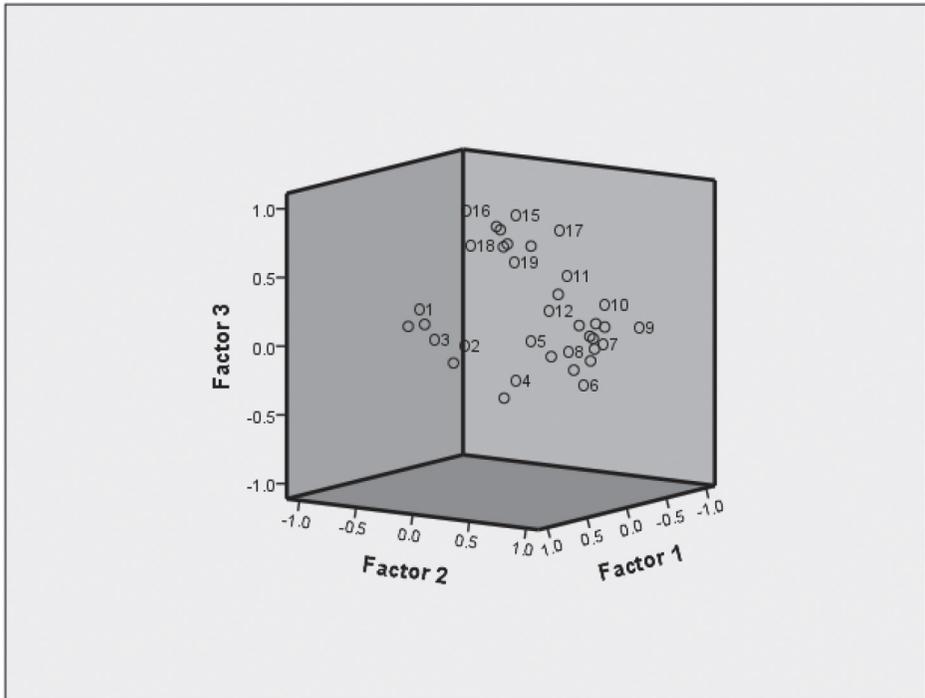
	<b>Factor 1</b>	<b>Factor 2</b>
MOT1	0.815	
MOT2	0.791	
MOT3	0.866	
MOT4	0.831	
MOT5	0.744	
MOT6	0.705	
MOT7		0.761
MOT8		0.776
MOT9		0.764
MOT10	0.711	
MOT11	0.624	
MOT12		0.838
MOT13		0.859
MOT14		0.835
Eigenvalues	7.433	1.233
Percentage of variance explained	53.095	8.809
Cronbach's alpha ( $\alpha$ )	0.896	0.894
Mean	3.978	4.135
SD	0.162	0.099

Extraction method: Principal components analysis.  
 Rotation method: Promax with Kaiser Normalization

The entrepreneurial obstacle scale has a KMO value of 0.945 and Bartlett's test of sphericity,  $\chi^2 (171) = 4653$ ,  $p < 0.001$ . The scale produced the three-factor result of the entrepreneurial obstacle. All three dimensions showed good Cronbach's alpha values. The results of the principal component factor analysis in this study have also significantly reduced the dimensions of the original scale (Fatoki, 2010).

The same method used on entrepreneurial motivation scale Promax rotation (Kappa = 4) with Kaiser normalization was performed for the scale of the entrepreneurial obstacles. The loadings plot of the rotation results shows three factors (Figure 2). Results showed that OBS1, OBS2, OBS3, and OBS4 loaded highly on factor 1, OBS5, OBS6, OBS7, OBS8, OBS9, OBS10, OBS11, OBS12, OBS13, and

OBS14 loaded highly on factor 2, and OBS15, OBS16, OBS17, OBS18, and OBS19 loaded highly on factor 3.



**Figure 2. The component plot in rotated space (obstacles).**

As shown in Table 4, the **first factor** on entrepreneurial obstacles scale saturates highly on lack of enough savings as starting capital (0.835) and difficulty in obtaining a loan or bank financing (0.852). Both measures relate to capital as an obstacle to start a business. Further, the existence of debts indicated a high loading (0.603) which implies that the current financial standing of an individual affects entrepreneurial intention. Finally, the cost of a business start-up is too high (0.812) also loads on the first factor that also relates to the lack of financial capability to start a business. Base on these findings, the first factor is denoted as the **capital obstacle**.

The **second factor** strongly saturated to the lack of necessary business and start-up skills as loaded on OBS5, OBS7, and OBS8. The second factor was also able to capture the lack of connections to people and government as loaded on OBS6, OBS12, OBS13, and OBS14. Lastly, the stress in doing business (0.810), easily become discouraged (0.778), and lack of time for entrepreneurship due to other personal activities (0.725). In this regard, this factor is denoted as **skills and support obstacle**.

**Table 4. Principal component factor analysis on entrepreneurial obstacles scale.**

	<b>Factor 1</b>	<b>Factor 2</b>	<b>Factor 3</b>
OBS1	0.835		
OBS2	0.852		
OBS3	0.812		
OBS4	0.603		
OBS5		0.727	
OBS6		0.821	
OBS7		0.854	
OBS8		0.811	
OBS9		0.810	
OBS10		0.778	
OBS11		0.725	
OBS12		0.814	
OBS13		0.835	
OBS14		0.804	
OBS15			0.799
OBS16			0.838
OBS17			0.836
OBS18			0.824
OBS19			0.817
Eigenvalues	1.196	9.894	1.590
Percentage of variance explained	6.292	52.072	8.369
Cronbach's alpha ( $\alpha$ )	0.784	0.939	0.891
Mean	3.593	3.130	3.377
SD	0.227	0.106	0.104

Extraction method: Principal components analysis.

Rotation method: Promax with Kaiser Normalization

The **third factor** saturated on sentiments about the business viability as loaded by OBS17, OBS18, and OBS19. This relates to the economic performance of the industry of the selected business among the would-be entrepreneurs. Further, uncertainty about the future if one starts his/her own business (0.799), and fear of failure such as losing one's investment (0.838) pertain to the individual's risk perceptions on the future economic performance of the business. Thus, this factor is denoted as **economic sentiment obstacle**.

## **Conclusions and Recommendations**

This study contributes to the body of knowledge by providing tested and validated measuring instrument on entrepreneurial motivation and obstacle specifically in the Philippine context. The study has found a simplistic attitude among employees in Ozamiz City towards entrepreneurship. This may be a result from how Filipinos, especially from those in the southern part, see entrepreneurship as a means for livelihood or alternative income but not necessarily for intrinsic satisfaction. The motivation of entrepreneurship as a career option is delineated by the potential of entrepreneurship to provide higher income as compared to their present work. In result, higher income can provide an individual personal and economic independence. Other motivations such as the enjoyment of taking risks, facing a challenge, honing creativity, and social acceptance are all considered as one secondary factor. This study was able to reduce the five dimensions of obstacles in the previous literature down to three dimensions, namely, capital obstacle, skills and support obstacle, and economic sentiment obstacle.

This study is limited in its analysis the usage of dimension reduction technical principal components analysis. Although no inference was tested on the effect of motivation and obstacle to entrepreneurial intention, descriptive statistics suggests that financial security provides the highest motivation among others, and access to financial capital is the greatest obstacle. With this, the government may focus on these issues on providing help among those who want to

create business start-ups. Future researchers may consider motivation and obstacles in modeling or predicting entrepreneurial intention.

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