THE GLOBAL ENTREPRENEURSHIP TREND WITH LATENT GROWTH CURVE APPROACH: LESSON LEARNED FROM THE GREAT RECESSION RECOVERY

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Abstract

As hospitality industry has been traditionally characterized by a small- and medium sized enterprise, entrepreneurship is much essential and important in the industry. To make an understanding of what trend exists in the entrepreneurship development around the world, a Latent Growth Curve (LGC) model was employed. By considering three macroeconomic variables (GDP, unemployment rate, and population growth), this study could figure out the trend of the growth of entrepreneurship anticipated in the most recent longitudinal data from 2010 to 2014, which indicates recovery of global economy from the economic recession. Also, the result of a series of comparisons of LGC model indicated that the increase of global entrepreneurship seen over time in an unconditional LGC model is fueled by increased unemployment rate and larger population growth. These results give theoretical and practical foundation of the importance of entrepreneurship in the recovery of global economy from the global economic recession after COVID-19 pandemic.

Keywords

Entrepreneurship, Small and Medium Sized Enterprise, Economic Recession, Economic Growth, Latent Growth Curve (LGC) Model

INTRODUCTION

The global business environment and economic status are changing dramatically (Wright & Dana, 2003). Historically, there is a notion that a small number of large, established firms were the major source of economic growth globally (Stevenson & Lundström, 2001). This economic structure results in a trickle-down effect on small-sized independent firms in terms of global economy by creating new forms of business. This new trend is positively associated with intention to make a business venture of individuals who are willing to and intended to pursue to differentiated and innovative products, new process, and new markets to create wealth (Daily, McDougall, Covin & Dalton, 2002; Ireland, Hitt, & Sirmon, 2003). In this context, entrepreneurship has been recognized as highly important driving force of small-sized independent firms for socio-economic prosperity (Brandstätter, 2011).

Entrepreneurship has been currently acknowledged to be one of the most rapidly growing and promising field in an area of social science as a result of its growth and significance (Casson, 2005; Reader & Watkins, 2006). It is true that entrepreneurship contributes to a series of economic attributes in current environment by emphasizing business innovativeness and strategic competitiveness, creating new types of employment, and maximizing economic wealth of economic players (Guasch, Kuznetsov, & Sanchez, 2002; Gurel, Altinay, & Daniele, 2010). Many researchers described the roles of entrepreneurship in the new business and enterprise creation (Mueller & Thomas, 2001; Zahra & Filatotchev, 2004), community and society development (Bardolet & Sheldon, 2008; Cawley & Gillmor, 2008), and socio-economic prosperity (Brandstätter, 2011). According to its growth and proliferation as a phenomenon, entrepreneurship has been defined by many researchers in different perspectives and emphases, so that the definition of it still remains inconsistent and elusive (Ahmetoglu, Leutner, & Chamorro-Premuzic, 2011; Hisrich, Langan-Fox, & Grant, 2007). There has been wide array of empirical tests to support that entrepreneurship positively influences wealth creation and spending power by promoting innovation, enhancing opportunity exploitation, and creating new job and employment (Acs, Arenius, Hay, & Minniti, 2005; Ateljevic, 2009; Mottiar & Ryan, 2007; Holmgren & From, 2005; Ramos-Rodríguez et al., 2012; Reynolds, Bosma, Autio, Hunt, De Bono, Servais, Lopez-Garcia, & Chin, 2005).

As entrepreneurship has been a growing phenomenon in world markets, its impact on economic growth has been increasingly recognized (Styles & Seymour, 2006; Ramos-Rodríguez, Medina-Garrido, & Ruiz-Navarro, 2012). Especially, after a devastating COVID-19 Pandemic, entire globe has been suffered from unprecedented economic crisis that results and global recession and massive travel and business restriction as parts of a disease containment policy (Kim et al., 2021). This crisis specifically hit human oriented service industry, tourism, and hospitality sectors the most. The hospitality and tourism industries have been acknowledged to be major contributors to national economic growth (Dees, 2002; Li, 2008). As hospitality industry has been traditionally characterized by a small- and medium-sized enterprise (SME) (Avcikurt, 2003; Bastakis, Buhalis, & Butler 2004;), much previous research has demonstrated that entrepreneurship is an essential and important (Russell & Faulkner, 2004; Lynch & MacWhannell, 2000). Such driving force of economic growth has been deterred for last two years. Even though most of the globe are steadily getting back to normal and trying to revamp devastated economic situation, demolished SMEs failed to sustain and support such economic move (Kim et al., 2021). Due to this limitation, the pace of recovery of economic situation in global business has not been promising as much as what the global market experiences after the global economic recession in 2010.

Although entrepreneurs are increasingly recognized to be an important element of not only hospitality industry, but also modern economies, understandings of how the propensity and trend of entrepreneurship looks like and how other macroscopic factors affect entrepreneurial activities globally (Böheim, Stiglbauer, & Winter-Ebmer, 2009; Cope, Jack, & Rose, 2007; Erken, Donselaar, & Thurik, 2008). After the global pandemic, it is essential to revamp global economy back to sustain business environment as well as creating values that can be shared with multiple stakeholders in multiple areas. So, may researchers and practitioners are stating that the way out from the economic recession after the pandemic can be found from the way entrepreneurship and SMEs' contribution on economic value creation after the 2010 economic recession. S, it is paramount to catalyze entrepreneurship-oriented economic development and recovery for the global economic recession. However, how entrepreneurship has been trended and how it sustained business under given macroscopic business circumstances has not been well understood. To fill this research gap, it is vital to investigate the macroeconomic model of global trend of entrepreneurship and prospective driving forces that result in the trend of global entrepreneurship. The understanding on trend of entrepreneurship and other macroeconomic variables that influences changes of that trend could help both hospitality academia and business practitioners to anticipate future evolution of industry trend as well as to react to macro-economic impacts on the entrepreneurship trend. For these benefits, specific objectives of this study are (1) finding best model that anticipate true global entrepreneurship trend that explains how entrepreneurship can be a driving force of future economic growth, (2) figuring out socio-economic factors that affect entrepreneurship trend globally, and (3) provide key contributors on global entrepreneurship trend in SMEs segments.

LITERATURE REVIEW

Entrepreneurship

As stated ahead, many researchers have demonstrated the entrepreneurship as its newness and new business creation (Daily, McDougall, Covin & Dalton, 2002; Gurel et al., 2010; Malchow-Moller, Schjerning, & Sorensen, 2011). However, current research trend is deviated from the mainstream of entrepreneurship research. From the 21st century, it has been widely acknowledged that not only starting up a new business, but also discovering and exploiting unexploited entrepreneurial opportunities should be the foundation of creating economic success and wealth (Brown & Eisenhardt, 2000; McCline, Bhat & Baj, 2000; Shane & Venkataraman, 2000). Exploiting entrepreneurial opportunities contributes to form firms' sustainable competitive advantages (SCA) and create wealth (Ireland, Hitt & Sirmon, 2003). In accordance with this propensity in the definition of entrepreneurship, entrepreneurship is defined as the process of discovery, identification, evaluation, and exploitation of entrepreneurial opportunities (Eckhardt & Shane, 2003; Riley & Szivas, 2003).

Entrepreneurship could be defined as the process of discovery, identification, evaluation, and exploitation of entrepreneurial opportunities (Eckhardt & Shane, 2003; Riley & Szivas, 2003). Entrepreneurship has been currently acknowledged to be one of the most rapidly growing and promising field in an area of social science as a result of its growth and significance (Casson, 2005; Reader & Watkins, 2006). Entrepreneurship contributes to a series of economic attributes in current environment by emphasizing business innovativeness and strategic competitiveness, creating new types of employment, and maximizing economic wealth of economic players (Guasch, Kuznetsov, & Sanchez, 2002; Gurel, Altinay, & Daniele, 2010). Many researchers described the roles of entrepreneurship in the new business and enterprise creation (Mueller & Thomas, 2001; Zahra & Filatotchev, 2004), community and society development (Bardolet & Sheldon, 2008; Cawley & Gillmor, 2008) and socio-economic prosperity (Brandstätter, 2011).

Especially, hospitality and tourism industries have been playing a significant role in national economic growth (Dees, 2002; Li, 2008; Kim, Tang, & Wang, 2020). As hospitality and tourism industry has been traditionally characterized by a small- and medium-sized enterprise (Avcikurt, 2003; Bastakis Buhalis & Butler, 2004; Kim, Tang, Wang & Zhang, 2022), some previous researchers demonstrated that entrepreneurship is an

essential and important dimension in tourism and hospitality industry (Russell & Faulkner, 2004; Lynch & MacWhannell, 2000). Other researchers further emphasized that the dominance of small, owner-managed tourism and hospitality businesses in many countries (Tinsley & Lynch, 2007; Thomas, 2000, 2004; Shaw, 2004; Shaw & Williams, 2002) has led to recognition of the significance of entrepreneurship (Shaw & Williams, 2004). Ball (2005) demonstrated that the hospitality and tourism industries are areas where change, development, innovation are increasingly emphasized in terms of entrepreneurship. He also pointed out that it is critical to reflect the rapidly changing demands of hospitality and tourism consumers (Ball, 2005). Due to the low barrier of entry and professional qualification to startup a business, hospitality and tourism entrepreneurs have been evolving themselves more specifically to (1) become a distinctive form of agent that is able to respond quickly to customers' needs and wants as sources of differentiation and (2) identify a niche that they are more competitive in the market (Jaafar, Abdul-Aziz, Maideen, & Mohd, 2011; Russell & Faulkner, 2004).

However, still many researchers argued that entrepreneurship has been understudied in hospitality and tourism research (Ateljevic & Page, 2009; Ioannides & Petersen, 2003; Li, 2008). While Lynch and MacWhannell (2000) claim that research on entrepreneurship in hospitality and tourism industry needs to adopt approaches that are used in majority of general business research, they also pointed out that overall level of knowledge regarding the hospitality entrepreneur remains low. Especially in hospitality and tourism research, relatively little attention has been paid to the role of entrepreneurial activity (Shaw & Williams 1998). Shaw and Williams (2002) explored the importance of tourism entrepreneurship and discuss its role in understanding tourism's impact on economic development. However, it stays unclear in terms of determinants of the activities, antecedents of certain entrepreneurial venture, and other factors that are related to the entrepreneurship. Li (2008) further argued that theoretical frameworks need to be developed to expand the range of empirical examination as well as to heighten the validity of test results of those empirical examination.

Macro-economic variables that influence entrepreneurship activity

Unemployment
Entrepreneurship has been acknowledged to be a driving force of boosting up the labor force participation (Cowling & Bygrave, 2002; Laguna, 2013). Birch (1979) discovered in his study that over 80% of new jobs were being generated in small rather than large US firms so that new and young firms were the engines of growth in the US economy. Research in other countries confirmed the contribution of small firms in job creations (Acs, Arenius, Hay, Minniti, 2005; Wright & Dana, 2003). In addition, creating one's own business and self-employment as entrepreneurs also have been acknowledged as a way out of unemployment (Laguna, 2013). So, it could be hypothesized that if the employment situation gets worse, intention to pursue an entrepreneurial venture of those who are unemployed can be higher (Faria, Cuestas, & Gil-Alana, 2009). So, it is essential to consider unemployment rate when measuring entrepreneurship trend globally.

Gross Domestic Product (GDP)
Economic situations affect socio-economic business circumstances. The global fluctuations in entrepreneurship have been widely associated with the world business cycle and economic growth as well (Koellinger & Roy Thurik, 2012). Economic growth is characterized by increased output and higher household income and is reflected in growth in the gross domestic product GDP (Estelami, Lehmann, & Holden, 2001). According to previous research, entrepreneurial activity varies according to GDP (Carree, Van Stel, Thurik, & Wennekers 2007). The prevalence and economic role of diverse types of entrepreneurs may vary based mainly on economic status. However, part of this variance could be due to national conditions, and partially due to socio-economic influences. Different types of entrepreneurial activities are therefore likely to play varying roles in the economic growth (De Soto 1989). In this context, these studies have expanded the analysis to include economic growth as measured by Gross Domestic Product (GDP) (Wong, Ho, & Autio, 2005) to control macroscopic impacts that significantly affect pure intention of entrepreneurial activities. So, it is vital to consider how economic growth measured by GDP is associated with entrepreneurship in developing macroeconomic entrepreneurship trend.

Population growth
Population growth can be both a cause and a consequence of economic development (De Vries, 2000; Wennekers, Uhlaner, & Thurik, 2002). The increase in population could be interpreted as a demographic response to demand for labor created by the need to intensify subsistence production (White, 1973). All population changes occur in the long term in response to changes in the demand for labor. A population of labor force of business organizations dominated by small firms is a generic factor that have a positive impact on entrepreneurial venture (Davidsson & Wiklund, 2001; Reynolds, Storey, & Westhead, 1994). Many researchers have supported that population growth is directly related to the total labor force, the rate of nascent entrepreneurship, and feasibility and possibility of business success perceived by potential entrepreneurs (Storey, 1994; Reynolds, Storey, & Westhead, 1994; Wennekers et al., 2002). This framework posits that the size of the demand for entrepreneurship is significantly

associated with the proportion of the population that will choose independent business ownership as an occupational choice.

METHODOLOGY

Model
To make an understanding of what trend exists in the entrepreneurship development around the world after a serious economic devastation due to COVID-10 pandemic, the situation after the global economic recession in 2010 can be a great model that represent how entrepreneurship can be developed for economic sustainability and growth. For this purpose, a Latent Growth Curve (LGC, hereafter) model was employed to correctly understand macro-economic viewpoint regarding business circumstances and entrepreneurship development. LGC model in structural equation modeling is an analysis of longitudinal data with multiple waves (Bollen & Curran, 2006; McArdle, 2009). This model could determine both initial status of outcome variable and linear or non-linear changes (Preacher, 2010). By estimating initial status (mean intercept) and growth rate (slope), this study enables to figure out the trend of the growth rate anticipated in the longitudinal data (Li & Acock, 1999). Also, it is possible to include both time-invariant and time-variant covariates that affect trajectories (Curran, Obeidat, & Losardo, 2010). Base model in a series of comparison of model fit could be an unconditional linear LGC model. By comparing a series of models with different methods (conditional non-linear model) and potential time variant covariates (TVC, hereafter), this study could find out the best fitting model in overarching longitudinal trend of Entrepreneurship around world after the global economic recession in 2010, which ultimately give a role model that explains how important it is to support entrepreneurial ventures and SMEs' business development in post- COVID-19 pandemic recession.

Data collection
To investigate the underlying trend of global entrepreneurship activity, the empirical analysis mainly draws from data published by the Global Entrepreneurship Monitor (GEM) programmed by the GEM Consortium. Entrepreneurship could be measured by Total early-stage Entrepreneurial Activity (TEA). These are repeatedly measured by the total percentage of 18-64 population who are either a nascent entrepreneur or owner-manager of a new business (GEM). In this analysis, a total number of 49 countries are included and actually used. Due to a fraction and brokenness of data from 2001 to 2009, this study ended up only using 2010 to 2014 (5-year term) based on the basic notion to maximize the total number of countries counted in this study.

To precisely predict pure entrepreneurship trend, this study includes three-time variant covariates to control macro-economic business circumstances: unemployment rate, GDP growth, and population growth. These macroeconomic data of corresponding countries were collected from database of The World Bank and OECD. First, GDP growth rate refers to an annual percentage growth rate of GDP at market prices based on constant local currency. Unemployment refers to the share of the labor force that is without work but available for and seeking employment (The World Bank, 2015). Population growth (annual %) is the exponential rate of growth of midyear population from year t-1 to t, expressed as a percentage.

RESULTS

In accordance with the research purpose, this study was designed to compare (1) unconditional LGC model to conditional linear LGC with TVCs and (2) conditional linear LGC with TVCs and non-linear LGC with TVCs to find the best fitting model in terms of finding a global trend of entrepreneurship and the most influential time-variant covariates on that trend.

Unconditional LGC model VS. Conditional LGC with TVCs
Based on the result of the first comparisons, table 1 shows that conditional LGC with TVCs shows better model fit when unemployment rate and population growth were included as TVCs.

Fit indices	Unconditional LGC model	Conditional Linear LGC with Time-Variant Covariates		
		GDP growth (annual %)	Unemployment, total (% of total labor force)	Population growth (annual %)
Chi-Square(χ^2)	17.026	56.468	37.323	44.24
df^a	10 (1.703)	30 (1.882)	30 (1.244)	30 (1.475)
p-value	0.074	0.002	0.168	0.045
RMSEA	0.121	0.136	0.071	0.099
CFI	0.976	0.939	0.993	0.985
TLI	0.963	0.888	0.987	0.973

Table 1. Model comparison 1

In the maximum likelihood procedure, a chi-square test is the most common goodness-of-fit test. Several other fit indices may be required, such as the comparative fit index (CFI) (Bentler, 1990; Hu& Bentler, 1999); normed fit index (NFI) (Maruyama, 1998), and root mean square error of approximation (RMSEA) (Kline, 2005). First, conditional LGC with TVC (unemployment rate) model shows good model fit. Even p-value was still significant at the p=.05 level (p=.045), it could be understood as an acceptable level. Based on the results, two best fitting models were founded: linear LGC with TVCs (unemployment rate and population growth). RMSEA of both models are above 0.05, which means indicate mediocre fit (MacCallum, Browne, & Sugawara, 1996). Other indices of two models clearly indicate that the model fits well to the data (good model fit). So, this study was more focused on those two TVCs by comparing more sophisticated method.

First, the model with unemployment rate as a TVC, the mean intercept is 11.614 and the mean slope is .503. It means that the TEA was 11.614 in 2010 and TEA increased by 0. 503 per every year. However, the increase was not significant in this model (p=.076 > .05). However, a linear growth pattern has been observed. Second, the model with population growth as a TVC, the mean intercept is 8.732 and the mean slope is .647. It means that the TEA was 8.732 in 2010 (initial status) and TEA increased by 0. 647 every year. Also, the increase is significant in this model (p < .005), so that a linear growth pattern was confirmed.

Conditional linear LGC with TVCs VS. Non-linear LGC with TVCs
Based on the results of the second model comparisons, table 2 indicates that non-linear LGC with TVCs shows much better model fits than conditional linear LGC with TVCs models. It could be observed in the results that all of the fit indices were improved.

Fit indices	Conditional Linear LGC with TVCs		Non-Linear LGC with TVCs	
	Unemployment, total (% of total labor force)	Population growth (annual %)	Unemployment, total (% of total labor force)	Population growth (annual %)
Chi-square(χ^2)	37.323	44.240	29.153	30.147
df^a	30 (1.244)	30 (1.475)	27 (1.080)	27 (1.117)
p-value	.168	.045	.353	.308
RMSEA	.071	.099	.041	.049
CFI	.993	.985	.998	.997
TLI	.987	.973	.996	.993

Table 2. Model comparison 2

P-values of chi-square of both Non-linear LGC with Unemployment total and Population growth are insignificant and RMSEA of both of those models also shows good model fit and better than Linear LGC model. So, it could be concluded that non-linear LGC with TVCs model was better to be used in terms of the interpretation power and statistical significance in this study.

Parameter		Standardized estimates			
		Unemployment rate		Population growth	
Λ(Lambda)		Linear LGC model	Non-linear LGC model	Linear LGC model	Non-linear LGC model
Eta 0 (η_0)	→ TEA10	.955	1.201	.891	.920
	→ TEA11	.917	1.158	.822	.835
	→ TEA12	.949	1.177	.853	.882
	→ TEA13	.899	1.170	.816	.836
	→ TEA14	.914	1.189	.800	.842
Eta 1 (η_1)	→ TEA10	.000	.000	.000	.000
	→ TEA11	.110	.743	.107	.394
	→ TEA12	.227	.693	.223	.286
	→ TEA13	.322	.837	.320	.493
	→ TEA14	.437	.818	.418	.475
Γ(Gamma)	→ TEA10	-.132	-.098	.322***	.374***
	→ TEA11	-.075	-.122	.289***	.168
	→ TEA12	-.141	-.146	.261**	.263**
	→ TEA13	-.135	-.136	.081	.034
	→ TEA14	-.164	-.125	.151	.170

Table 3. Standardized estimates of both linear and non-linear LGC model

According to the linear models with TVCs included, this result indicated that an overall increase in TEA over time existed. Table 4 clearly indicates that all of the mean intercepts and mean slopes values showed mediocre levels of statistical significance. So, this study could find a different magnitude and pattern of each estimation. Non-linear model could explain different variance that used to be underlid in terms of the linear pattern that was estimated.

TVCs	Model	Eta	Estimate	S.E.	C.R.	P
Unemployment rate	Linear	Intercept	11.614	1.581	7.344	***
		Slope	.503	.284	1.774	.076
	Non-linear	Intercept	11.083	1.614	6.865	***
		Slope	1.942	1.039	1.869	.062
Population growth	Linear	Intercept	8.732	.935	9.338	***
		Slope	.647	.173	3.749	***
	Non-linear	Intercept	8.169	.942	8.670	***
		Slope	2.960	.675	4.386	***

Table 4. Intercepts and slopes of both linear and non-linear model with TVCs

With unemployment rate as a TVC, the mean intercept is 11.083 and the mean slope is 1.942. It means that the TEA was 11.083 in 2010 (initial status) and TEA increased by 1.942 every year. Also, the increase is significant in this model ($p < 0.1$), which confirms a linear growth pattern. With population growth as a TVC, the mean intercept is 8.169 and the mean slope is 2.960. It means that the TEA was 8.169 in 2010 (initial status) and TEA increased by 2.960 every year. Also, the increase is significant in this model ($p < 0.01$), which confirms a linear growth pattern.

However, unlike linear models, non-linear models indicated that while an overall increasing trend was observed, some periods experienced decreases. Below, figure 1 illustrates these trends. These non-linear models illustrated a largely linear trend, but also included some inflections in non-linear model.
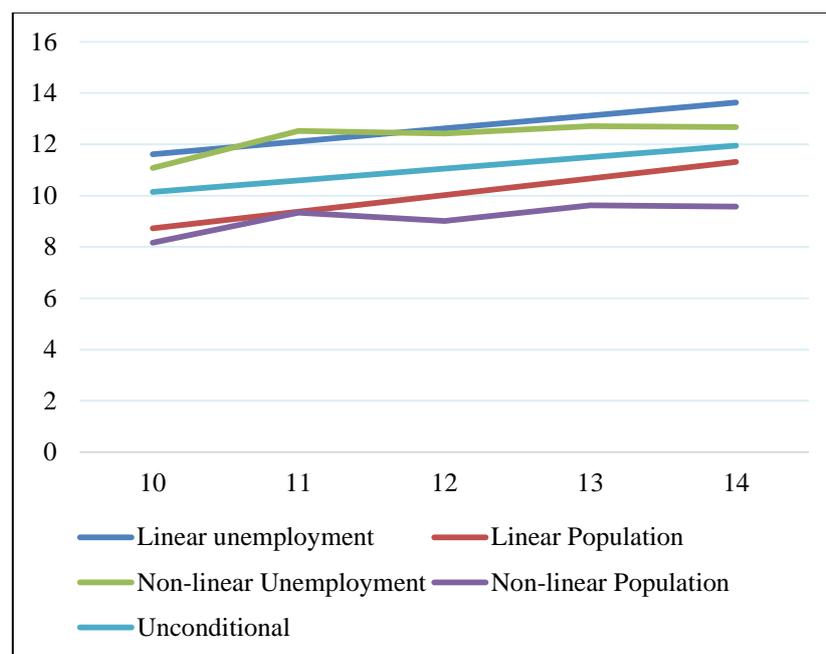

Figure 1. Trend of Entrepreneurship

These non-linear models illustrate a largely linear trend, but importantly, also includes some inflections in non-linear model. This finding indicates that, after accounting for TVCs (unemployment rate and population growth), an overall increase in TEA over time was observed. Importantly, the graphs of the trend over time (and the improved model fit) suggest that the inclusion of the free parameters more accurately represented the data and changes in TEA over time were non-linear LGC model. This may indicate that the increase in TEA seen over time in an unconditional LGC model is fueled by reductions in labor force participation.

CONCLUSION

Entrepreneurship activity has long been understood and acknowledged as a new business trend that drives economic growth and employment opportunities. This new paradigm of revered trickle-down effect enables many small businesses to be core contributors of global economy. However, research dearth failed to fully support the fact that entrepreneurship is an upward trend no matter what business circumstances are applied to the business activities. Even in the business economy recovery mode in 2010 through 2014, entrepreneurship has been a strong

root for economic value creation and driving force of economic recovery, which can give a hint for global businesses and governments. This study successfully proves the trend of global entrepreneurship trend by controlling multiple macro-economic time variant covariates. This approach empirically and statistically crystalizes the fact that entrepreneurship is not a short-term fed that just reflects temporary geo-locational and socio-economic factors, but a trend that presumes future growth potential under a given business recovery mode environment. This study found that unemployment and population are two statistically significant time variant covariates when estimating entrepreneurship trend slope.

In addition, each year different macro, meso, and micro factors affect business environment differently. So, this study applied non-linear conditional model to precisely predict and estimate entrepreneurship trend as well.

Based on these results, entrepreneurship was found to be a sustainable economic driving force during the recovery period after the great recession in 2010, which allows researchers to concrete the idea for future growth under macroscopic economic impacts after the recession in post pandemic period. This finding further enables researchers to support the notion that more entrepreneurial SMES can create economic and social values that can be shared with multiple stakeholders that are geo-spatial-temporally unlimited when in the recovery mode from the COVID-19 pandemic. Especially, devastating business circumstances in service, hospitality, and tourism industry can be main bodies that encourages and support SMEs' business development as well as entrepreneurial venture.

To further explain a global entrepreneurship trend, multiple future research topics can be suggested. First, future research should be based on various theoretical papers in different disciplines that deal with numerous attributes of entrepreneurship. Inter-discipline approach can help strengthen understandings of hospitality and tourism entrepreneurship with higher generalizability and validity. Second, research of entrepreneurship in hospitality and tourism is a lack of holistic model circumscribe various relevant variables. As Li (2008) found out from her review, majority of hospitality and tourism entrepreneurship studies are more focused on simple regressional relationship by applying t-test, ANOVA, or multiple regression analysis. However, only 1.3 % of all entrepreneurships papers in top six academic journals in hospitality and tourism industry applied structural equation modeling technics (Li, 2008). So, it will be more meaningful to draw an overarching construct that is more valid and reliable to predict entrepreneurship or intention to pursue entrepreneurship more precisely. Structural equation modeling could be a proper approach to deal with a holistic model of entrepreneurship.

Lastly, new contributing business dynamics should be further explored. One of the key factors that contribute to the global entrepreneurship trend is a concept of micro-entrepreneurship using P2P business platform and sharing economy platform. Increasing global entrepreneurship propensity can be explained by diversified entrepreneurship opportunities as well as low entry barriers resulted from the technological advance with multiple business platforms. Even though traditional entrepreneurship has long been acknowledged to be a new driving force of economic development and employment (e.g. Bardolet & Sheldon, 2008; Baron, 2007; Malchow-Møller, Schjerning, & Sørensen, 2011), the emergence of internet since the mid-1990s provides a new paradigm of business economy so that the public could have more flexible opportunities to involve into new types of entrepreneurship. Many unexperienced prospective entrepreneurs seek an innovative business platform which could alleviate potential risk that a traditional business start-up has. Sharing economy, widely known as a new wave of business platform in peer-to-peer markets, has emerged as an alternative format of consumption and distribution. It also offers a novel venue for the people with limited business experience to involve into entrepreneurship by using existing sources (Böckmann, 2013). As defined, peer-to-peer sharing economy platforms generate a new form of entrepreneurs who supply and exchange resources, products, and services for profit (Sundararajan, 2014; Fraiberger & Sundararajan, 2015).

Based on the thorough review of previous literatures related to entrepreneurship, factors that are directly related to an entrepreneurship are found to be explained through complexed and multidimensional perspectives of hospitality and tourism industry; 1) economics and financial aspects, which is more oriented from the economic rationality and financial feasibility, 2) social and psychological aspects, which is more focused on individuals' characteristics, traits, passion motivation, and propensity and intention to pursue entrepreneurship, and 3) managerial attributes, which is the theoretical foundation of making a right decision by following rational process based on knowledge, information, and human resources. Many researchers have tried to prove the best dominant theoretical model in terms of antecedents and consequences of entrepreneurship (Veciana, 2007; Ramos-Rodríguez, Medina-Garrido, & Ruiz-Navarro, 2012). In this context, it could be a reasonable future research topic about entrepreneurship model that includes three different capital resources named social, intellectual, and financial capital to pursue entrepreneurship could be likely more plausible and reliable one in terms of overarching holistic relationships of factors that are likely to influence entrepreneurs' intention and pursuit.

DISCUSSION

This study makes a theoretical contribution by investigating macro-perspective entrepreneurship trend. This study was the first attempt to empirically demonstrate the trend of entrepreneurship and its association with macroeconomic variables. First, LGC model enabled this study to draw the most recent five-year global trend of

entrepreneurship. In this study, gradual increase pattern of entrepreneurship was found. By adding time-variant covariates, this study could enhance the effects of macroeconomic variables on the pattern and trend of entrepreneurial venture. Especially, this study found out that unemployment rate and population growth enable this study to explain wider variance.

Multiple practical implications can be proposed. This study revealed that unemployment rate and population growth were significant macroeconomic variables in a trend of entrepreneurship. Based on these findings, academia needs to educate students to precisely predict the status of economy and job market. By strengthening macro-perspectives toward the current economic trend, entrepreneurship needs to be dealt more significantly to educate those who are in or planning to be in a job market.

GDP growth rate dose not benefit the explanation of entrepreneurship trend. Yet this does not mean that GDP growth rate is not associated with entrepreneurship; rather, entrepreneurship is associated with unemployment (van Stel, Carree, and Thurik 2005). It will be important to exploit scale economies, to promote the development of new entrepreneurial venture, and to strengthen the management education to be successful in currently vulnerable and evolving economy (Wennekers, van Stel, and Thurik 2005; Valliere & Peterson, 2009).

However, this study tested only three macroeconomic variables as time-variant covariates. It is meaningful to assess wider array of macroeconomic variables as time-variant covariates, such as consumer price, poverty rate, and population density. Also, this study could not test any time-invariant covariates, such as gender, age, experience, and/or nation. Adding time-invariant covariates could enrich the variance explained by a proposed model, as well as enable to figure out any group differences existed in the sample. This study didn't test a reversed relationship between GDP growth and TEA or any other intermediary in between GDP and TEA. It will be a promising future research topic to specify roles of GDP growth in terms of entrepreneurship. Hospitality industry is heavily relying on macroeconomic situation. So, by drawing a trend of entrepreneurship, business academia needs to deepen comprehensive knowledge and understanding regarding reaction and future direction of hospitality entrepreneurship.

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