**Development of Halal Tourism Destinations to Improve Economic Growth**

Zusmelia Zusmelia, Ansofino Ansofino*, Yossi Ekaputeri, Nilma Desrirosya
Economic Department
STKIP PGRI Sumatera Barat
Padang, West Sumatra, Indonesia
*ansofino@stkippgri-sumbar.ac.id

**Abstract**—The focus of the research is to explain the types and diversity of creative industry businesses, the creative economy, interacting with each other in forming their business networks, creating business agglomeration. The research method is the panel data method with five destination regions during the 2015-2017. The estimation method uses Pooled least square (PLS) and fixed effect method (FEM). The results showed that the most dominant form of creative industry business in West Sumatra was the super creative business group, accounted for 74% of the total creative industry workforce. There is Creative professional groups more or less reach 26%. The largest is spread in the city of Padang and Bukittinggi. Changes in the concentration of industrial clusters have a positive impact on regional innovation and economic growth, an increase in the intensity of the use of R&D has a positive impact on regions with concentrations of industrial clusters, a negative impact on regions that do not yet have a creative industry cluster. The more agglomeration of industrial business is created due to the creative industry business cluster. Conversely, if industrial clusters are not yet formed, it will have a negative impact on regional innovation and regional economic growth.

**Keywords:** creative industries, regional innovation, economic growth

I. INTRODUCTION

Planners of economic development have long believed that agglomeration of economic activity in a development space leads to an increase in productivity and output of the economy [1], thereby in turn increasing regional economic innovation and growth. [2]. Regional development is an effort to create development spaces that interact with each other, based on inter-regional dependency, the stronger the inter-regional linkages both in the physical linkages of the region through the development of regional connectivity to improve regional accessibility, as well as the interrelationships of input and output produced between regions, the more agglomeration the economy is built, and the more developed and developed a development area [3,4].

Analysis of economic interactions in an economic space has long been carried out with the scope of "external economic of scale" especially by Marshall (1890), Hoover (1948), Fujita (2008) [5,6]. This concept firmly states that the exchange process in the market which is based on price interactions among market participants, has been able to encourage an increasing return, the external economic of scale which creates agglomeration will be more efficient. The existence of economic agglomeration is an engine for economic growth and regional innovation [2,7]. Measurement of economic agglomeration can be done in three ways namely: specialization, diversity and density [8,9].

Measurement of agglomeration in the creative industry and creative economy and its impact on regional economic growth can be done through external localization [5], pecuniary externality [10], competitive advantage cluster [2]. Creative economy region and creative industry in West Sumatra province is tourism region is a growth engine for the development of tourism destinations that will encourage the development of innovation and economic growth in the region of West Sumatra, so this research wants to focus on whether the impact of the creation of creative economic clusters and industry clusters creative in the main tourism destination region can produce innovation and economic growth in the West Sumatra region?

According to Florida, economic and industrial creativity has been a driving instrument for regional economic growth, the presence of a climate of openness, tolerance, and diversity has made zones (tourism destinations) more attractive to individual talents, creative economy entrepreneurs and community organizations to make innovations in its products in welcoming the presence of tourists visiting the region [11].

In the main tourism destination, creative industry, creative economy and creative culture businesses gather together in synergy to form a business network for the needs of tourists who come, so that agglomeration is built. According to Wolfgang, agglomeration originally originated from the term engineering is the gathering together of elements (particles) with increasing size forming clusters, then this understanding also applies to business people in the creative industry, creative
economy and creative culture to gathering together in the area of tourist destinations to form a business network that is getting bigger and stronger in serving the needs of tourists, on culinary, clothing and souvenirs [9]. The parameters to determine the strength of the agglomeration of the efforts of the creative industries, creative economy and creative crocodiles are: the first size of the business of creative industries, creative economy and creative culture, business distribution, service areas, and forms of business. Second size of agglomeration, distribution and shape, three density of creative industry business people, creative economy and creative culture, four Strength of agglomeration [9,12].

The concept of agglomeration of this technique has then been adopted by the science of planning rural and urban development. Industry agglomeration modelling developed after the work of Marshallian externality's fundamental economists, which involved a collection of labour (labour pooling), the dissemination of knowledge (knowledge spill overs) and specialized input (specialized inputs). The size of the creative industry cluster, creative economy and creative culture is very dependent on three different forces namely: the size of the economic location, the intensity of price competition and the level of transportation costs [13]. Full or partial agglomeration of creative industry, creative economy and creative culture business actors in a tourism destination region occurs when the transportation costs are low and when the products sold or produced are different and when the localization of the economy is strong enough.

This research focuses on how the relationship between creative industries, creative economy and creative culture with the creation of economic agglomeration in tourist destination areas in West Sumatra, knowledge, innovation, entrepreneurial and creative skills and art initiative from creative business actors are able to build business networks of creative, economic industries creative and creative culture in the halal tourism destination in West Sumatra, will be able to encourage the development of tourist destinations with the increasing number of households around this tourism destination earning income from tourism activities, so that in turn able to encourage regional economic growth [13,14]. The novelty of this research lies in how to identify the creative economy in the tourism region, and how this creative economy business forms its business network.

The main issues to be examined are: 1). What are the forms and types of creative industry businesses and the creative economy and creative culture in the main tourism destination in West Sumatra? 2). How do the various types and diversity of creative industry businesses, creative economics, and creative culture spread, interact with each other in forming their business networks, or creating business agglomeration?, 3). How is the interrelation and business network that forms this agglomeration able to encourage household income in the creative industry, creative economy and creative culture businesses and in turn able to encourage economic growth in the West Sumatra region?

II. METHOD

This study uses panel data analysis method with three cross section data consisting of five main tourism destinations in West Sumatra, namely: Mentawai, Padang, Bukittinggi, Tanah Datar, and Sawahlunto. Three time period data analysed from 2015 to 2017. The dependent variable in this study is regional innovation by generating added value in the creative industries, in this case the data is in the form of a difference in the value of small and medium enterprise production (MSMEs), with the value of inputs or raw materials.

The independent variable in this study consists of the level of concentration of creative industries (CIC) which is the ratio between the numbers of creative industry businesses with the area of the main destination visited, Yu et al. with the following formula [2]:

$$CIC_{index} = \frac{R}{A}$$  

Where Ri shows the number of creative industries in the i destination region, while Ai is the i destination area. The greater the creative industry business, it will be realized that this destination region is the area of creative economic business concentration among the main tourism destinations in West Sumatra.

There are three types of panel data tested namely Pooled Least Square (PLS) and Fixed Effect (FE), and Random Effect (RE) methods. The assumption used for the fixed effect test is that the diversity of individual destination innovations for the creative economy that is not observed correlates with a number of characteristics that are not observed. While the assumption for the RE method is the diversity of characteristics that are not observed is not correlated with the characteristics observed. Determination of whether the panel data testing model for innovation in the West Sumatra tourism destination region is in Pooled, FE or RE, then the Chow-likelihood ratio test and Hausman Test are used [15]. Based on the variables used in this study, the model in this study takes the following form:

$$\text{Ln}(Y_{it}) = C + \text{Ln}(CIC_{it}) + \text{Ln}(FDI_{it}) + \text{Ln}(KL_{it}) + \text{Ln}(SCA_{it}) + \text{Ln}(R&D_{it}) + \varepsilon$$  

Where Yn is the growth of innovation and regional value added growth and CIC is a cluster of creative industries, FDI is a direct investment, KL is the ratio of capital per household of creative economic actors, SCA is a scale of creative economic endeavours, and R&D is the intensity of the results of research and development.

III. RESULTS AND DISCUSSION

A. The Emergence of Creative Groups in the West Sumatra Society

Changes in community economic development towards a more prosperous and happy have been believed to be more triggered by the awakening of individual creativity in the community. Creativity has been seen as important in economic development because it is able to improve new technologies
and industries and even new capital wealth for groups of people who own it such as talents, democratic attitudes, tolerance for diversity, all of which are social capital within and between social groups, which give birth to ethos and creative culture. According to Florida, there has been an increase in the quality of human resources through creative ethos, in areas that have a concentration of this creative ethos, such as in urban centres and tourist destination areas [11,16]. The greater the group of creative workers in an area, the more open this region is and the faster the development of its economic progress.

The group of creative workers who are moving the creative economy has started to grow and develop in the tourist destinations of West Sumatra, in 2018 it has reached 1,564,612 people consisting of super creative and creative professional groups. The super creative group have reached 74% of creative industry workers in Sumatra West, See figure 1.

![Comparison of Super Creative Groups and Creative Professionals in West Sumatra 2018](image)

Fig. 1. Comparison of super creative groups and creative professionals.

Creative professional groups consisting of finance and business workers, managers, advocates or legal workers, nurses, technicians and sales, all accounted for 26% of all creative workers that existed so far. This figure is indeed still relatively small, when compared with the population of West Sumatra, which reaches more or less five million people. Among the largest super creative groups are educator workers, researchers and trainers and media, arts, sports and design workers. While among the most dominant creative professional groups are the sales group, nurses and technician workers. The largest creative groups are found in Padang City, Agam, Padang Pariaman, Tanah Datar and Lima Puluh Kota, among the most dominant creative groups are sales workers, educators, researchers, media workers, arts, sports and entertainment, see table 1. Among the regencies, Agam, Tanah Datar, Padang Pariaman Pesisir Selatan regencies are the regions that have the most prominent creative groups, while for the most prominent urban areas are found in Bukittingi, and Payakumbuh cities.

The size of the creative group is correlated with the economic progress of the region, especially in terms of the per capita income of the district and city. Regions that have large creative groups are found to be related to the high per capita income of the region. According to Romer, economic creativity has encouraged not only creating competition in comparative and market advantage, but also greater progress in the socio-economic life of society [17]. Human creativity (human creativity) is not only limited to technological innovation, or new business models, but it is diverse and multi-dimensional.

Creativity is related to differences in habits of thought (habits of mind) and behaviour patterns that must be instilled in both the individual base and the community. According to Florida [11,19]. Creativity is multi-dimensional and diverse experiences. Creativity is formed by intellectual abilities that are enriched by a diversity of experiences and perspectives. It is related to the mind that looks a variety of attention and knowledge. The diversity of creativity is as follows: Technology creativity (invention), creativity economy or (entrepreneurship), Artistic and cultural creativity. Intrinsic motivation is conducive to fostering creativity, not just money. But external motivation actually inhibits creativity. Although creativity is often seen as an individual phenomenon, it is an inevitable social process. Creativity develops well in unique social environments. There are four key characteristics of time and place where creativity develops well [15,20]. Domain of Activity, Intellectual Acceptance, Ethnic diversity, Political openness.

The data shows that diversity turns out to be correlated with the number of creative workforce in the district and city areas. In regions with high diversity, the number of creative workers also shows a high trend. Padang City is the most diverse city, especially in terms of religion and culture. Outside of Padang City, it turns out that the districts of South Pesisir, Agam and Padang Pariaman also have a high level of ethnic diversity, on the other hand in the latter district also has a high number of creative workforce.

![Comparison of Diversity with the West Sumatra Creative Industry Workforce](image)

Fig. 2. Interconnected diversity with the level of creativity.

In Figure 2, shows that the districts in West Sumatra are far more diverse than their urban areas except Padang. This diversity is mainly seen from ethnicity and religion. There are four districts that have high diversity, namely the South Pesisir, Agam, West Pasaman districts, and the Solok and Padang Pariaman districts, mostly in terms of ethnic diversity originating from the Batak and Javanese tribes, because this area has been a transmigration location since the past. While the cities in the province of West Sumatra, the diversity is relatively small compared to the district, this is because the source of diversity comes only from ethnic Chinese as intermediary traders. It is rare to find intermediary traders from other ethnic groups.
B. Impact of Creative Industry Clusters on Regional Innovation and Growth the Economy

The creative industry index measures the ratio between the number of creative industry businesses and their area. The highest creative industry cluster index in the province of West Sumatra is highest in the cities of West Sumatra compared to the regency, especially Bukittinggi City, Padang Panjang, Payakumbuh, Padang City, Pariaman City and Solok City. Meanwhile, these cities are the most crowded tourist destination areas visited by domestic and foreign tourists. So it can be said, the more crowded the number of tourist visits and the more accumulation of people, the greater the creative economy.

Based on Figure 3 above, the Mentawai archipelago has the lowest number of creative economic ventures, as well as for the cities of Sawahlunto and Tanah Datar, these three regions are the main tourism destinations of the province of West Sumatra, but the number of creative economic ventures is still underdeveloped. Therefore, it is necessary to explore the potential of the local culture and household economy for this creative economic endeavour, bearing in mind that this area is a centre for tourists visiting the foreign and the domestic tourists.

In Model 1 of the FEM method, changes in all variables such as CIC, investment, capital ratio per population, number of creative industry businesses and the intensity of R&D have the greatest impact on regional innovation in the tourist destinations of Bukittinggi by (1.55 + (-1.74)) amounted to 0.19 units. The biggest and positive impact was found in the city of Padang of (1.55 + 1.02) was 2.57 units. Changes in the CIC concentration variable as a whole were 9513.77 units, the recipient of the changes the biggest was Padang City with 9514.79 units and Bukittinggi had an impact of 9512.03 units. The impact of CIC changes on the largest regional innovation system was received by creative industry clusters located in the tourist destinations of Padang, Bukittinggi and Sawahlunto, meaning that the three main tourist destination areas are more concentrated centres of creative industries when compared to the two tourist destinations in the Mentawai islands and Tanah Datar district.

![Fig. 3. The magnitude of the creative economy index by major cities in West Sumatra in 2018.](image)

![Fig. 4. Impact of changes in the concentration of creative industry clusters on regional innovation and economic growth.](image)

| TABLE I. | ESTIMATED RESULTS OF FIXED EFFECT IN THE 2015-2017 TIME PERIOD |
|----------|-------------------------------------------------------------|
| Independent Variable | Dependent variable: Regional innovation / Industrial value added growth | Dependent Variable: Regional economic growth |
|                  | PLS | FEM | PLS | FEM |
| Creative industry cluster (CIC) concentration level | 8197.80 (6.69) | 9313.77** (10.73) | -5.11* (2.18) | 3.85 |
| Investment in the creative industry | -1.093 (0.66) | -2.43* (2.18) | -2.34** (2.84) | -8.61 |
| Capital ratio per population | 295884.6 (0.17) | -13140375** (2.98) | 0.0054** (20.39) | 0.0011 |
| The number of MSME companies that produce creative industries | -60624.21 (0.17) | 324302.1 (1.32) | 0.0005** (3.02) | -0.0002 |
| R&D Intensity | -6078416 | - | -0.002 (0.13) | 0.0075 |
| R² | 0.9986 | 0.9997 | 0.2754 | 0.9984 |
| Adjusted R² | 0.9968 | 0.9998 | 0.0145 | 0.9924 |
| F Statistik | 556.45 | 1142.70 | - | 166.48 |

Note: ** significant at 5% and * significant at 10%
Source: Result Analysis, 2019

The test results for the first fixed effect model (FEM) in the time period from changes in regional innovation through increasing the added value of the creative industries, using the Likelihood ratio (LR) method, the calculated value X² = 20.21 is far greater than the X² table, so it is significant that this model is more precisely analysed by the fixed effect method. In model two, the LR value, X² = 60.39 is very significant at all test levels of 1%, 5% and 10%, so that the fixed effect model is the most appropriate model in estimating CIC on economic growth in the destination area.
Figure 4 illustrates that the concentration of creative industry clusters (CIC) in the main tourism destination areas of West Sumatra has a positive impact on economic growth, especially the greater impact on the cities of Padang and Bukittinggi, this in line with the results of Wentao's research, Yu et al in the China region [2], however, the impact on the regional innovation system has not been evenly distributed among the main tourist destination regions, this is what needs to be encouraged, so that the creation of added value for creative industries needs to be increased especially in destinations Tanah Datar tour and the Mentawai islands.

The impact of changes in the number of MSME-scale creative businesses, changes in investment originating from induced investment, changes in the ratio of capital to the number of residents in the destination region turned out to be inversely proportional to the increase in regional innovation, which in this case is a change in the value-added of the creative industries of the main tourist destination. This implies that the number of MSME-scale creative industry businesses has not adopted new technological changes both in input and in processing, even after production, so that changes to the products produced have not been able to encourage regional innovation so far. This is in line with the research of Zusmelia et al, which states that the spirit of entrepreneurship in women Minangkabau traders grows in the first generation, generational change tends to decrease, presumably this is due to lack of responsiveness to technological changes, so that many creative industries in MSME scale businesses which was initiated by the household experienced a setback after the second generation [21]. According to Ansofino, the increase in added value of snack products in the tourist destinations of West Sumatra has not yet occurred because intermediate inputs, especially in the supply of packaging raw materials, are still imported from outside the region of West Sumatra [22].

In the Mentawai, Tanah Datar, Padang, Sawahlunto and Bukittinggi, this in line with the research of Zusmelia et al, which states that the spirit of entrepreneurship in women Minangkabau traders grows in the first generation, generational change tends to decrease, presumably this is due to lack of responsiveness to technological changes, so that many creative industries in MSME scale businesses which was initiated by the household experienced a setback after the second generation [21]. According to Ansofino, the increase in added value of snack products in the tourist destinations of West Sumatra has not yet occurred because intermediate inputs, especially in the supply of packaging raw materials, are still imported from outside the region of West Sumatra [22].

Fig. 5. Impact of R&D intensity on regional economic growth.

The positive impact of the intensity of the use of the results of research and development seen from the use of internet access to the development of creative industry businesses in the main tourist destination areas on economic growth is only found in the tourist destinations of Padang and Bukittinggi, while in the Mentawai, Tanah Datar and Sawahlunto areas have a negative impact, see figure 5.

In the Mentawai region, the use of R&D intensity is actually inversely proportional to economic growth, this is thought to be caused by creative industry businesses not yet fully using internet-based information and technology, so that the intention to use the internet not for the purpose of developing creative industry businesses actually decreases productivity which results in a decline economic growth and vice versa. In contrast to Padang City and Bukittinggi, the use of R&D intensity actually increases regional innovation and economic growth, because creative industry products such as fashion, culinary require sources of ideas and information and creations from various sources obtained from this internet site. This is what drives positive economic growth. According to Anderson et al, agglomeration is driven by the creation of external knowledge that develops within the arts worker group [23].

The impact of changes in the number of creative industry businesses on regional economic growth, the most positive in the City of Padang and Bukittinggi, and a negative impact on the Mentawai Islands and Tanah Datar and Sawahlunto regions, this is due to the arrangement of creative industry businesses, especially in the main tourist destination areas more organized and concentrated in the cities of Padang and Bukittinggi and are still sporadic in the Mentawai, Tanah Datar and Sawahlunto islands. Therefore, determining the location and convergence of locations for MSME-scale creative industry businesses needs to be done in this final destination.

IV. Conclusion

The most dominant forms of creative industry businesses in West Sumatra are their super creative business groups, most of whom are Educator Workers, Librarians, Trainers and researchers, besides that there are also arts, sports and entertainment media workers who all account for 74% of the total creative industry workforce. Creative professional groups consisting of technical workers, salesman nurses more or less reach 26%. The largest is spread in the city of Padang and Bukittinggi.

The concentration of creative industries in West Sumatra is more scattered in the cities than in the districts, in terms of the potential for the development of creative industries in the district because it has ethnic, cultural and religious diversity. The highest creative industry cluster index figures are in Padang and Bukittinggi and other cities. This is different from the findings of Richard Florida which states that one of the triggers for the emergence of creativity is due to diversity [11]. However, the results of this study indicate that the concentration of population and tourists is the most dominant determinant of the success of the creative industries in West Sumatra.

Changes in the concentration of industrial clusters have a positive impact on regional innovation and economic growth in the main tourist destination provinces, on the other hand an increase in the intensity of the use of R&D has a positive impact on regions with concentrated industrial clusters, but instead has a negative impact on regions that do not yet have creative industry clusters that lead to creation agglomeration.

The more agglomeration of industrial business is created due to the creative industry business cluster, the more positive it is on economic growth. Conversely, if an industrial cluster
has not yet been formed, it will have a negative impact on regional innovation and regional economic growth.

REFERENCES

[1] R. Andersson, J.M. Quigley, and M. Wilhelmsson, “Agglomeration and the spatial distribution of creativity,” Pap. Reg. Sci., vol. 84, no. 3, pp. 445–464, 2005.
[2] W. Yu, J. Hong, Y. Zhu, D. Marinova, and X. Guo, “Creative industry clusters, regional innovation and economic growth in China,” Reg. Sci. Policy Pract., vol. 6, no. 4, pp. 329–347, 2014.
[3] M. Pflüger and J. Südekum, “Integration, agglomeration and welfare,” J. Urban Econ., vol. 63, no. 2, pp. 544–566, 2008.
[4] S.B. Billings and E.B. Johnson, “Agglomeration within an urban area,” J. Urban Econ., vol. 91, pp. 13–25, 2016.
[5] J.V. Henderson, “Marshall’s scale economies,” J. Urban Econ., vol. 53, no. 1, pp. 1–28, 2003.
[6] P. Robson, Economic integration in Africa. UK: Routledge, 2012.
[7] B. Johansson and J.M. Quigley, “Agglomeration and networks in spatial economies,” Pap. Reg. Sci., vol. 83, no. 1, pp. 165–176, 2003.
[8] J. Tao, C.Y. Ho, S. Luo, and Y. Sheng, “Agglomeration economies in creative industries,” Reg. Sci. Urban Econ., vol. 77, pp. 141–154, 2019.
[9] W.B. Pietsch, Agglomeration processes: phenomena, technologies, equipment. Germany: John Wiley & Sons, 2008.
[10] P.P. Combes, G. Duranton, and H.G. Overman, “Agglomerasi and the adjustment of the spatial economy,” Reg. Sci. Policy, vol. 84, no. 3, pp. 311-349, 2005.
[11] R. Florida, The Rise of the Creative Class, Revisited. Philadelphia, USA: Basic Books, 2012.
[12] G. Buenstorf and S. Klepper, “Heritage and Agglomeration: the Akron Tire Cluster Revisited,” Econ. J., vol. 119, pp. 705–733, 2009.
[13] P. Belleflamme, P. Picard, and J.F. Thisse, “An Economic Theory of Regional Clusters,” J. Urban Econ., vol. 48, no. 1, pp. 158–184, 2000.
[14] P. Almeida and B. Kogut, “Localization of Knowledge and the Mobility of Engineers in Regional Networks,” Manage. Sci., vol. 45, no. 7, pp. 905–917, 1999.
[15] J. Bai, “Fixed-Effects Dynamic Panel Models, a Factor Analytical Method,” Econometrica, vol. 81, no. 1, pp. 285–314, 2013.
[16] S.S. Rosenthal and W.C. Strange, “The attenuation of human capital spillovers,” J. Urban Econ., vol. 64, no. 2, pp. 373–389, 2008.
[17] P.M. Romer, “Endogenous technological change,” J. Polit. Econ., vol. 98, no. 5, pp. S71–S102, 1990.
[18] H. Nyström, “The postmodern challenge – from economic to creative management,” Creat. Innov. Manag., vol. 9, no. 2, pp. 109–114, 2000.
[19] J. Merkel, “Richard Florida: The Rise of the Creative Class,” Schlüsselwerke der Stadtforschung. pp. 69–90, 2016.
[20] J. Hartley, J. Potts, S. Cunningham, T. Flew, M. Keane, and J. Banks, “Creative Class,” Key Concepts Creat. Ind., pp. 48–51, 2017.
[21] Z. Zusmelia, D. Darizal, and E. Yeni, “Model Pengembangan Entrepreneurship dalam Pemberdayaan Ekonomi Ramah Tangga di Minangkabau,” Mimbar, vol. 28, no. 2, pp. 125–134, 2012.
[22] A. Ansofino and Z. Zusmelia, “Agro Bussines Development Nexus Tourism In West Sumatera Province,” Mimb. J. Sos. dan Pembang., vol. 35, no. 1, pp. 57–68, 2019.
[23] Å.E. Andersson, D.E. Andersson, Z. Daghbashyan, and B. Härsman, “Location and spatial clustering of artists,” Reg. Sci. Urban Econ., vol. 47, no. 1, pp. 128–137, 2014.