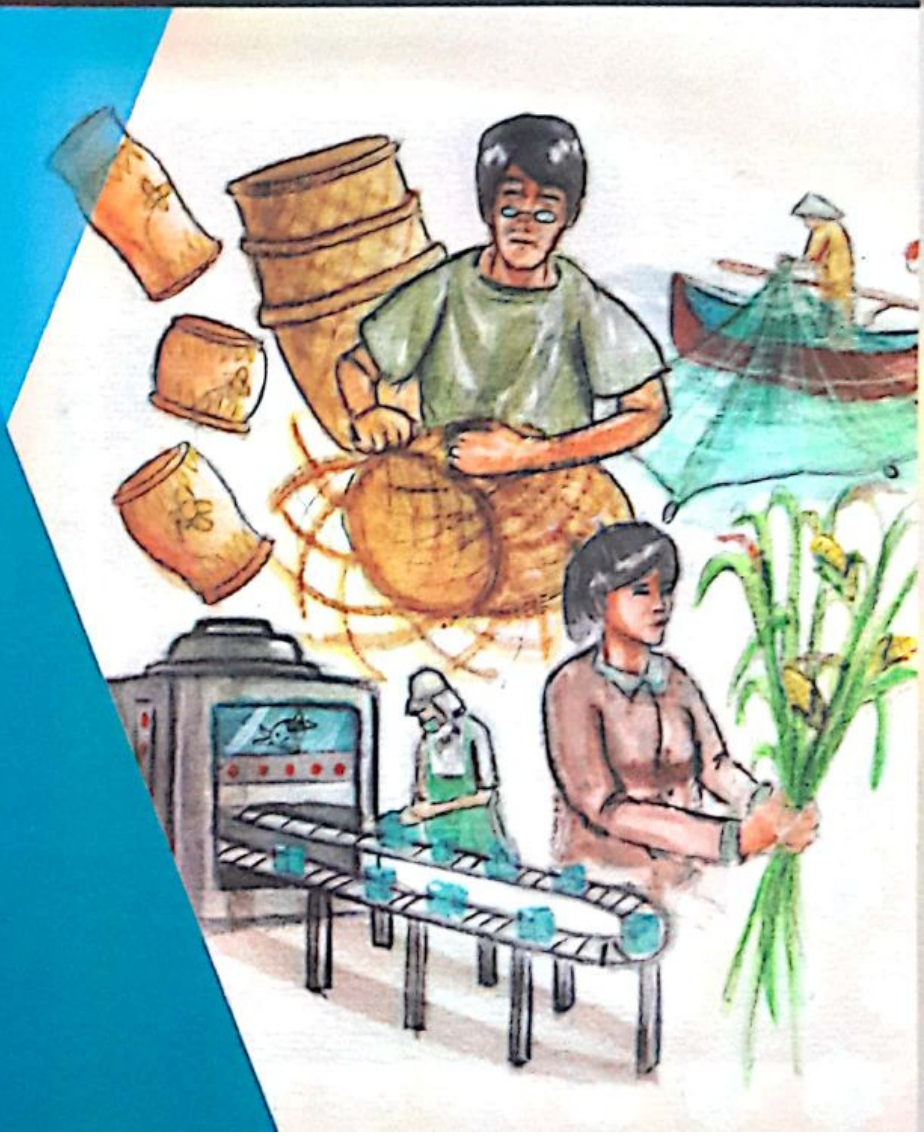
STRENGTHENING REGIONAL AND LOCAL ECONOMY



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CHAPTER FOUR

CULTURAL CREATIVE INDUSTRIES MODEL FOR FINANCIAL INCLUSIVENESS: EVIDENCE FROM SMALL AND MEDIUM ENTERPRISES IN WEST SUMATERA

Widya Fitriana, Ernan Rustiadi, Akhmad Fauzi
and Lukytawati Anggraeni

INTRODUCTION

The concept of creative industry firstly developed in Indonesia along with the changes of global economic trends that enter the fourth economic wave which is known as the era of creative industries. Today, the basis of economic development no longer relies on the richness of natural resources but more on individuals' ideas, creativity, and skills as an endless and renewable development resource. The creative industry in Indonesia strongly contributes to the economy and employment. Based on statistical data of 2015, the creative economy contributes 7.1% to the national GDP, even its growth reaches 5.76% which is higher than the average of national economic growth 5.74%. From the labor side, this sector is able to absorb 10.7% of the national workforce with 9.7% of total business units. It proves that the creative industry has a great potential to be developed (Indonesia Statistics Agency 2015)

Unfortunately, the contribution to GDP is still relatively low compared to other Asian countries, such as Thailand (9.5%) and South Korea 8.67% (Indonesian Creative Economic Agency 2015). Bank Indonesia (2015) found that one of the fundamental issues in developing

creative industries in Indonesia is due to the limited access to formal financing sources, whereas, it is a key driver of innovation and productivity which is important to strengthen the creative industries to face the dynamic and high market competition. (Diallo and Al-titi 2017; Mullineux 2011). Besides, the creative industries in Indonesia are more concentrated in certain areas, particularly in Java Island, and only a few of them are located outside Java, such as in West Sumatera. Based on the study of Bank Indonesia (2015), the West Sumatera Province is chosen as one of 10 provinces that focuse on the development of national creative industry.

According to Indonesia Statistics Agency (2014), Micro Small Industry (MSI) in West Sumatera is more dominant than the Medium and Large Industry (MLI), even the number of the industry is more than 90%. Based on MSI data in 2014 and referring to Presidential Regulation No. 72/2015 on Creative Industry Category, it is found that 75.94% of MSIs in West Sumatera focus their business on creative industry comprising three sub-sectors, i.e., culinary (35.64%), craft (39.38%) and fashion (23.4%). The existence of creative industries is geographically scattered almost in all districts and cities in West Sumatera, eventhough the distribution pattern tends to be uneven. In addition, in spite of the obstacles in the form of limited access, creative industry has a great potential to absorb labours and redistribution of economic growth. Based on the result of creative economy survey (2016), one of the fundamental problems in creative economy development is the limited access to banking. Creative industry entrepreneurs mostly use their own capital, albeit with limited amount.

The importance of finance for business development has been empirically proven in a number of studies. External financing is particularly important for companies since it does not only help in business expansion, but also stimulate investment growth and innovation development. Ahmed and Hamid (2011) argue that inadequate finance is a major obstacle for industries' growth. According to Schiffer and Weder (2001), small industries typically have greater challenges in getting external financing than large industries, one of which is due to the lack of sufficient collateral to borrow.

A World Bank survey shows that most of creative industries use personal capital to finance their working capital and investment (purchasing land, buildings, machinery and production equipment). However, research and innovation activities depend more on external capital. Limitations to access external sources of finance often cause the creative industries rarely conduct research and innovation activities in spite of its importance to face the increasing dynamic and competitive challenges in the market of creative industry. Therefore, financial inclusiveness in the context of creative industry development is important to be examined since the purpose of inclusive finance is to expand business access to the formal financial sector particularly to reach a non-bankable business unit.

Based on the explanation above, this study is designed with the aim to describe the characteristis of creative industries in West Sumatera and to analyze the financial inclusiveness in creative industries based on entrepreneur, firm and regional characteristics regarding the access and use of credit/loans from formal financial institutions.

The results of this study are expected to provide an in-depth analysis of creative industry characteristics in West Sumatera and the conditionb of its financial inclusiveness. Thus, the policy of creative industry development in the future is expected to be able to remove the barriers in using services from formal financial institutions and to set up several conditions which allow the entrepreneurs to improve access to bank loans.

This paper is organized into 5 sections. Section 1 provides an introduction of this study. Section 2 provides an overview of financial inclusiveness in creative industry. Section 3 presents the research method, including the empirical model, data and estimation techniques. Section 4 discusses the empirical results and Section 5 concludes this paper.

FINANCIAL INCLUSIVENESS OF CREATIVE INDUSTRY

Financial inclusiveness by some researchers, such as Efobi, Beecroft and Osabuohien (2014), Honohan (2008), Fungacova and Weill (2015), and Chauvet & Jacolin (2017) is defined as an increasing access and utilization of formal financial services measured by using three main indicators: ownership of bank account, use of bank credit, and saving on

bank account. On the other hand, financial exclusion can also be happened due to the constraints of the company itself such as asset ownership and lack of business guarantee.

Han (2008) argues that the ability to access external financing is strongly influenced by the characteristics of the entrepreneur. Education and experience in managing company have a strong impact on improving access to bank. A related opinion is also stated by Fungacova and Weill (2015) that education has a positive effect on bank account ownership. Entrepreneurs as managers must also have competence and opportunities to build networking with external financing sources. This is in line with the findings of Fatoki and Smit (2011) which stated that business information and social networking are important in determining the access to bank credit. Moreover, other factors such as the age of entrepreneur, according to the findings of Nkuah et al (2013) and Nguyen and Luu (2013), also correlate to the ability to access external financing sources. They find that the entrepreneurs in the productive age have greater opportunities to access external financing and minimize loan risk.

Kunt et al. (2015) find that gender also influence financial inclusiveness that men have better access to (demand) and use of (supply) of financial services than women in India. The characteristics of entrepreneur with regard to education, age and gender affect the financial inclusiveness in China (Fungacova and Weill 2015). Meanwhile, in Africa, male entrepreneurs who are more established, educated and experienced have better financial inclusiveness (Zins and Weill 2016), but gender has no effect on the formal or informal financing institution they chose (Fungacova and Weill 2015). Based on these studies, the hypothesis of this research is that entrepreneurs' characteristics regarding age, education, gender, partnership, and social network generally influence the financial inclusiveness in creative industries (Hypothesis 1)

A study by Bencheikh and Taktak (2017) find that inclusive finance is also influenced by firm characteristics, such as growth, size and profitability of the company. According to Laeven and Woodruff (2007), firm size and legality are positively correlated to financial access which small industries usually have greater challenges in accessing financing sources from banking institutions than large industries due to the firm financing gap. The findings of Bencheikh and Taktak (2017) show that

liquidity of collateral, such as land, buildings, machinery and equipment can facilitate the company's access to financing sources. Biepke and Abor (2009) stated that the age of the company has an effect on the external financing demand. They argue that the company which has been operating for a long time has an increasing credit demand for its business development. However, according to Fowowe's (2017) study, financial access can exactly increase a greater growth in the young firm rather than the older or the mature firm. Comunian et al. (2010) argue that beside asset and profitability factors, market is also an important factor affecting the inclusiveness of creative industries. Based on above descriptions, the other hypothesis of this research is: firm characteristics with regard to scale, business experience, asset, legality, export, consumer and profitability will influence the financial inclusion of creative industries (Hypothesis 2).

According to Granger and Hamilton (2010), creative industries tend to grow in areas that have good infrastructure especially in communication. A prosperous region with low poverty and adequate infrastructure, particularly in information and technology, is a driving force in realizing the growth of an inclusive creative industry. Clare (2013) also adds that creative industries are embedded in place. Financial inclusion by Pearce (2011) is aimed to attract unbanked population in formal financial system. However, Chakravarty and Pal (2013) emphasize that financial inclusion is the process to remove the barriers and to overcome the inabilities of disadvantaged groups. It is a multidimensional phenomenon and may vary across countries and sectors. Thus, it reinforces that regional characteristics also affect the financial inclusion of the creative industries development. Hence, this study made another hypothesis in which regional characteristics, i.e., technology (internet) also influences the financial inclusion of creative industries in West Sumatera (Hypothesis 3).

THE USE OF MSI 2014 DATA

Distribution and Scope of Sample Data

The creative industry basically has characteristics which are different from the common industry, as it is not just a common business (Cunningham 2002). The fundamental difference lies in the main production input used (Digital, Culture, Media and Sport Committee/ DCMS Report 1998). The creative industry places intellectual capital as the primary production input in which creativity and talent in human capital become important input rather than the other. That is what makes it different from conventional industries which are relatively capital-intensive.

Clare (2013) says that creative industries are embedded in place. Each region tends to have unique characteristics that distinguish it from other regions. In West Sumatera, 78.42% of creative industry entrepreneurs are women. This is in line with the findings by Carter et al. (2013) that the production activities related to crafts and fashions or other production activities which are closely related to arts, aesthetics and other cultural activities, are better managed by women. Thus, it is also able to promote gender balance.

The research was conducted by using the data of Micro Small Industry (MSI) 2014 issued by Indonesia Statistics Agency. MSI surveyed 1800 micro small industries in all districts and cities in West Sumatera. The data was then sorted purposively by taking 1367 samples using creative industry criteria according to the Creative Economy Agency based on president regulation No. 72/2015 on creative industry classification according to Indonesia Industrial Classification of All Economic Activities (KBLI). Results of processing MSI 2014 data shows that there were three sub-sectors of creative industries in West Sumatera: culinary (35.64%), craft (39.38%) and fashion (23.4%). The detailed explanations of those sub-sectors are presented on Table 1.

Table 1. Distribution and Scope of Sample Data

Sub Sector	Total	KBLI	Description
Culinary	495 (35.64%)	10710, 10733, 10750, 10790, 10792, 10793, 10794, 10799.	Preparation activities, processing, presentation of food and beverage products which creativity, aesthetics, tradition, and / or local wisdom as the most important elements in improving the taste and value of the product, to attract purchasing power and provide experience for consumers.
Craft	547 (39.38%)	16291, 16292, 31001, 31004, 32111, 32120, 32202, 32402, 32112, 32909, 13912, 13921, 13922, 13923, 13924, 16292, 16291, 16292, 16293, 16299, 13912, 13921, 32401, 23963, 23951, 13122, 17022, 23959, 23932	It is a part of the applied art which is the meeting point of art and design derived from traditional heritage or contemporary ideas whose results can be works of art, functional products, decorative objects, and can be grouped by material and exploration of the techniques used and the thematic products
Fashion	325 (23.4%)	14111, 14120, 14131, 14302, 15121, 15201.	A lifestyle in appearance which reflects self or group identity.
Total	**1367**		

Source: MSI 2014 (data processed)

Creative Industry in West Sumatera

The creative industries in West Sumatera proved to be able to facilitate greater absorption of female labour. It can be seen from the average ratio of women labour absorption in the creative industry reaches 78.43%. However, if it is viewed from the quality of human resources, 39.14% of the entrepreneurs in West Sumatera have a low level

education, i.e., elementary school. This condition is certainly not favourable considering the development of creative industries requires human resources who are capable of mastering current knowledge and technology which is generally identical with higher education level (Florida 2012; Howkins 2001)). Nevertheless, a number of studies (Rutkauskas et al. 2014; Dornberger 2012) reveal that creative industries based on cultural and social values generally have a lower dependence on high-educated labour than non-cultural-based creative industries.

Table 2.Categorizing Creative Industries in West Sumatera

Sub sector	Total (%)	KBLI* 2015	Main Industry in Sub-sector
Craft	547 (40, 02%)	29 KBLI	embroidery industries 292 industries (21.36%)
Culinary	495 (36,21%)	8 KBLI	Sweet potato crackers and related industries", 265 industries (19.39%)
Fashion	325 (23, 77%)	6 KBLI	Fashion made by order, 157 industries (11.49%)

Source: MSI 2014 (data processed)

Note: KLBI stands for Klasifikasi Baku Lapangan-usaha Indonesia

The structure of creative industry in West Sumatera tends to resemble the national creative economy structure which is dominated by three main sub-sectors: culinary, craft and fashion (see Table 2). According to Fahmi et al. (2016), creative industries that grow in developing areas tend to be a traditional cultural industry which is based on unique traditional values compared to the creative industries which are based on innovation and intellectual capital such as film, audio visual, and graphic design sub-sectors.

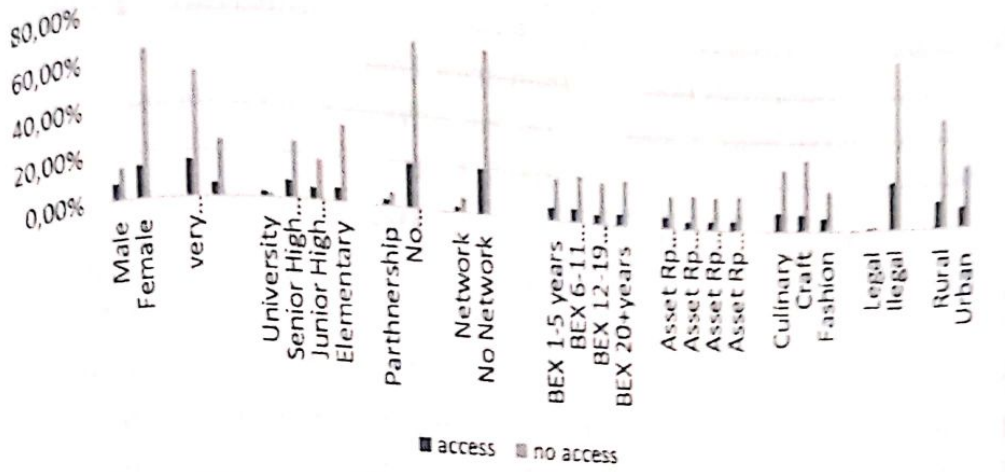

Figure 1. General Characteristics of Creative Industries in West Sumatera

Based on its firm characteristics, the percentage of start-up industry with operational experience under 5 years in West Sumatera reaches 24.29%. It indicates that the product and firm competitiveness in this province have a good prospect. Nevertheless, export-oriented start-ups among creative industries in West Sumatera only reach 1.90%. It means that the effort to encourage the growth of start-up industry also should be followed by the innovation ability of established companies in order to increase export opportunities. The percentage of business to business market of creative industries in West Sumatera has now reached 68.18%. Therefore, it is expected to provide spill-over effect in encouraging the growth of other economic sectors. In addition, 62.11% of the creative industries in West Sumatera are geographically located in rural areas, and 45.21% are in urban areas (Figure 1).

Table 3. Comparative Analysis of Creative Industry Related to Credit Access

Variable	Creative Industries that Have Bank Access		Creative Industries That Do Not Have Bank Access		Difference	P-value
	Mean	St Dev		St Dev		
Edu	10.39	3,71)	8,92	(2,98)	1,467	0,000***
Gender	0.658	(0,475)	0,820	(0,384)	-0,1621	0.000***
Age	43.4	(10,8)	43,6	(11,7)	-0,182	0,801
Partner	0.140	(0,347)	0,074	(0,262)	0,0654	0,003***
Network	0.113	(0,317)	0,086	(0.281)	0,0267	0,188

Variable	Creative Industries that Have Bank Access		Creative Industries That Do Not Have Bank Access		Difference	P-value
	Mean	St Dev		St Dev		
Sector	1.874	(0,798)	1,876	(0,755)	-0,0024	0,963
BEX	13.1	10,0	14,2	(10,7)	-1,145	0.085
Size	3.02	(3,10)	1,69 (	1,51)	1,330	0,000****
Export	0.09	(1,11)	0,014	(0,144)	0,0715	0,267
Legal	0.020	(0,140)	0,027	(0,163)	-0,00727	0,444
Cons	54.8	(45,1)	64,5	(45,2)	-9,71	0, 001***
Asset	12.456	55.045	91.924	28.673	3263539	0,322
Profit	0.013	(10.128)	0.044	(0.732)	-0.0305	0.295
Net	17.84	(8,59)	17,21	(8,62)	0,636	0,258

*Significant effect on the real level of 10%; ** (5%); and *** (1%)

Based on the legal status, only 2.56% of the creative industries in West Sumatera are already incorporated. This condition obviously can render difficulties to the industries in marketing and getting capital access since legal aspect is one of the considerations for the bank to provide finance. Although it has a good prospect in business development, the absence of firm legality makes the industry is not bankable to get capital loans.

Based on comparative analysis, there are six significant different variables between creative industries that have bank access and no bank access (Table 4). Creative industries which have bank access tend to have more educated entrepreneur, dominated by man, have a good partnership, large firm-size and dominated by household consumers. According to Howkins (2001) higher education level and partnership seem to be associated with higher probability to bank access. In India, Kunt et al. (2015) find that men have better access to (demand) and use of (supply) of financial services than women.

Table 4. Description of Bank Credit Access on Creative Industry in West Sumatera

Criteria	Frequency	Percentage	Description
Participate in credit (receive credit)	85	6.218	*Accessible*
Unparticipating in credit	1282		

Criteria	Frequency	Percentage	Description
Reason			
a. do not know the procedure	61	4.462	*Non accessible*
b. difficult procedure	98	7.169	*Non accessible*
c. no collateral	243	17.776	*Non accessible*
d. high interest rates	165	12.070	*Non accessible*
e. rejected proposal	19	1.389	*Non accessible*
f. uninterested			
uninterested but have the ability to access credit	216	15.801	*Accessible*
uninterested and do not have the ability to access credit	480	35.113	*Non accessible*

Source: MSI 2014 (data processed)

Table 4 shows that 22,019% of creative industries in West Sumatera have access to bank credit, but those participating in bank credit are only 6,218%. Approximately 50,914% of the respondents state that they are not interested in applying the credit. This is partly due to the condition of their asset ownership in which only 15.801% has the ability to apply for credit. No collateral and price factors (high interest rate) also become the biggest obstacle in accessing credit to formal financial institutions. The ability of the creative industry to access bank credit shows diversed conditions. This diversity is related to the characteristics of entrepreneur, firm, and region. As shown in Table 5, another alternative funding source used is cooperative (2.27%). Interestingly, after the personal capital, the second largest source of capital comes from the other party (9.80%), i.e., third parties who have social closeness with the entrepreneurs. According to Ambrosius and Cuecuecha (2015), informal financial services have a statistically significant effect in encouraging household lending in Mexico rather than traditional banks. A study by Ngalawa and Viegi (2013) also find that the formal and informal financial sector can be complementary in aggregate. The tendency of creative entrepreneur to use loans from other parties which has emotional closeness based on trust

shows the important role of social capital in the capital system of creative industries in West Sumatera. Besides, the lack of access to use bank credit shows the inability of formal financial sector in handling the financial needs of businesses (Table 5).

Table 5. Main Sources of Capital on Creative Industry in West Sumatera

The Main Source of Capital	Frequency	Percentage
Personal capital	1.015	74,25
Bank	85	6,22
Cooperative	31	2,27
Non-bank financial institution	13	0,95
Partner	27	1,98
Individual	45	3,29
Family	17	1,24
Other party	134	9,80
Total	1.367	100

Source: MSI 2014 (data processed)

Explanatory Variables

There were two response variables: (1) related to bank access and (2) related to the use of bank loan. Then, the independent variables were divided into 3 groups: (1) entrepreneur characteristics consisting of 5 variables, i.e., education, gender, age, partnership, and network; (2) firm characteristics consisting of 8 variables, i.e., scale, experience, sub sector, consumer, export, legality, asset, and profitability; (3) regional characteristics consisting of 1 variable, i.e., information technology (internet) that can be measured by the percentage of people who access the internet at each district where the firm is located.

Previous researches (Efobi et al. 2014, Honohan 2008, Fungacova and Weill 2015, Chauvet and Jacolin 2017) have used three main indicators in measuring financial inclusion: ownership of bank accounts, use of bank credit, and savings on bank account. However, because the limited availability of secondary data especially for saving of bank account data that can be accessed from Indonesian Statistic Agency, therefore in this paper the researchers can only use two indicators in measuring financial inclusion of creative industry: first relating to access

and second relating to use. Credit access was used to measure the penetration of creative industries against formal financial institutions. This variable was measured by using 2 values of 1 and 0. The use of credit was observed by the percentage of bank loan in working capital.

Among the entrepreneur characteristic, we include a number of individual entrepreneur that we estimate might affect financial inclusion. All variables are clearly explained in Table 3. Adult entrepreneur between the age of 25 and 64 expect greater penetration of formal financial services than younger adults and those age 65 and over (Kunt 2015). According to Fungacova and Weill (2015) women entrepreneurs have a limited access to financial inclusion than man, so we expect this variable to have a negative sign. According to Howkins (2001) higher education level, network ability and partnership seem to be associated with higher probability to bank access, so we expect this variable to have a positive sign.

At a firm characteristics, we expect the creative industry with small scale and limited asset tends to be negatively associated with financial inclusion. We also include the dummy variable for firm legality, which takes Value 1 if the firm has a legal status and Value 0 for otherwise. We expect this variable to be positively correlated with the financial inclusion (Table 6).

Proxies for regional characteristic are measured by internet usage at business region (location). We expect creative industries located in rural area with limited infrastructure especially in communication tend to have negative sign. According to Granger and Hamilton (2010), creative industries tend to grow in areas that have good infrastructure especially in communication. A prosperous region with low poverty and adequate infrastructure, particularly in information and technology, is a driving force in realizing the growth of an inclusive creative industry.

Table 6. Explanation of Operational Variables

Variable	Code	Description
Age	AGE	Age of the entrepreneur (year)
Gender	GENDER	1 = female; 0 = others
Education	EDU	Measured from the formal education (years)
Partnership	PARTNER	1 = if the entrepreneur has ever collaborated with other parties; 0 others

Variable	Code	Description
Network	NETWORK	1 = if the entrepreneur is incorporated in business association; 0 = others
Sector	SECTOR	1 = culinary; 2 = craft; 3 = fashion n
Experience	BEX	Measured in years, from the establishment up to the observation
Firm Size	SIZE	Measured by the amount of labor
Legality	LEGAL	1 = legal business; 0 = others
Export	EXSPORT	Measured by share of export (percent)
Consumers	CONS	Measured by sales share for business to business (percent)
Asset	ASET	Measured by total business assets during the year (million rupiah per year)
Profitability	PROFIT	Measured by the ratio of operating income to the total assets (percent)
Internet	NET	Measured by the percentage of people who access internet at each business location (percent)
Relating to access	Y_{access}	1 = companies that have access to banks; 0 = others
Relating to use	Y_{use}	Measured by the percentage of bank loan in working capital

THE USE OF LOGISTIC REGRESSION MODEL

Data analysis used to measure credit access (relating to access) was binary logistic regression approach. Logistic regression is a method of statistical analysis to describe the relationship between dependent and independent variables (Hosmer and Lameshow 2000). In Model-1 credit access was measured by using two values (binary variable) equal to 1 if the firm has bank access and 0 for otherwise. Therefore, we use the logit regression model to investigate its determinants

Model-1: Financial Inclusion Relating to Bank Access

$$Logit\ P = Ln\ \frac{Pij}{1-Pij} = \beta_0 + \beta_1 X_1 + \ldots\ldots + \beta i_j X_{ij} + \varepsilon ij,$$

P is probability to have bank access. B_0 is the intercept, βi is coefficient and X is variable.

To test the goodness of suitability, the researchers used Pearson, Deviance and Hosmer-Lemeshow Methods. The test was conducted to see the suitability between the entered data and the observed data. To see the significance of the model, then the G and Wald Tests were used. The G test is used to find out whether there is an influence of independent variables used in the model at the same time to the response variable. G test was used by comparing the value of α with p-value, if p-value $<\alpha$ then hypothesis, H_0 was rejected. If H_0 was rejected, it means that the model used was statistically significant with significance level of α. Furthermore, the Wald test was used to see the significance of each variable (partially). If p-value $<\alpha$, then the hypothesis H_0 was rejected, it means that the variable was statistically significant with significance level of α.

Moreover, odds ratio coefficient was done in order to interpret the logistic regression coefficient. It is an indicator to see the tendency of companies to access the financial institutions (formal). If the value of odds ratio was close to zero, the tendency of the company to access the formal financial institution (bank) was getting smaller.

Data analysis used to measure financial inclusion related to use was Multiple Linear Regression. This model was employed because the use of bank credit is a continuous variable which is measured by the percentage of bank credit used as working capital.

Model-2 Financial Inclusion Relating to Use of Bank Loan

$$Y\,(use) = \alpha o + \alpha_1 EDU_{ij} + \alpha_2\, GENDER_{ij} + \alpha 3AGE_{IJ} + \alpha_4\, PARTNER_{IJ} + \alpha_5\, NETWORK_{IJ} + \alpha_6\, SECTOR_{IJ} + \alpha_7\, BEX_{IJ} + \alpha\, SIZE_{IJ} + \alpha_9\, EXSPORT_{IJ} + \alpha_{10}\, LEGAL_{IJ} + \alpha_{11}\, CONS_{IJ} + \alpha_{12}\, ASET_{IJ} + \alpha_{13}\, PROFIT_{IJ} + \alpha_{14}\, NET_{IJ} + \varepsilon_{IJ}$$

To see the significance of Model-2, it was tested by using the F and t tests. The F test was done by comparing the value of $F_{observed}$ with F_{table}. If $F_{observed} > F_{table}$, then hypothesis H_0 was rejected. It means that X variable was simultaneously and statistically significant to Y with a significance level of α. Moreover, t test was used to see the significance of each X variable to Y. When $t_{observed} < t_{table}$, the hypothesis H_0 was rejected. Thus, in partially, X variable was statistically significant to Y with a significance level of α.

RESULTS OF ESTIMATION USING LRM

The result of estimation using Logistic Regression Model (LRM) related to credit access is shown in Table 7. The analysis result of Model-1 is done for all districts/cities in West Sumatera. The analysis result shows that there is a negative relationship between access to credit and gender factors. In other words, creative industries led by women entrepreneurs have a lower probability in accessing credit. This is in line with the results of study by Kunt et al. (2015) that men have better access to (demand) and use (supply) of financial services than women in India, as well as in Africa, more educated male entrepreneurs have proven to have better access to credit than women entrepreneurs (Zins and Weill 2016).

The results of this study also indicate that firm characteristics, such as firm size, assets and consumers have statistically significant effect on bank access. Companies which have larger business scales tend to have better access to credit. It is because large companies generally have sufficient asset ability that can be used as collateral in making loans to banks. Besides, the large percentage of business consumers (industrial markets and trade sectors) served by the creative industry can actually reduce the opportunities to access bank credit.

Tabel 7. Financial Inclusion Analysis Related to Bank Access

Variable	Coefficient	*p-value*	z	Marginal Effect
Entrepreneurs Characteristics				
Edu	0.116***	0.000	5.17	0.1700
Age	-0.0028	0.719	-0.36	-0.0005
Gender	-0.558***	0.001	-3.30	-0.8288
Partnership	0.333	0.166	1.39	0.0541
Network	0.237	0.319	1.00	0.3393
Firm Characteristics				
Size	0.269***	0.000	6.61	0.4000
Bex	-0.003	0.711	-0.37	-0.0003
dummy *fashion*	-0.021	0.918	-0.10	-0.0029
dummy craft	-0.188	0.322	-0.99	-0.0258
Asset	0.006**	0.030	2.17	5.23e-10
Legal	-0.730	0.157	-1.42	-1.1103
Profitability	-0.0004	0.276	-1.09	-0.0005
Consumer	-0.007***	0.000	-4.29	-0.1008

Variable	Coefficient	*p-value*	z	Marginal Effect
Export	0.652	0.120	1.56	0.0178
Regional Characteristics				
Internet	-0.004	0.811	-0.24	-0.0005
Constant	-1.37229	0.057	-1.90	1.12

Number of observation 1367; P-Value = 0.000; Log- Likelihood -633.719

* Significant level at 10 percent, **significant level 5 percent , *** significant level 1 percent

A study by Biepke and Abor (2009) show that firm financing gaps often occur due to a collateral problem in which large-scale companies have a greater chance to access credit due to sufficient collateral as a loan requirement. However, small-scaled company generally has greater challenges and constraints in accessing bank credit due to the unbankable assets and lack of collateral. Bencheikh and Taktak (2017) said that building liquidity such as land, buildings, machinery and equipment can facilitate the company's access to formal financing sources. In this case, craft sub-sector has significant effect at the level of 10%. It means that the ability of the craft sub sector to credit access is lower than others

Furthermore, Model-1 is also done by using Klassen regional typology which provides an overview of the growth pattern of a region's economic development. This technique divides an area into four quadrants based on economic growth and income per capita of the regency where the company is located. The four quadrants of development in question are:

(a) High income but low growth region is an advanced but pressured area. It is ndicated by a lower rate of economic growth but per capita income is higher than the provincial average;

(b) Low growth and low income region is a relatively under-developed region, the rates of economic growth and income per capita is respectively lower than the province;

(c) High growth and high income region is an advanced and fast-growing area. This category is indicated by the level of economic growth and per capita income of a region, which is higher than average growth rate compared to the province;

(d) High growth but low income region is a rapidly growing area. It is indicated by a higher rate of economic growth but per capita income is lower than the provincial average.

Based on the size of association between response variables and independent variables, this model also shows the strong relationship and the ability of the model to predict, as seen from the big value of *Adjusted R square*. Partially, based on the result in Table 7, there are some variables significantly influence bank access. They are entrepreneur characteristics (education, gender, partnership and network), firm characteristics (size, sector, consumer, profitability and export) and regional characteristics (internet). If we observe from each variable, it turns out that the age of entrepreneur does not significantly influence the bank access to each region's typology. Meanwhile, other firm characteristic variables, such as firm size, asset and legality also do not have any significant influence to the bank access of each region's typology.

The analysis result in Table 8 shows that there is a negative relationship between access to credit and gender factors. In other words, creative industries led by women entrepreneurs have lower probability in accessing bank loan. This is in line with the results of Kunt et al. (2015) that men have better access to (demand) and use (supply) of financial services than women in India. In Africa, more educated and experienced men entrepreneurs also have better access to credit than women entrepreneurs (Zins and Weill 2016). However, gender does not affect the formal and informal institutions they choose (Fungacova and Weill 2015). Formal education factor owned by the entrepreneurs also influences the ability to access bank credit. High educated entrepreneurs have a better chance to access credit than low/middle educated entrepreneurs. Therefore, the education of an entrepreneur has a strong impact on improving access to bank loan. The result of this study confirms the finding of Han (2008) and Fungacova and Weill (2015) that educated entrepreneurs tend to have better access to formal financial institutions.

Table 8. Financial Inclusion Analysis Related to Credit Access based on Klassen Regional Typology

Variable	High Income but Low Growth Region	Low Growth and Low Income Region	High Growth and High Income Region	High Growth but Low Income Region
	Coeff. (p-value) odds	Coeff. (p-value) odds	Coeff. (p-value) odds	Coeff. (p-value) odds
Entrepreneurs Characteristics				
EDU	-0.12 (0.600) 0.88	0.075 (0.014)** 1.08	0.174 (0.000)*** 1.19	0.126 (0.132) 1.13
AGE	0.017 (0.833) 1.02	0.010 (0.349) 1.01	-0.002 (0.858) 1.00	-0.046 (0.110) 0.95
GENDER	-3.02 (0.237) 0.05	-0.336 (0.161) 0.71	-0.729 (0.032)** 0.48	-1.473 (0.019)** 0.23
PARTNERSHIP	-22.27 (0.999) 0.00	0.354 (0.319) 1.43	0.111 (0.800) 1.12	1.23 (0.083)* 3.43
NETWORK	1.99 (0.398) 7.35	-0.207 (0.608) 0.81	0.736 (0.070)* 2.09	-0.127 (0.854) 0.88
Firm Characteristics				
SIZE	-	0.457 (0.000)*** 1.58	0.259 (0.000)*** 1.30	0.273 (0.069)* 1.31
BEX	-0.15 (0.169) 0.85	-0.002 (0.799) 1.00	-0.149 (0.366) 0.99	0.022 (0.443) 1.02
Dummy FASHION	-	1.287 (0.000)*** 3.63	-1.87 (0.000)*** 0.15	-1.13 (0.146) 0.32
Dummy CRAFT	-	1.081 (0.000)*** 2.95	-1.16 (0.001)** 0.31	-2.20 (0.002)** 0.11

Variable	High Income but Low Growth Region	Low Growth and Low Income Region	High Growth and High Income Region	High Growth but Low Income Region
	Coeff. (p-value) odds	Coeff. (p-value) odds	Coeff. (p-value) odds	Coeff. (p-value) odds
LEGAL	-18.68 (0.999) 0.00	-0.659 (0.376) 0.52	-1.04 (0.234) 0.35	0.0437 (0.734) 1.55
PROFITABILITY	-0.05 (0.097)* 0.95	-0.002 (0.007)* 1.00	-0.00 (0.395) 1.00	(0.631) 1.00
CONSUMER	0.031 (0.076) 1.03	-0.008 (0.000)*** 0.99	-0.003 (0.248) 1.00	-0.011 (0.024)** 0.99
EXSPORT	-23.4 (0.999) 0.00	-0.18 (0.876) 0.83	0.511 (0.815) 1.67	1.17 (0.039)** 3.22
Regional Characterictics				
INTERNET	-	0.032 (0.002)** 1.03	0.002 (0.909) 1.00	-0.129 (0.001) 0.88
Constant	3.15 (0.629)	-3.889 (0.000)	-1.69 (0.118)	3.24 (0.083)
Number of observations	60 (4.34%)	796 (58.22%)	384 (28.09%)	147 (10.74%)
p-value	0.027	0.000	0.000	0.000
Adjusted R square	94.1	79.2	82.8	83.0

*Significant effect on the real level of 10%; ** (5%); and *** (1%),
Source: MSI 2014 (data processed)

The results of this study also indicate that firm characteristics—such as, business size, sector, profitability, consumers and export—have statistically significant effect on bank access. Companies which have larger business scales tend to have better access to credit. It is because the large companies generally have sufficient asset ability that can be used as collateral in getting bank loans. A study by Biepke and Abor (2009)

shows that firm financing gaps often occur due to collateral problem which large-scale company have a greater chance to access credit due to sufficient collateral as a loan requirement. However, small-scale industry generally has greater challenges and constraints in accessing bank credit due to the weak assets and lack of collateral. Bencheikh and Taktak (2017) said that building liquidity, such as land, building, machinery and equipment can facilitate the company's access to formal financing sources.

Geographically, creative industries in West Sumatera are scattered almost in all districts and cities, but the spread pattern tends to be uneven. There are 62.11% of the creative industries located in the rural areas. Based on regional typology, 57.4% of creative industries in West Sumatera are located in low economic growth and low income region with a limited infrastructure. According to McCann (2007), industries in urban areas with more adequate infrastructure tend to have better financial inclusion than industries in rural areas with limited infrastructure. Creative industry in West Sumatera generally belongs to traditional cultural industry which is more widely located in regions with low economic growth and low income. It indicates that the financial access for creative industries in the area is still low.

Table 9. Financial Inclusion Analysis of Creative Industry Related to Credit Usage

Variable	High Income but Low Growth Region	Low Growth and Low Income Region	High Growth and High Income Region	High Growth but Low Income Region
	Coeff. (P-Value)	Coeff. (P-Value)	Coeff. (P-Value)	Coeff. (P-Value)
Entrepreneurs Characteristics				
EDU	-0.001 (0.593)	-0.00 (0.694)	0.001 (0.762)	0.006 (0.090)*
AGE	-0.000 (0.258)	-0.00 (0.141)	0.001 (0.046)**	0.000 (0.761)
GENDER	0.007 (0.769)	-0.02 (0.066)*	-0.023 (0.319)	0.001 (0.964)
PARTNERSHIP	-0.008 (0.754)	0.008 (0.664)	-0.024 (0.432)	0.011 (0.739)

Variable	High Income but Low Growth Region	Low Growth and Low Income Region	High Growth and High Income Region	High Growth but Low Income Region
	Coeff. (P-Value)	Coeff. (P-Value)	Coeff. (P-Value)	Coeff. (P-Value)
NETWORK	-0.009 (0.701)	-0.02 (0.120)	0.02 (0.526)	0.007 (0.817)
Firm Characteristics				
SIZE	-	-0.003 (0.179)	0.007 (0.086)*	-0.001 (0.829)
BEX	-0.000 (0.766)	0.000 (0.483)	-0.001 (0.188)	0.000 (0.537)
SECTOR	-	0.008 (0.231)	0.018 (0.187)	0.015 (0.340)
ASSET	0.000 (0.719)	0.00 (0.133)	-0.000 (0.874)	0.000 (0.206)
LEGAL	-0.007 (0.854)	-0.03 (0.342)	0.013 (0.809)	0.090 (0.119)
PROFITABILITY	-0.00 (0.728)	-0.00 (0.625)	-0.000 (0.787)	-0.000 (0.897)
CONSUMER	-0.00 (0.611)	0.00 (0.320)	-0.002 (0.230)	-0.000 (0.062)*
EXSPORT	-0.007 (0.838)	0.012 (0.761)	-0.14 (0.297)	0.000 (0,997)
PROFITABILITY	-0.00 (0.728)	-0.00 (0.625)	-0.000 (0.787)	-0.000 (0.897)
Regional Characteristics				
INTERNET		-	-0.00 (0.572)	0.000 (0.849)
Constant		0.068 (0.291)	0.077 (0.047)	-0.04 (0.596)
Number of observations		60 (4.34%)	796 (58.22%)	384 (28.09%)
R-Sq (%)		7.1	2.2	4.2

*Significant effect on the real level of 10%; ** (5%); and *** (1%),
Source: MSI 2014 (data processed)

Basically, the bank access of micro-small scaled creative industry is more often based on soft information that is not easy to be well understood by all business actors especially if the business location is in the rural areas and away from the bank office. According to Alessandrini et al. (2009), the problem arises due to the asymmetric information, agency and uncertainty in the relationship between business actors and the bank. Industries in rural areas tend to have difficulties in obtaining

information intensively about bank lending procedures. Although it cannot be denied that technological developments which create digital finance can reduce the information cost. In some research results (Klagge and Martin 2005; Haas and Doren 2013), it is proven that it is not easy to get soft information for business actors especially small-micro companies which lack infrastructure facilities.

The analysis result of Model-2 shows that the use of bank credit as working capital in creative industry is significantly influenced by entrepreneur characteristics (education, age and gender) and firm characteristics (size and consumer), but it is not significantly influenced by regional characteristics (internet access). The positive relationship between education and age of entrepreneur shows that the higher the entrepreneur's education, the greater the need for bank loan, especially to be utilized for innovation and market expansion. Conversely, if the company already has an established asset, the ability of internal capital tends to increase so that the proportion to the use of external capital will decrease.

The overall result of Model-1 and Model-2 analysis indicates that there are many factors influencing the financial inclusion for creative industries in West Sumatera, they come from the diverse characteristics comprising entrepreneur, firm, and region factors. Informal financing seems to be an alternative capital source which is more demanded by the creative industries in West Sumatera. It indicates that the informal financing built from social capital of local communities, such as individual trust, can strengthen the development of creative industries. The development of implicit contractual relations in informal financing system that is commonly used by creative industry players in West Sumatera can be an alternative to overcome the lack of banking access particularly for start-up companies.

Nevertheless, the source of informal financing is sometimes limited in terms of volume and coverage of the loan. In the future, creative industries in West Sumatera should be encouraged to improve access and utilization of credit from formal financial institutions (banks). Hence, the increased financial inclusion is expected to be able to accelerate the productivity and innovation improvement that is crucial for strengthening the development of creative industries in this province, especially to face market competition which is more dynamic and competitive.

CONCLUSIONS

Creative industries in West Sumatera characteristically show its ability to absorb female labours (promoting gender balance) and to promote production activities based on the exploration of local values by utilizing arts, aesthetics and traditional culture (strengthening cultural identity) and micro small-scale industries. Despite the limited access to capital, they potentially have high economic growth due to the emergence of start-up industry. Those industries have a wide spread, but they tend to be concentrated in rural areas with low income and thus low economic growth. While serving the larger market for business to business, banks—especially the state-owned ones, are expected to bring spillover effect to the growth of other economic sectors especially in rural area.

The access for creative industries to formal financial institutions (banks) is still very limited. The study shows that the utilisation of bank credit as working capital in West Sumatera Province is very low. The varied characteristics of entrepreneur (education, gender, and partnership), firm (size, costumer, and export) and region (internet) raise the difference in access and credit usage of creative industries. Strong social relationship and the role of informal financing in local communities becomes an alternative way to overcome the lack of access faced by creative industry actors especially for Start-up Company in starting its business.

In the future, the creative industries in West Sumatera need hard work to increase the financial inclusion to encourage the utilization of bank services. For that reason, banks as formal financial institutions need to cooperate with Regional Credit Guarantee Company (*Perusahaan Penjamin Kredit Daerah,*PPKD) of West Sumatera in order to overcome the problem of entrepreneurs' weak collateral availability In sum, it is necessary to provide traditional entrepreneurs, especially female ones, with financial education, as they could be the potential targets of banks'credit program. Finally, in order to develop creative industries in West Sumatera Province also needs the Government's supports by improving local infrastructures, since the majority of creative industries there are located in areas with low economic growth and income as well.

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