

## International Journal of Economics and Financial Issues

ISSN: 2146-4138

available at http: www.econjournals.com

International Journal of Economics and Financial Issues, 2018, 8(1), 1-8.



# Effect of Investment on Employment in the Formal Small Industries In the District/City of South Sumatra Province, Indonesia

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#### **ABSTRACT**

This study aimed to analyze the effect of the investment on employment in the formal small industries in the district/city of South Sumatera Province. The data used are secondary data obtained from the publication of the Department of Industry and Trade of South Sumatera Province. The analytical method used is a quantitative analysis of panel data regression analysis equipment. The results showed that investment significantly positive effect on employment in the formal small industries in the district/city of South Sumatera Province.

Keywords: Investment, Employment, Formal Small Industry

JEL Classification: L00

### 1. INTRODUCTION

Development in developing countries is generally focused on the economic development. This is because economic development can support the achievement of objectives and encourage the development of other fields. Economic development is also a multidimensional process that covers the transformation process marked by changes in the economic structure and framework in the economic structure of society (Todaro and Smith, 2003).

The process of economic development in a country naturally leads to equal opportunities for all kinds of economic activities, including industries of all sizes. Small-scale industries, especially in developing countries is often associated with problems of economic and social poverty, unemployment, unequal distribution of income, the process of uneven development, and urbanization. The existence or growth of the small-scale industry is expected to contribute positively to the reduction efforts of these issues.

One way to implement the overall economic development and sustainable by increasing investment. Investments in essence are also the first step in economic development. Investment is an important factor for economic growth and development (Mipango, 2015). Rizvi and Nishat (2009) state that the very important and sensitive thing in developing countries is the foreign direct investment (FDI). Currently the FDI not only the transfer of money but a combination of financial and intangible assets such as technology, managerial ability, marketing skills and other assets. Meanwhile Matthew and Johnson (2014) stated that on one side of FDI in a will add new resources with regard to capital, technology, managerial capabilities and technical skills in the country concerned, and another side foreign investment may as "imperialistic predators" that would exploit the country and would make political and economic dependency.

Investment is a component of aggregate demand, investment also has a role in production capacity in the economy. The amount of production capacity in the economy can be reflected by the many businesses in the economy, both large-scale enterprises, medium-scale, micro, and small-scale enterprises. Pettinger (2017) stated that the investments affect economic growth, because investment is a component of aggregate demand, and more importantly that the investment would affect production capacity in the economy.

Economic development in addition to addressing socio-economic issues, as well as to improve the welfare of the community. The

successful achievement of the welfare state can be measured by the ability in solving various problems, including the problem of employment. This is in line with one of the main objectives of development, namely the creation of new jobs in sufficient quantity and quality to be able to absorb the additional labor force continued to enter the labor market.

The number of workers absorbed by the economic sector can describe the absorptive capacity of that sector of the workforce. Likewise, the small-scale industry in Indonesia, its existence has a strategic role in the national economy that is as one important source for increasing employment opportunities.

Indonesian government's attention to the development of small-scale industry has been started since the 70s. This is reflected in the many programs of development of small-scale industries by the government such as the small investment credit; permanent working capital loans; national movement partnership; empowerment of micro sector, small and medium enterprises; smallholder credit program, etc.

As shown in Table 1 based on Constitution No. 20 of 2008 about micro, small and medium enterprises, there are several criteria scale enterprises can be classified into micro, small businesses, and medium-sized businesses as follows:

A microenterprise is a productive enterprise belonging to individuals and/or individual business entity, has a net worth of at most 50 million rupiahs excluding land and buildings, and has annual sales of up to 300 million rupiahs. Small businesses are productive economic activities that stand alone, carried out by an individual or business entity that is not a subsidiary or branch of the company is not owned, controlled, or be a part either directly or indirectly from medium or large business; have a net worth of more than 50 million rupiah up to at most 500 million rupiah; excluding land and building or have an annual sales turnover of more than 300 million rupiah up to 2.5 billion rupiah. Mediumsized businesses are productive economic activities that stand alone, carried out by an individual or business entity that is not subsidiaries or branches of companies owned, controlled, or be a part either directly or indirectly with small business or big business; have a net worth of more than 500 million rupiah up to a maximum of 10 billion rupiah excluding land and buildings or having an annual sales turnover of more than 2.5 billion rupiah up to at most 50 billion rupiah (Ministry of Cooperatives of the Republic of Indonesia, 2011).

Micro, small and medium enterprises is one of the strategic sectors of the Indonesian economy. This is reflected in the employment by the sector. In 2012 the number of workers in the sector of micro,

small and medium enterprises as much as 107.6 million workers, or about 97% of the number of workers in Indonesia (Abidin, 2015). In 2016, the presence of small micro-enterprises in the province of South Sumatra able to absorb as much as 1,796,639 workers (CBS, 2017).

Indonesia is an archipelago with a very wide area. Based on the growth of the central division of the industrial area, South Sumatra Province entered the zone of regional industrial growth center. This brings the consequence that South Sumatra province need to undertake the development of the industrial sector, including the development of small industries. The industrial sector in the province of South Sumatra, especially formal small industry is divided into the business field of the food industry; clothing and leather industries of rubber; chemical industry and building materials; metal industry and services; as well as the craft industry and the public.

Relating to small industries, employment and investment, a phenomenon in South Sumatra Province in 2016 showed that of the 11229 units of small industries formal scattered in 17 districts/city as much as 67% were in 6 districts/city is the Palembang city; MUBA district; Muara Enim district; East OKU district; Pagar Alam city; and Lubuk Linggau city. Likewise, the number of workers, of which there are 60006 workers in the formal small industries, as many as 61% are in the 6 district/city. Meanwhile, of the total investment of formal small industry in 2016, as much as 40.7% or 913.1 billion were in 6 district/city.

The above phenomenon different from the situation in 2011 which showed that employment in the formal small industry in Palembang city; MUBA district; Muara Enim district; East OKU district; Pagar Alam city; Lubuk Linggau city absorb as much as 60.2% of the total workforce in this sector. Meanwhile, the value of investments in 6 district/city in 2011 amounted to 80.5% of total investment in the formal small industry sector.

Thus during the period 2011-2016 a significant decline in investment in formal small industries in 6 districts/cities, namely from 80.5% in 2011 to 40.7% in 2016. The absorption of labor relatively fixed from 60.2% in 2011 to 61% in 2016. This situation is interesting to study in order to determine the relationship between investment and employment.

### 2. LITERATURE REVIEW

Economic development in addition to addressing socio-economic problems, as well as to improve the welfare of the community. The successful achievement of the welfare state can be measured by the ability in solving various problems, including the problem of

Table 1. Criteria for micro small and medium enterprises

Table 1. Criteria for inicro, sman and inequalification refer prises				
Businessmen	Net worth (rupiah)	Annual sales results (rupiah)		
Microbusiness	Up to 50,000,000	Up to 300 million		
Small business	>50000000-500000000	>300000000-2500000000		
Medium	>500000000-10000000000	>2500000000-50000000000		
enterprises				

Source: Constitution No. 20 of 2008

employment. Employment is one important factor in overcoming the problem of employment.

Employment is a fundamental aspect of human life, as it includes economic and social dimensions. Employment is the number of people that can be accommodated to work in a business unit or job. Employment will accommodate all workers when business units or jobs would be sufficient or balanced with the number of the existing workforce.

Investment is an investment activity on a variety of economic activities (production) in the hope to gain an advantage in the future. Investments, in essence, are also the first step in economic development. Investment is an important factor for economic growth and development (Mipango, 2015).

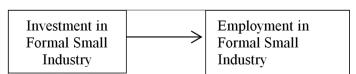
The economic theory stated that investment as expenditures for the purchase of capital goods and production equipment for the purpose of replacing and especially add modal goods in the economy that will be used to produce goods and services in the future (Sukirno, 2010).

Investment activity allows a society constantly increase economic activity and employment, increase national income and improve the welfare of society. The role of such investments come from three important functions of investment activity is the investment is one of the components of aggregate expenditure so that the increase in investment will increase aggregate demand, national income, and employment opportunities. Added capital goods as a result of the investment will increase production capacity; Investment is always followed by the development of technology (Riezky, 2013).

Investment has an important role in employment, because of the investments will create employment opportunities, and in turn will be able to absorb the labor force. Dewi and Sutrisna (2015) concluded that investment significantly and a positive effect on employment through economic growth. The increase in employment is done by increasing investment in labor-intensive industries. In line with these studies is Bustam (2016) found that the investments in micro, small and medium enterprises have a significant effect on employment.

### 3. THEORETICAL FRAMEWORK

One way to implement the overall economic development and sustainable by increasing investment. This is because investment is the first step of a production activity.



The number of workers absorbed by the economy can describe the absorptive capacity of the sector of the workforce. Likewise, the small-scale industry in Indonesia, its existence has a strategic role in the national economy that is as one important source for increasing employment opportunities.

Investment in the formal small industry will increase the production process and make the production process requires human labor, so the company will require additional manpower. This shows that the investment is an important variable in increasing employment.

### 4. MATERIALS AND METHODS

This study analyzed the effect of the investment on employment in the formal small industry. Researchers conducted an empirical study on the object of research is districts/city in South Sumatera Province of Indonesia in 2006-2016.

The study population was 17 districts/cities, while the study sample as many as 35% of the population, or as many as 6 districts/city. The 6 districts/city comprises 3 districts are Banyuasin; Muara Enim; Ogan Komering Ulu; and 3 cities are Palembang; Pagar Alam; Lubuk Linggau. Location of research on those district/ cities that has a number of formal small industry relatively large compared with other district/cities.

This study uses quantitative analysis. To analyze the effect of the investment on employment in the formal small industry use panel data regression. As the data analysis unit sides cross (cross-section) is 6 district/city and time series data (time series) in the period 2006-2016. The reason for the use of cross-section data is to better understand the behavior of employment in each district/city. In general, the research model expressed in the equation:

$$Y=f(X) \tag{1}$$

Where, Y is a labor, and X is an investment.

The labor force is defined as the amount of labor that exist in formal small industries in each district/city, this also reflects the value of the variable employment.

Investment is defined as the value of the investment per year in formal small industry in each district/city.

Equation (1) above can be expressed in the econometric equation as follows:

$$Y_{it} = \alpha_0 + \alpha_1 X_{it} + e_{it} \tag{2}$$

i=district/city to i, where i=1,..., 6 t= year to t, where t = 2006,..., 2016

Equation (2) is a common form of panel data regression equation. In the panel data regression known 3 estimation method, namely

common effects, fixed effects and random effects. Effects common methods performed by combining all the cross-section data and time series irrespective of differences in the two types of data. This method assumes that the intercept and coefficients are constant over time (t) and individuals (i). Common methods effects can be expressed as in Equation (2).

Fixed effects method assumes that inter-unit cross section (in this study, namely district/city) has an average value of different employment. It will be represented by the difference between the value of the intercept district/city. Fixed effects model identical to the dummy regression model. Fixed effects model in this study can be stated as follows:

$$Y_{it} = \alpha_0 + \alpha_1 X_{it} + \alpha_2 D_1 \alpha_3 D_2 + \alpha_4 D_3 + \alpha_5 D_4 + \alpha_6 D_5 + e_{it}$$
(3)

Where  $D_1=1$ , for Musi Banyuasin;  $D_1=0$ , for another districts/city;  $D_2=1$ , for Musra Enim;  $D_2=0$ , or another districts/cities;  $D_3=1$ , for OKU Timur;  $D_3=0$ , for another districts/cities;  $D_4=1$ , for Pagar Alam;  $D_4=0$ , for another districts/cities;  $D_5=1$ , for Lubuk Linggau;  $D_5=0$ , for another districts/cities.

Random effects method is a panel data estimation where possible residual interrelates time (t) and an individual (t). At random effects method assumes that the intercept is a random variable. The regression equation for a method of random effects when expressed in this study are:

$$Y_{it} = (\alpha_0 + \mu_i) + \alpha_1 X_{it} + e_{it}$$

$$\tag{4}$$

$$Y_{it} = \alpha_0 + \alpha_1 X_{it} + e_i + \mu_i \tag{5}$$

Where,  $e_{it}$ =Residual overall (combined cross section and time series);  $\mu_i$ =Residual individually which is a random characteristic of the i<sup>th</sup> observation unit and fixed all the time.

In order to choose the most appropriate model, there are some testing: Chow test; Hausman test; and Breusch-Pagan test or Lagrange Multiplier (LM) test.

Chow test is a test to determine the model of the Common Effects or Fixed Effects are most appropriate for estimating panel data; (2) The Hausman test (Hausman and Wise, 1978) is a statistical test to determine the model of fixed effects or random effects are most appropriately used in estimating panel data; (3) LM test used to test whether common effects or random effects are most appropriately used in estimating panel data.

### 5. RESULTS AND DISCUSSIONS

Micro, small and medium enterprises is a strategic sector and potential in Indonesia, so the government is trying to continue to maintain its growth. Business operators choose the micro, small and medium enterprises due to several reasons such as: Does not require capital that is too large, the technology used is relatively simple, and in terms of labor does not always require qualifications specific requirements such as level of education and skills of workers so as to absorb the force working optimally.

### **5.1. Formal Small Industry in District/City of South Sumatra Province**

Formal small industry in the district/city of South Sumatera Province are grouped into five, namely products produced by the food industry; clothing and leather industries of rubber; chemical industry and building materials; metal industry and services; as well as the craft industry and the public.

As shown in Table 2, palembang, MUBA, and Pagar Alam is a district/city having a number of formal small industry business over a thousand units in 2014-2016. During from 2006 to 2016 Palembang is a district/city by the most number of formal small industry, average 24.2% of total formal small industry in the province of South Sumatra. Palembang has a large number of small industries because Palembang is the capital of the province due to more quickly receive the innovation and new things from outside the region, especially from Java to further developed in Palembang.

District of MUBA in 2009 has significant growth in the formal small industry that is equal to 214 percent compared to 2008. The number of formal small industry increased again in 2010 amounted to 21.8% compared to 2009 but after that the numbers stagnant at 1449 units. Stagnantly number of small industries in this district indicate that the MUBA society during 2010 to 20116 uninformed about new things, and lack of innovation of new products.

Pagar Alam has significant growth in 2012, namely from 90 units in 2011 to 521 units in 2012. Likewise in 2014 nominally significant growth that is from 671 business units in 2013 to 1063 units in 2014. The significant growth of business formal small industry in Pagar Alam in 2012 and 2014 because this area began much visited by tourists, especially to enjoy nature.

The number of formal small industry in East OKU district is significant growth in 2008 and 2009 but decreased in 2012, increased again in 2013 and 2014. The number of formal small industry in East OKU district stagnant as much as 925 units during 2014 to 2016. The fluctuation formal small industry growth in East OKU, due to this relatively new area became a separate district with OKU district, so the economy is not yet stable condition.

Number of formal small industry in MuaraEnimis fluctuating growth over the period 2006-2013, but there was a significant increase in 2014. LubukLinggau has a number of formal small industry which continued to increase during 2006-2016, although the increase is small relatively.

Among the formal small industry in the province of South Sumatera, judging from the number of its business units, the type of industry that dominates is sought in the food industry; chemical industry and building materials; as well as metal industries and services. In 2011 there were 8329 business units, where as many as 34.9% of the food industry; 32.7% of the chemical industry and buildings; and 21.3% of the metal industry and services. This phenomenon is found also in 2016 where from as many as 11 229 business units, amounting to 34.6% (3,889 units) is the food industry; chemical industry and building materials businesses as much as 3384 units or 30.1%; as well as metal industries and services as much as 2,367 business units or 21.1%. Food industries dominate in the number of business units, it is because a food is a basic necessity.

Table 2: Formal small industrial in district/city of South Sumatera Province, 2006-2016

District/Town	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Palembang	1752	1780	1894	1947	1971	1971	1631	1973	2120	2199	2283
Ogan Ilir	179	194	200	219	224	224	237	274	274	274	279
Ogan Komering Ilir	165	188	190	467	467	467	467	467	467	500	509
Banyuasin	399	422	421	421	421	421	421	421	421	540	630
Musi Banyuasin	375	379	379	1190	1449	1449	1449	1449	1449	1449	1449
Prabumulih	607	632	657	215	248	248	248	248	313	368	368
Muara Enim	391	409	355	550	556	588	428	428	758	758	758
Ogan Komering Ulu	456	456	469	470	512	512	519	519	577	617	617
Ogan Komering Ulu Timur	189	189	423	743	743	925	799	885	925	925	925
Ogan Komering Ulu Selatan	289	291	291	295	295	308	295	430	430	824	430
Lahat	227	242	245	251	251	284	286	286	294	327	327
Pagar Alam	78	78	82	90	90	90	521	671	1,063	1,063	1,386
Empat Lawang	-	-	262	2	2	2	56	56	56	64	64
Musi Rawas	226	229	194	192	192	208	208	208	211	211	214
Lubuk Linggau	562	570	576	590	592	632	658	678	678	726	726
Penukal Abab Lematang Ilir	-	-	-	-	-	-	-	-	109	117	239
Musi Rawas Utara	-	-	-	-	-	-	-	-	-	-	25
Total	5895	6059	6638	7642	8013	8329	8223	8993	10,145	10,962	11,229

Source: Department of Trade and Industry of South Sumatera Province

### **5.2.** Labor in Small Industry Formal in Regency/City South Sumatra Province

Labor is one of the factors of production is very important in producing goods and services. Demand employers or labor against different manufacturers with consumer demand for goods and services. Consumers buy goods because such goods give satisfaction (utility), while manufacturers employ labor for to help produce goods and services.

During the 2006-2016 Palembang is an area where small industries formal absorb the most labor compared with other districts/cities. This absorption reached over ten thousand people every year. In 2006 the number of workers in the formal small industry in Palembang is 13669 people (35.8%), and in 2011 nominally increased to 15283 people (32.5%). In 2016 nominally increased again to 18698 people, but the percentage dropped to 31.2%. This indicates that the workforce in the formal small industry in the city of Palembang in number to dominate from the entire workforce is in formal small industries in the district/city of South Sumatera Province.

All districts/city in South Sumatera Province has a formal small industry that can create jobs over a thousand people in 2016 unless EmpatLawang (247 persons or 0.4%); Pali District (386 people, or 0.6%); and district of Muratara (248 persons or 0.4%). It is very reasonable considering the three districts is a new district of the division.

Among the five groups of formal small industry in the Province of South Sumatera, judging from the number of workers absorbed, the chemical industry and building materials most labor-intensive, followed by the food industry; metal industry and services; clothing and leather industries of rubber; as well as the craft industry and the public. In 2016 total labor force absorbed in the formal small industry that is 60006 people. Of these, 34% is absorbed in the chemical industry and building materials, amounting to 33.5% absorbed in the food industry, and as many as 9995 people or 16.7% absorbed in the metal

industry and services, the rest is absorbed in the clothing and leather industry of rubber (10.5%) and the craft industry and the public (5.3%).

### **5.3.** Investment in Small Industry Formal in District/City of South Sumatra Province

Investment is a major component in driving the economy. Investments enabling people continuously increase economic activity and employment, increase national income and improve the welfare of society. Investment by the company will affect the expansion of employment opportunities. This is because of the investment it will increase the production process and to make the production process requires human labor, so the company will require additional manpower.

The investment made by all the formal small industries in the district/city of South Sumatera Province nominally show continuous improvement that is from 133.3 billion rupiahs in 2006, rising to 296 billion rupiahs in 2011, and amounted to 913 billion rupiahs in 2016. Significantly increases occurred in 2016 the investment increase of 31% compared to 2015 amounted to 6975 billion rupiahs. Increased investment in formal small industry, once again indicates the economic growth in the district/city of South Sumatera Province.

In 2016 Lahat is a district/city where the formal small industry has the highest investment, that is 396.3 billion rupiah or 43.4% of the total investment of formal small industries throughout the district/city of South Sumatera Province. Although the highest investment, but in 2016 Lahat has a number of formal small industrial relatively little as many as 327 business units or 2.9% of total formal small industry business units. Meanwhile, the number of workers absorbed in Lahat in 2016 as many as 2254 people or 3.8%. The relatively small number of formal small industry business units, as well as the relative size of the labor that is absorbed in the small industry, in line with the characteristic of Lahat district as an agroindustry area.

The greatest investment of the total investments in formal small industries in the districts/city of South Sumatera Province in 2016 was in the food industry, followed by investment in the chemical industry and building materials, as well as metal industries and services. The value of investments in the food industry amounted to 577.8 billion rupiahs or 63.3% of total investment. In 2016, the chemical industry and building materials, as well as metal industries and services have an investment value amounting to 152.4 billion rupiahs (16.7%) and 107 billion rupiahs (11.7%) of the total investment. The investment of the food industry is large enough that 63.3% of the total investment, this suggests that the food industry is an industry that is required by the community to meet their needs.

### 5.4. Estimation Model

In order to select the best model of panel data regression of the three approaches used, namely common effects; fixed effects; and random effects then tested Chow; Hausman test; and LM test. The results are as follows.

### 5.4.1. Chow test

This test is used to select the model on panel data regression of choosing fixed effects (fixed effects model) or select common effects (fixed coefficient models). Initial hypothesis of this test is as good fixed effects model with fixed coefficient models (Baltagi, 2005).

As shown in Table 3, chow test show that the value of Chi-square cross section 0.000 < 0.05 with 95% significance level ( $\alpha = 5\%$ ), then Ho is rejected, therefore, according to Chow test model used is the fixed effects model.

**Table 3: Chow test** 

Effects test	Statistics	df	Prob
Cross Section F	121.800265	(5, 59)	0.0000
Cross section Chi-square	160.165679	5	0.0000

Source: The estimation results, the data is processed

5.4.2. Hausman test

Hausman test performed to select a random effects model or fixed effects model. The test is to see whether there is a relationship between the error in the model (composite error) with one or more explanatory variables (independent variables) in the model. Her null hypothesis is there is no relationship between error models with one or more explanatory variables (Baltagi, 2005).

As shown in Table 4 Hausman test shows that the value of a random cross-section of 0.1541>0.05 then the null hypothesis is accepted, so the Hausman test according to the model used is random effect model.

#### 5 4 3 LM test

LM test is used to ensure that the model will be used. The basis of the Hausman test is done when the fixed and random test results are not consistent. For example, the Chow test, a suitable model is the fixed effects model, but at the time of the Hausman test, a suitable model is random effects model (Table 5).

So as to decide the model that will be used to test the LM.

The LM test indicate that the value of the cross-section of one-sided Breusch-Pagan at 0.0000 <0.05, the null hypothesis is rejected, so according to the LM test that the model used in this study is the random effects model.

### 5.4.4.Random effects model

In any part will be showed the Random Effects estimation as shown in Table 6.

The results of the panel data estimation using Random Effects can be expressed by the following equation:

Based on the Equation (6) can be analyzed the influence of the independent variable on the dependent variable. The average value

Test summary	Chi-square statistics		Chi-square. df	Prob
Cross section random	2.031474		1	0.1541
Cross section random effects te	est comparison			
Variable	Fixed	Random	Var (fiff.)	Prob
LNINV	0.546822	0.549000	0.000002	0.1541
Variable	Coefficient	Standard error	t-statistic	Prob
С	-5.120358	0.613673	-8.343795	0.0000
LNINV	0.546822	0.025638	21.32893	0.0000
Effects specification				
Cross-section of fixed (dummy	variables)			
$\mathbb{R}^2$	0.966755	Mean of the		7.957950
Adj. R <sup>2</sup>	0.963374	dependent var		1.051820
SE of regression	0.201296	SD dependent var		-0.268074
Sum squared resid	2.390690	Akaike		-0.035838
Log-likelihood	15.84645	information		
F-statistic	285.9498	criterion		
Prob (F-statistics)	0.000000	Schwarz criterion		-0.176307
		Hannan-Quincriter		1.022978
		Durbin-Watson		
		Stat		

Source: The estimation results, the data is processed

of the components to random error (random error component) amounted to 5.172466. A positive sign in the independent variable coefficient indicates that the variable investment has a positive effect on employment in the formal small industry districts/city of South Sumatera province with a coefficient of 0.549. This means that any investment growth rates by one percent will result in employment increased by 0.549%, while other factors held constant (ceteris paribus).

Marked negative constants mean that if there is no investment there is no employment or labor absorption is zero. This implicitly means that the investment is an important factor affecting employment in the formal small industries in the district/city of South Sumatera Province. Without investment means no production activity, and at the same time, there is no meaningful employment.

Based on estimates in Table 6 the value of the coefficient determination was 0.87, which means employment variable variation determined by the variable investment of 87%, while the remaining 13% variation of the variable employment in the formal small industry is determined by other variables to exist in the model.

Figures intercept indicates the estimated coefficient random effects model, which means that the formal small industries in 6 regency/

Table 5: Test LM

Null (no rand. effect)	Cross-section	Period	Both
alternative	One-sided	One-sided	
Honda	15.01520	-1.471000	9.577197
	(0.0000)	(0.9294)	(0.0000)
King-Wu	15.01520	-1.471000	11.41058
	(0.0000)	(0.9294)	(0.0000)
SLM	17.31050	-1.288986	-
	(0.0000)	(0.9013)	-
GHM	-	-	225.4563
	-	-	(0.0000)

Source: The estimation results

city location study had the different employment. The difference of the value of the intercept in each district/city. Here the value of the intercept each regency/municipal research sites:

Table 7 shows that the value of the highest intercept is Palembang and the low one is Pagar Alam. This shows how much difference the random error component of Palembang and Pagar Alam with an average intercept value of 6 district/city other research areas. This also shows that compared with 6 district/cities the formal small industry in Palembang able to absorb most of the workforce is high, while the formal small industry in Pagar Alam has the employment rate is the lowest.

During the 2006-2016 formal small industry in Palembang able to absorb the labor force over ten thousand people every year. In 2006 the number of workers in the formal small industry in Palembang is 13 669 people (35.8%), and in 2011 nominally increased to 15 283 people (32.5%). In 2016 nominally increased again to 18 698 people, but the percentage dropped to 31.2%. This indicates that the workforce in the formal small industry in the city of Palembang in number to dominate from the entire workforce is in formal small industries in 6 districts/city of South Sumatera Province.

### 5.4.5. t-test

The t-test is a statistical test equipment to see the partial regression coefficients of independent variables affect the dependent variable. The t-test can be seen by comparing the value of the t statistic with t-table or compared the probability of t statistic with the significance level ( $\alpha = 5\%$ ). The hypothesis used in the t-test is as follows:

Ho: Investment has no significant effect on employment in the formal small industries in the district/city of South Sumatra Province

Ha: Investments have a significant effect on employment in the formal small industries in the district/city of South Sumatra Province

Table 6: Results of estimation random effects model

Variable	Coefficient	Std error	t-statistic	Prob
С	-5.172466	0.665690	-7.770078	0.0000
LNINV	0.5490000	0.025592	21.45208	0.0000
Effects specification				
			SD	Rho
Cross-section			0.638215	0.9095
random			0.201296	0.0905
idiosyncratic				
random				
Weighted statistics				
$\mathbb{R}^2$	0.876183	Mean of the dependent	nt var	0.753388
Adj. R <sup>2</sup>	0.874249	SD dependent var		0.572204
SE of regression	0.202912	Sum squared resid		2.635087
F-statistic	452.8926	Durbin-Watson Stat		0.9338787
Prob (F-statistics)	0.000000			
<b>Unweighted statistics</b>				
$R^2$	0.588009	Mean dependent var		7.957950
Sum-squared	29.62676	Durbin-Watson		0.083062
resid				

Source: The estimation results, the data is processed. SD: Standard deviation

**Table 7: Value intercept of 6 district** 

District/city	Intercept value
Palembang	1.248625
MUBA	0.310793
MuaraEnim	-0.488494
East OKU	-0.262431
PagarAlam	-0.670530
LubukLinggau	-0.137963

Source: The estimation results, the data is processed

Based on estimates in Table 6 shows that investment has Prob. t-stat 0.000 < 0.05 with 95% significance level ( $\alpha$ =5%), so Ho rejected and Ha accepted. This may imply that the investment variables have a significant effect on employment in small industry district/city of South Sumatera Province. Investment is a major component in driving the economy. Investments enabling people continuously increase economic activity and employment, increase national income and improve the welfare of society. Investments made formal small industry in the district/city of South Sumatera Province affect the expansion of employment opportunities.

### 6. CONCLUSION

The partial test indicates that investment has a significantly positive effect on employment in the formal small industries in the district/city of South Sumatera Province. Labor in the formal small industry in the city of Palembang dominate the entire workforce is in formal small industries in 6 district/city of South Sumatera Province.

The result of the test showed that the variation of the variable employment by 87% is determined by the variation of the variable investment, while the rest of 13% is determined by a variety of other variables that are not listed in the model.

#### 7. ACKNOWLEDGMENT

This article's publication is partially supported by the UniversitasSriwijaya for Professional Prime Research.

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