# Profile of informal sector workers and factors affecting informal sector employment in Jambi Province

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#### Abstract

This study aims to analyze; 1) the profile of informal sector workers in Jambi Province; 2) The development of informal sector employment in Jambi Province; 3). the effect of economic growth, population, and income per capita on informal sector employment. The data used micro data of National Labor Force Survey, Jambi Province 2015. The results showed; 1) Informal sector workers in Jambi Province 81.5 percent are in rural areas, dominated by male workers, mostly poorly educated, and work in agriculture; 2). During the period 2005-2015, the average growth of the informal sector was 1.3 percent per year, and 3) Simultaneously the economic growth, population, and income per capita had a significant effect on informal sector employment.

Keywords: informal sector, economic growth, population, and income per capita

#### **INTRODUCTION**

The level of welfare of the Indonesian population as measured by per capita income has increased significantly with an average growth of 4.4 percent per year in the period 2005 to 2015. If the per capita income of Indonesia in 2005 is still 2,737 US dollars, then in year 2015 to 3,377.1 US dollars or Rp 45.2 million (Bank Indonesia Report, 2015). But behind the success of the development, still leaving the problem of job opportunities and unemployment. BPS (2017) states that the open unemployment rate in Indonesia in 2017 reached 5.33 percent or amounted to 7.01 million workforce. This imbalance of labor supply and demand is due to the still high population growth rate of 1.38 percent per year in 2010 - 2015 period.

The study conducted Tambunan (2003); Todaro and Smith (2006) see that unemployment occurring in Indonesia is due to limitations in the creation and expansion of employment in the formal sector. The reason according to World Bank (2014), due to the global economic turmoil, which forced the growth of manufacturing productivity in Indonesia experienced a sharp decline in the past decade. This condition forces more than 50 percent of Indonesian workers to work in agriculture and low-level services. In various studies of employment of the agricultural sector and low-level services known as the informal sector that became alternative employment opportunities in many developing countries (Sethuraman, 1976; Prihanto, 2007) .The informal sector accommodates many skilled and low-skilled labor, as well as graduates of various educational levels who can not compete for jobs in the formal sector.

The existence of the informal sector in the economy of Jambi Province is increasing and becoming the main source of income for the majority of the population. In 2008 the workforce working in the informal sector amounted to 864,389 people or 70.59 percent of all workers in Jambi Province. The number of informal sector workers

increased in 2014 to 932,740 people or 63.66 percent of the total labor force (BPS, 2015).

The development of the informal sector according to the World Bank (2014) study, as an impact of economic growth driven by capital penetration in the form of large investment in both infrastructure and other economic sectors. The dominance of the capitalist system in the economic system has given rise to a core (formal) and a peripheral economic (informal) economic system (Pitoyo, 2007). Thus the growth of the informal sector in the economy can be said to be the impact of economic growth and the growth of the formal sector which opens opportunities for growth of small informal economy sectors.

Based on the above description, this study aims to analyze 1. Informal sector employers in Jambi Province by region (Urban and Rural), gender, education level, business field and business hours of 2015, 2). Development of employment in the informal sector in Jambi province in 2005-2015, 3) Influence of economic growth, population, and income per capita on informal sector employment.

# **METHODS**

The data used are micro data of National Labor Force Survey (SAKERNAS) Jambi Province 2015. To get the profile of informal sector in Jambi Province used tabulation analysis. Meanwhile, to analyze the effect of economic growth, population and income per capita on employment in informal sector in Jambi Province used semilogical double linear regression.

 $LnKSI = a + b_1 PE + b_2 LnJP + b_3 LnPK + \varepsilon$ 

where:

where.	
KSI	: informal sector employment variables
a	: constants
b1, b2, b2	: regression coefficients of the variables PE, JF and PK
PE	: economic growth
JP	: population
PK	: income per capita

# **RESULTS AND DISCUSSION**

#### Profile of informal sector workers by rural-urban

The employment of the informal sector in Jambi Province in 2015 are in rural areas (81.5 percent), while in urban the number of informal sector workers is only 18.5 percent. The informal sector workers in the rurals are dominated by those who are Employer assisted by temporary worker/unpaid workers with a figure of 92 percent.

1 au	Table 1. Informal sector workers by fural-urban in Janor Province, Tear 2015						
No	<b>Employment Status</b>	Urban	Rural	%	Persons		
1	Own account worker	27,0	73,0	100,0	324.447		
2	Employer assisted by temporary worker/unpaid worker	7,1	92,9	100,0	223.851		
3	Casual employee in agriculture	9,4	90,6	100,0	77.817		
4	Casual employee not in agriculture	74,3	25,7	100,0	52.601		
5	Unpaid worker	7,8	92,2	100,0	230.586		
Info	ormal Workers	18,5	81,5	100,0	909.302		
n	G 1 0015 DDG						

Table 1. Informal sector workers by rural-urban in Jambi Province, Year 2015

Source: Sakernas 2015 - BPS.

The development of the informal sector in rural areas according to Pitoyo (2007) is due to government programs to revitalize rural agriculture and rural infrastructure development, such as roads and bridges construction, irrigation facilities, clean water facilities, construction of health facilities, educational facilities and so on. In Jambi province, the agricultural revitalization program such as the revitalization / replanting program of oil palm and smallholder rubber plantations; educational program to farmers in the framework of the utilization of plants and land and the use of appropriate technology (Jambi Independent, 2017).

# Profile of informal sector workers by sex

In terms of gender, informal sector workers in Jambi Province are predominantly male workers (62.6 percent). This indicates that the role and participation of women in the world of work is still low. The low number of women participation in the labor market according to research conducted by the Ministry of Women and Child Protection-Indonesia (Kemenppa, 2016), among others: the perception related to the role of domestic women. In relation to that perception, the role of women in the labor market in general in domestic work is seasonal, part time and informality.

	5	,			
No	Employment Status	Male	Female	%	Persons
1	Own account worker	70,2	29,8	100,0	324.447
2	Employer assisted by temporary worker/unpaid				
	worker	83,5	16,5	100,0	223.851
3	Casual employee in agriculture	72,0	28,0	100,0	77.817
4	Casual employee not in agriculture	83,2	16,8	100,0	52.601
5	Unpaid worker	23,9	76,1	100,0	230.586
Info	ormal Workers	62,6	37,4	100,0	909.302

Table 2. Informal sector workers by sex in Jambi Province, Year 2015

Source: Sakernas 2015 - BPS.

# Profile of informal sector workers by education

Table 3 shows that 78.2 percent of informal sector workers are poorly educated (No Schooling, Did not complete Primary School, Primary School, and Junior High School). The result of this study confirm that the informal sector is an alternative for small or low educated and less skilled people as a source of income (Sethuraman, 1976, Prihanto, 2007; Directorate of Manpower and Economic Analysis, 2008)

 Table 3. Informal sector workers by education in Jambi Province, Year 2015 (percent)

No	Employment Status S	No Schooling	Did not complete Primary School	Primary school	Junior high school	Senior High School	Academy/ University	Total
1	Own account worker	3,7	16,6	34,0	22,3	21,1	2,3	100
2	Employer assisted by temporary worker/							
	unpaid worker	3,3	20,5	40,1	15,9	17,9	2,3	100
3	Casual employee in							100
	agriculture	3,2	15,7	37,8	28,2	14,2	0,9	
4	Casual employee not							100
	in agriculture	0,9	17,3	32,0	27,9	20,4	1,4	
5	Unpaid worker	3,1	18,8	35,6	18,9	21,9	1,8	100
I	nformal Workers	3,3	18,1	36,1	20,7	19,9	2,0	100
Ι	nformal Worker							
	(Person)	29560	164416	328322	188148	180524	18332	909302
Sou	rce: Sakernas 2015 - BI	PS						

Source: Sakernas 2015 - BPS.

The findings of research results Kemenppa (2016) states that low education causes discrimination in the work. The lack of education and skills causes the workforce difficult to find job, to support themselves and their families. The results provide informal informal sector workers with a low level of education, most of whom work in the category of unpaid workers (79.8 per cent) and as casual employee in agriculture (78.2 per cent).

#### Profile of informal sector workers by working hours

Most informal sector workers in Jambi Province (50.5 percent) work less than 35 hours per week. Thus, the informal sector workers in Jambi Province with less than 35 hours a week are categorized as part-time workers or Non-Full-time Workers (BPS, 2015). Although low working hours have implications for low informal worker productivity, these conditions reinforce working hours in the more flexible informal sector of running their businesses, so that for those working in this sector can choose the desired time (Bappenas, 2009; Prihanto, 2007).

**Table 4.** Informal sector workers by working hours on main work in a week in Jambi Province, Year2015 (percent)

	-ore (percent)					
No	Employment Status	<b>0</b> *)	1 - 14	15 - 34	35 +	Total
1	Own account worker	3,2	4,4	39,2	53,3	100,0
2	Employer assisted by					
	temporary worker/unpaid					
	worker	3,2	4,3	37,7	54,8	100,0
3	Casual employee in					
	agriculture	0,0	4,5	49,2	46,3	100,0
4	Casual employee not in					
	agriculture	0,0	4,2	19,9	75,9	100,0
5	Unpaid worker	0,0	13,9	51,8	34,2	100,0
	Informal Workers	1,9	6,8	41,8	49,5	100,0
I	nformal Worker (Person)	17420	61739	379874	450269	909302

Source: Sakernas 2015 - BPS.

Note: \*) While not working.

# Profile of informal sector workers by employment

The result shows that most informal sector workers in Jambi Province work in agriculture (66.7 percent). They work in agriculture as casual employee in agriculture, Unpaid worker (78.8 per cent) and employer assisted by temporary worker/unpaid worker (74 per cent).

Table 5. Informal sector workers by main employment in Jambi Province, Year 2015 (percent)

No	<b>Employment Status</b>	Α	$\mathbf{M}$	Т	S	Total
1	Own account worker	55,8	2,1	26,9	15,2	100,0
2	Employer assisted by temporary					
	worker/unpaid worker	74,0	1,7	22,0	2,3	100,0
3	Casual employee in agriculture	100,0	0,0	0,0	0,0	100,0
4	Casual employee not in agriculture	0,0	1,3	7,7	91,0	100,0
5	Unpaid worker	78,8	2,1	17,8	1,3	100,0
	Informal Workers	66,7	1,8	20,0	11,6	100,0
	Informal Worker (Person)	606438	16103	181602	105159	909302

Source: Sakernas 2015 - BPS.

A : Agriculture, Forestry, Fishery.

M : Manufacturing Industry.

Q : Wholesale tradde, retail trade, restaurant and hotel.

: Transportation, Storage and Communication, Financing, Insurance, Real Estate, Business Service, Comunity, Social and Personal Services

Note:

This condition reinforces Pitoyo's (2007) opinion, that there is generally a failure of transformation in the formal labor market, where the shift in economic structure is not followed by labor migration in agriculture and the informal sector. While the trade sector absorbs 20 percent. These two business sectors play a large role in absorbing workers in the informal sector, because in principle it is a sector that has relatively low legalization of business, traditional business management and become the main pedestal for community entrepreneurship activities (Pitoyo, 2007; Prihanto, 2007; Nazara, 2010)

#### Development of employment in the informal sector in Jambi Province

The informal sector is hardly listed in official economic statistics of a country, but informal activities play an important and ever-growing role (Nazara, 2010). The development of informal sector workers in Jambi Province continues to increase by an average of 1.3 percent per year in the 2005-2015 period. The results of this study make it clear that the informal sector has a positive side, because it has become a source of income and employment, often referred to as the last resort for many people. That is, hope or last resort for the poor or unemployed to earn income (Siregar, 2013: Bappenas, 2009).

NIa	Energlannand Status	2005		2015		Average anual	
No	<b>Employment Status</b>	Persons	%	Persons	%	growth (%)	
1	Own account worker	233288	29,1	324447	35,7	3,4	
2	Employer assisted by temporary				24,6		
	worker/unpaid worker	225501	28,1	223851		-0,1	
3	Casual employee in agriculture	62086	7,7	77817	8,6	2,3	
4	Casual employee not in agriculture	31197	3,9	52601	5,8	5,4	
5	Unpaid worker	250173	31,2	230586	25,3	-0,8	
	Informal Workers	802245	100	909302	100	1,3	
a	0.1 0015 DD0						

Table 6. Growth of informal sector employment in Jambi Province, 2005 – 2015

Source: Sakernas 2015 - BPS.

The growth of informal sector workers in Jambi Province primarily comes from casual employee not in agriculture with an average growth of 5.4 percent per year. This is in line with Sir William Arthur Lewis's thesis that the growth of the informal sector is due to the excessive labor of the traditional agricultural sector in rural areas whose productivity is very low and the inability of the modern sector to absorb power (Todaro and Smith, 2006; Arsyad, 2004).

# Effect of economic growth, population, and per capita income on informal sector employment in Jambi Province, 2005 - 2015

Multicollinearity test of this research model to see whether the regression model found a correlation between independent variables (independent). Calculation of Collinearity Diagnostics was obtained, that all independent variables of economic growth (PE), population (JP), and per capita income (PK), had a higher tolerance value than 0.10 and a VIF value less than 10 so it can be stated that multicolinearity occurs.

The Autocorrelation Test to determine whether in the regression analysis of the dependent variable is the employment of the informal sector is not correlated with itself. By using Durbin Watson Test, the result of DW value is 1,249. In Durbin Watson table with alpha 5 percent, obtained dL and dU value of dL = 1.053 and dU = 1,664. Thus DW value is at interval dL < DW < (4 - dL), it can be stated that dependent variable there is no autocorrelation.

No	Variabel	Collinearity	v statistics
		Tolerance	VIF
1	PE	0,643	1,556
2	Ln_JP	0,873	1,146
3	Ln_PK	0,620	1,612

 Table 7. Multicollinearity test

Source: Results of data.

The result of estimation of research model on the influence of Economic Growth, Total Population, and Per Capita Income on Informal Sector Employment Opportunity, obtained by regression result as shown in Table 8.

Table 8. Estimation result
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No Va	riabel	Coef.	Std.Error	t –statistik	Prob.
1 (Constant)		1,570	1,667	0,942	0,359
2 PE		-0,014	0,022	0,649	0,525
3 Ln_JP		0,667	0,140	4,758	0,000
4 Ln_PK		-0,030	0,154	-0,198	0,846
R Square	0,608				
Adjusted R Square	0,543				
F – statistik	9,317				
Prob (F – statistik)	0,001 <sup>a</sup>				
Durbin – Watson	1,249				
C	1-4-				

Source: Results of data.

Model feasibility test in this research is based on coefficient of determination (Rsquared), t-statistic value and F-statistic. Regression estimation results obtained that the coefficient of determination (R-squared) of 0.608. This means that 60.8 percent of informal sector employment change (KSI) can be explained by explanatory variables such as economic growth (PE), population (JP), and per capita income (PK), while the remaining 39.2 percent are explained by other variables not included in the research model. Meanwhile, the value of F-statistics obtained probability of 0.001; it can be said that together the economic growth explanatory variable (PE), population (JP), and income per capita (PK) significantly affect the employment of the informal sector (KSI).

The t-statistical test of economic growth variable (PE), has a probability value of 0.525; then with a significance level of 5 percent of economic growth variable has no significant effect. Economic growth is a proxy for increased production of goods and services. In production theory, demand for input (labor) is derived demand from output demand, which means that new job opportunities occur when there is demand for output (Feriyanto, 2014). Within the framework of the theory should economic growth affect the employment opportunities of the informal sector. Nevertheless, the estimation results show that economic growth in Jambi Province did not affect the informal sector employment. According to Pitoyo (2007) this situation indicates that the economic growth that occurs tend to be driven capital and technology power, thus failing to create equity.

For the t-statistical test of the population variable (JP), yields a probability value of 0,000; so statistically with the 5% significance level of the population variable has a significant effect on informal sector employment. Regression estimation results show that the population (JP), positively affect the employment opportunities of the informal sector (KSI). This means that if the population increases 1 percent, then the employment opportunities informal sector will increase 0.67 percent. Population is the most dominant factor in economic activity, because the population as a source of provision of labor, experts, and business personnel needed in production activities. In addition, the large number of residents also adds the potential of the community as a source of new demand, meaning that the population can increase the market of goods and services (Todaro and Smith, 2006; Arsyad, 2004).

While the t-statistical test for income variable per capita obtained probability value of 0.846; thus per capita income has no effect on informal sector employment. Revenue per capita should affect employment opportunities through consumer purchasing power that will ultimately create demand for goods and services. In this study, per capita income variable did not affect the informal sector employment. Some studies suggest that job opportunities in the informal sector are generally not emerging due to demand, but are driven more by labor surplus in the traditional agricultural sector (Siregar, 2013, Todaro and Smith, 2006). Nazara (2010) further adds that informal sector employment is the result of labor market rigidity that hinders job creation in the formal sector.

# CONCLUSIONS

Based on the profile of informal sector workers in Jambi Province, the following description is illustrated. A). Most of all are in the countryside, b). Dominated by male workers, c). They are low educated average (No school, No primary, primary, and junior), d). The average number of working hours per week is still less than 35 hours per week, e). Most informal sector workers work in the agricultural sector. Informal sector workers in Jambi Province experienced an average growth of 1.3 percent per year in the 2005 to 2015 period. The highest growth of informal sector workers came from those own account worker who increased on average by 3.4 percent per year.

The result of regression model estimation explaining together the economic growth, population, and income per capita influence to informal employment sector.

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