

# Job Mobility in Big Cities, Southern Sumatera

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**Abstract-** This study discusses job mobility Major cities in South Sumatera, namely Palembang, Bandar Lampung and Jambi. In this study, the occupational mobility divided into two (2) categories: (1) to move jobs, and (2) do not change jobs. The data used is the cross section data obtained through field surveys. By using binary logistic regression equation, the estimation results show that the variables of work experience, and age variables significantly affect job mobility.

**Index Terms-** Job Mobility, binary logistic, probability, odds ratio

## I. INTRODUCTION

Genesis moved from one job to another in the economic sector (sector primary, secondary, and tertiary) a lot going on lately. One of the factors that influence the incidence of this is that many companies are using the contract system on employees. Displacement can work because it is the desire of its own workers to improve the well-being, income received unsatisfactory, or dismissed from the company because of downsizing or due to expiration of the employment contract.

Job mobility is a change of jobs to different jobs or types of work into different types of jobs or job status to the status of different jobs (Alatas and Trisilo, 1990). Job mobility can be seen from two sides. First, the views of the status of job mobility which includes workers who've moved jobs and workers who have never been. Second, job mobility is seen from a shift in the type of work from one sector to another.

The move from one job to another has an important role in the economy, because it involves an increase in the welfare of workers. In addition to the displacement of jobs, there is a concordance between the company and labor, which the company wants a quality workforce while at the workers expect higher wages. In taking the decision to move jobs or stay on the job long usually influenced by several factors, but usually the most dominant factor is the wish to obtain greater revenue. Pack and Paxson (1999), suggests that through the mobility of the work will earn a better income from a previous job. To obtain a better income, workers tend to change jobs more promising is the work that relatif high level of productivity.

## II. LITERATURE REVIEW

Workers with low quality or lacked the skills at a more mobile work among existing industries than workers who have high skills and quality. While Pack and Paxson (1999), Mincer

and Jovanovic (1981), Akkemik (2005) revealed that workers are more likely to move to other industries that provide wage increases, meaning that workers prefer a sector or industry whose productivity is better than the economic sectors more. The main objective of the mobility of the work to earn a better income than from his previous work, it also reinforced the findings Susilowati (2001) that labor mobility a positive impact on increasing household income and economic development of rural areas

Rationality workers to move from one job to another job or jobs with low productivity to higher productivity to gain a better wage rate than his previous work. The wage rate is usually measured by labor productivity, while productivity can be recorded from education and employment experience. The wage rate is far below the given labor productivity has the potential to encourage workers to move or quit the job. McConnell (1999) revealed that the mobility of workers emerged as a response to the difference in wages as the market moves towards balance. In addition to the wages, there are several other factors that also may be the originator. Many factors cause someone to do a job change. According Suriastini (2006), one can do the job on his own mobility or voluntary or involuntary occurring or not voluntary because it was not his desire.

Ehrenberg and Smith (2012), mentions that there are three schemes undertaken by the company to withhold labor to not exit or quit. First, give wage rate that is higher than the level of wages in the labor market. Second, wage rates with higher acceleration, especially to workers who are already experienced. Third, by providing opportunities for workers to participate in training or education and the labor required to serve and apply the knowledge gained in the company within a certain time.

Longhi and Taylor (2011) analyzed changes in the type of work, and found that about 30 percent of job seekers find new kinds of work in the same job with the previous work. Job seekers who work much easier than the job seekers who have been unemployed for vertical mobility.

## III. RESEARCH METHOD

This study discusses the job mobility in major cities in South Sumatera, namely Palembang, Bandar Lampung and Jambi. All three cities are in the group of big city because it has a population of more than 500,000 people.

In this study, the unit of analysis is all the workers doing the job mobility. The variable unit the unit of analysis is labor income, work experience, education workers, age, number of dependents, and the worker's location. The data used is the cross section data obtained through field surveys using a questionnaire. Other necessary supporting data from various surveys the Central

Bureau of Statistics (BPS) is Palembang in Figures 2014, Bandar Lampung in Figures 2014, and Jambi in Figures 2014. Data is taken from data on the number of workers by the main business field where the number of workers in Palembang as many as 600 408 people, Bandar Lampung as many as 361 957 people, and Jambi is 230 243 people, bringing the total number of residents in three (3) of the city is 1,192,608 people

In order for samples taken in this study may represent the population, the sample in this study was determined by using a formula Slovin (Sangadji and Sopiah, 2010). By using a precision level of 10 percent, the number of samples were obtained as many as 100 people, then the number of samples for each city are determined by proportional random sampling, which obtained results (1) for Palembang as many as 51 respondents; (2) to Bandar Lampung as many as 30 respondents; and (3) Jambi were 19 respondents. Determination of workers who perform that job mobility sampled using simple random sampling (Singarimbun and Effendi, 1995).

**Model and Technical Analysis**

Analysis of the probability of workers to do the job mobility is based on two categories: (1) changing jobs; and (2) do not change jobs., which analyzed using binary logistic regression model. Factors affecting the mobility of workers to do the job (MP), namely income (INC), work experience (EXP), education (EDU), the number of dependents (ND), age (AGE), and the location of the respondent (LR). Then the function of job mobility is

$$MP_i = f( INC, EXP, EDU, ND, AGE, LR) \quad (1)$$

According to Hosmer, Lemeshow, and Studirvant (2013), and Agresti (2007), binary logit model of equation is:

$$g(x) = \ln \left( \frac{\pi(x)}{1-\pi(x)} \right) = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_p X_p$$

From equation 1, then the equation model in this study are as follows:

$$MP = \ln \left( \frac{P}{1-P} \right) = \beta_0 + \beta_1 INC + \beta_2 EXP + \beta_3 EDU + \beta_4 ND + \beta_5 AGE + \beta_6 D_1 LR_1 + \beta_7 D_2 LR_2$$

Where:

- MP = Job Mobility (1 = Moving jobs; 0 = No change jobs)
- INC = Respondent income every month (in Indonesian Rupiah)
- EXP = Work experience of respondents (in terms of years)
- EDU = Education formally respondents (in terms of years)
- ND = Number of dependents of respondents (in person)
- AGE = Age of respondents (in terms of years)
- LR = Location Respondents
- D1 = Dummy location of respondents, 1 = Palembang; 0 = more

- D2 = Dummy location of respondents, 1 = Bandar Lampung; 0 = more

**IV. RESULTS**

In this study, the dependent variable consists of 2 categories with coding Y = 0, to move jobs, and Y = 1 not to move jobs, therefore the regression model appropriate to be used with the dependent variable nominal scale two categories is the equation of logistic binary (Hosmer and Lemeshow, 2013).

Based on estimates, with  $\alpha = 0.05$  and a degree of freedom (df) = k = 6, obtained  $\chi^2$  value (p) of the chi-square distribution table at 12.592. Subsequently obtained value -2 (LO-LI) (Iteration History) amounted to 18.595 > 12.592 or -2 (LO-LI) >  $\chi^2(p)$ , it can be concluded that together (simultaneously), the 6 (six) independent variables significantly influence variable job mobility.

Hosmer and Lemeshow Test used to test the suitability of the model (goodness of fit), or in other words to test whether the model that we use, by using the 6 (six) independent variables (INC, EXP, EDU, ND, AGE, and LR) are in accordance with the data empirical or not. The null hypothesis in this test is a "model has been adequately explain the data (fit)" with the test criteria reject the null hypothesis (Ho) if the probability value less than or equal to a predetermined level of significance ( $p \leq 0.05$ ). Based on the results of data processing obtained Chi-square value of 9.855 with a probability value of 0.275. Thus the null hypothesis is accepted ( $0.275 > 0.05$ ), meaning that models have been adequately explain the data (fit).

Through the Model Summary table of the results if the data obtained value Nagelkerke's R Square of 0.231. This indicates that the variability of the dependent variable (MP) which can be explained by the variability of independent variables (INC, EXP, EDU, ND, AGE, and LR) simultaneously is of 23.1 percent, while the remaining 76.9 percent is explained by the variability other variables outside the 6 (six) independent variables were studied.

By using binary logistic regression, obtained the test results shown in Table 1 below.

**Table 1 Results of Testing Individual Independent Variables**

Independent variables	B	Wald	Sig.	Exp (B)
intercept	2,004	1,021	0,312	7.416
income	-	.538	.463	0.878
work experience	0.131	9.593	0,002	1,175
education	0.161	0,030	0,862	0,986
age	-	5,847	0,016	.914
number of dependents	0.014	1,784	.182	1,282
location Palembang	-	0,003	0,959	1,033
location Bandar Lampung	0.090	0.315	.574	.663
	.248			
	0,033			
	-			
	0.412			

Source: results of data processing, 2017

From Table 1 it obtained a logistic regression model as follows.

$$MP = \ln\left(\frac{P}{1-P}\right) = 2,004 - 0,131/INC + 0,161EXP - 0,014EDU + 0,248ND - 0,090AGE + 0,033D,LR_1 - 0,412D,LR_2$$

### The Effect of Income (INC) on Job Mobility

In this case, the variable income of workers did not significantly affect job mobility. In this logit model, the coefficient of labor income obtained yield was -0.131, while the odds value of workers' income is exponential (-0.131) of 0.878. This value explains that the income of workers who perform the job mobility decreased by 0.878 times than the income of workers who do not change jobs.

Someone who did move the work would start again from the beginning and still not much experience. Revenue given by the company to be readjusted with the expertise and experience possessed by the worker.

### The Effect of Work Experience (EXP) on Job Mobility

In this study, work experience is calculated by a long time or employment either at the old job and the new jobs that have been taken by the workers in terms of years. Results of the estimation model (Table 1) shows that significant work experience variables at  $\alpha = 0.05$  with a value of 0.002. From the results of the statistical calculation, the coefficient is positive work experience that is 0.161, meaning that each additional year of work, the job mobility increasing by 16.1 percent. Nuse values odds of work experience is exponential (0.161) of 1.175. This value is clear that respondents have a longer work experience, will have a tendency to do the job mobility increases by 1,175 times.

In this study suggest that individuals who have had work experience longer then the opportunity to move jobs is growing. It is clear that workers who are in Palembang, Bandar Lampung and Jambi has considerable opportunities to change jobs when each worker has had a long working experience. The experience of the control of any type of work is a resource for those workers to earn a better income from a previous job.

### The Effect of Education (EDU) on Job Mobility

Based on Table 1, the education variable is not significant p-value 0.862 which is greater than  $\alpha = 0.05$ . If seen from the coefficient of education variable negatively affected by the value of -0.014, meaning that the higher the education level the lower the chances of workers to do the job mobility. Nuse values odds of education is exponential (-0.014) of 0.986. This value explains that the high education level of workers, the tendency to do the job mobility decreased by 0.986 time than workers who have low education levels but do not change jobs.

The higher the level of education will be the higher the level of income, therefore, when a person has a higher education, hence the desire to do the job mobility decreases. This is because the revenue earned is directly proportional to the level of education that can be achieved by anyone.

### The Effect of Age (AGE) on Job Mobility

In this study indicate that the respondent's age significantly affect job mobility. When a person still has the ability to perform mobility for various reasons, such as to obtain a better income,

then do the job mobility choice. The estimation results explain that the respondent's age a significant negative effect, where the value of the coefficient is -0.090 to mean that the increasing age of the diminishing opportunities for job mobility. If viewed from the odds of 0.914, which means that the opportunity to move jobs decreased by 0914 times compared to workers who do not change jobs.

### The Effect of Number of Dependents (ND) on Job Mobility

In this study, the number of dependents is defined as the sum of all family members to be borne in one family. Variable number of dependents and no significant positive effect on job mobility opportunities. The coefficient of the variable number of dependents obtained yield was 0.248, meaning that the more the number of dependents, the increasing mobility of the work amounted to 24.8 percent. The odds of the number of dependents of workers is exponential (0.248) of 1.282. This value explains that workers have a number of dependents more the tendency to do the job mobility increased by 1,282 times compared to the number of dependents workers who have little and do not change jobs.

Variable number of dependents is positive, which means the addition of one of the family members are borne increase the chances of workers to do the job mobility. This is done to obtain a better income from previous work to meet the needs of family life. While an increasing number of family dependents, the necessities of life is also increasing, therefore the worker who is also the head of the family has a great responsibility to provide for the welfare of his family.

### The Effect of Location Respondent (LR) on Job Mobility

In this study, the location of the respondent is three (3) major cities are located in South Sumatera, namely Palembang, Bandar Lampung and Jambi. Jambi as the basic category or the reference category. From the estimation results shown in Table 1, the results obtained Palembang locations is positive but not significant. Palembang coefficient of 0,033 with a value odds ratio of 1.033, this value gives the meaning of job mobility is greater than 0,033 times in Jambi. As for the location of Bandar Lampung leave a negative value and the value of the odds ratio of 0.663. This explains the value of that job mobility in Bandar Lampung 0.663 times lower than in the city of Jambi.

## V. CONCLUSION

The aim of the workers doing the job mobility because they want to earn better than a previous job. From the estimation explains that the only variable work experience, and age variables that significantly. Worker who already have work experience longer then the opportunity to move job growing. Of the three major cities of Palembang, Bandar Lampung and Jambi, the probability of workers doing the job mobility, as work experience increases, increasing by 1,175 times than workers with little work experience and do not move the sector. Furthermore, the variable age where increasing age the lower the chances of workers to do the job mobility of 0.914 times than workers who do not change jobs. In addition a person of child bearing age will be more motivated to work in order to meet the needs of families, meaning that at the time of the person's ability

to move jobs is quite high, but after increasing age and increasing work experience then a lower desire to change jobs. Another variable that is not significant is the income variable, because when a worker has obtained sufficient income to meet the needs of family life then there is the unwillingness to change jobs. These conditions explain that earned income is directly proportional to the level of education that can be achieved by someone, it means that the higher the education level, the greater the revenue that could be earned workers. Therefore, the education variable is also not significant to job mobility. Furthermore, a variable number of dependents not significantly affect job mobility. This indicates that regardless of the number of dependents is not strong enough influence workers to switch to another job. This condition describes the help of other family members to meet the needs of family life. Besides the location of respondents also did not significantly affect whether or not to move to another job.

#### REFERENCES

- [1] Agresti, Alan. 2007. *An Introduction to Categorical Data Analysis* (Second Edition). New Jersey: John Wiley & Sons. Inc.
- [2] Akkemik, K. Ali. 2005. *Labor Productivity and Inter-Sectoral Reallocation of Labor in Singapore (1965-2002)*. Forum of International Development Studies, 30 September 2005.
- [3] Alatas and Trisilo. 1990. *Struktur Ketenagakerjaan di Indonesia*, dalam Aris Ananta (ed). *Ekonomi Sumber Daya Manusia*. Jakarta: LDFE-UI.
- [4] Badan Pusat Statistik (BPS) Kota Palembang. 2014. *Palembang Dalam Angka Tahun 2014*.
- [5] Badan Pusat Statistik (BPS) Kota Bandar Lampung. 2014. *Bandar Lampung Dalam Angka Tahun 2014*.
- [6] Badan Pusat Statistik (BPS) Kota Jambi. 2014. *Jambi Dalam Angka Tahun 2014*.
- [7] Ehrenberg, Ronald G., dan Robert S. Smith. 2012. *Modern Labor Economics: Theory and Public Policy* (Eleventh Edition). United State: Prentice Hall-Pearson.
- [8] Hosmer, JR, David W., Stanley Lemeshow, Rodney X. Sturdivant. 2013. *Applied Logistic Regression* (3rd Edition). New Jersey: John Wiley & Sons Inc.
- [9] Longhi, Simonetta, dan Mark Taylor. 2011. *Occupational Change and Mobility among Employed and Unemployed Job Seekers*. Economic & Social Research Council (ESRC), No. 2011-25, October 2011.
- [10] McConnell, Campbell., S.L., Brue, dan D.A. Macpherson. 1999. *Contemporary Labor Economics*. Boston: McGraw-Hill Internasional Edition.
- [11] Mincer, Jacob, dan Boyan Jovanovic. 1981. *Labor Mobility and Wages*. Chicago: University of Chicago Press. ISBN 0-226-72628-2, p. 21-64.
- [12] Pack, Howard dan Christina Paxson. 1999. *Inter-Industry Labor Mobility in Taiwan, China*. Policy Research Working Paper Number 2154, August 1999. The World Bank, Development Research Group, Public Economics.
- [13] Sangadji, Etta Mamang, and Sopiha. 2010. *Metodologi Penelitian: Pendekatan Praktis dalam Penelitian*. Yogyakarta: Penerbit Andi.
- [14] Singarimbun, Masri, and Sofian Effendi. 1995. *Metode Penelitian Survei: Edisi Revisi*. Jakarta: LP3ES.
- [15] Suriastini, Ny Wayan. 2006. *Hubungan Umur dengan Perubahan Pekerjaan: Suatu Aplikasi Metaanalisis dalam Ukuran Sampel, Populasi*, 17 (1) ISSN:0853 – 0262.
- [16] Susilowati, Sri Hery (2001). *Dampak Mobilitas Tenaga Kerja Terhadap Pendapatan Rumah Tangga Pedesaan*. Pusat Penelitian Sosial Ekonomi Pertanian, Badan Litbang Pertanian, Departemen Pertanian Bogor.

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