Analysis Occupational Change and Earning of Star Hotel’s Workers in Palembang Indonesia


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Abstract- This research is based on theory and previous research on Occupational Change and Earning for hotel’s workers in Palembang Indonesia.

Index Terms- Occupational Change, Earning, Multinomial Logit

I. INTRODUCTION

This article provides novel evidence on the relation between changes in occupational and earning of hotel’s worker. We assess: (1) location and occupational with four category (2) analyze the factors that affect worker to occupational change. The category of the location and occupational influenced by sex, married, previous earning, experience, age, training and education. Work plays an important role in the labor market. Work is a tool used to construct different types of work into a group of work based on its classification so that it can be differentiated level and specialization of its expertise. Research conducted by Longhi (2009) in the UK and Germany, the results of the study show that first: there is more specific than the change of work compared with the case of change of job title in the same profession. Second: the working situation of people who change jobs is different from those who change job titles in the same profession, as well as the characteristics of the person making the change. Third: the effect of job change on income and job satisfaction. Job changes are often associated with changes in one's income (Shaw, 1998: 1).

Workers change jobs in order to increase their income, assuming that 1). Workers are interested in money and non money from the job 2). Workers expect a higher level of compensation for the same level of work (Ehrenberg, 1997: 248). Wage or income compensation theories suggest a suitability between workers in the labor market (Nurlina, 2012: 96).

Since South Sumatera was officially appointed to host Asean Games 2018, various preparations have been made by the South Sumatra provincial government in various sectors. One such preparation is to meet the needs of lodging for participants and guests ie with the construction of hotels.

Table 1.1 Classification of Hotels Based on Star Criteria in Palembang

<table>
<thead>
<tr>
<th>No</th>
<th>Hotel Criteria (Unit)</th>
<th>Hotel Amount (Unit)</th>
<th>the occupancy rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5 Star</td>
<td>3</td>
<td>65.46</td>
</tr>
<tr>
<td>2</td>
<td>4 Star</td>
<td>10</td>
<td>60.26</td>
</tr>
<tr>
<td>3</td>
<td>3 Star</td>
<td>15</td>
<td>68.56</td>
</tr>
<tr>
<td>4</td>
<td>2 Star</td>
<td>13</td>
<td>54.38</td>
</tr>
<tr>
<td>5</td>
<td>1 Star</td>
<td>12</td>
<td>61.02</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>52</td>
<td>100</td>
</tr>
</tbody>
</table>

Source: Department of Tourism, 2016
Each with a different hotel occupancy rate, 2017 data show that for a five-star hotel 65.46 percent, four-star hotels 60.26 percent, three-star hotels 68.56 percent and two-star hotels 54.38 percent and star hotels One 61.02 percent. The highest percentage of occupancy rate was in three star hotels which was 68.56 percent. There is a change in jobs due to better revenue expectations. The increase in hotel growth in Palembang city, is an opportunity of employment and demand for hotel workforce. Workers who originally worked on the field A certain will be moved to make changes to the work in the hope that the income will be increased compared to before the change of work.

II. Research Elaborations

The concept of job change is rooted in the concept of job mobility. There is no general definition of job change. The definition differs depending on the background and purpose of the research. Job changes can be made with or without geographic mobility. Job changes may occur within the same company or with the involvement of different entrepreneurs. Job change characteristics include elements:
A. Changed profession
B. Changes based on job-related content before and after job change. The need for different competencies to fulfill work-related tasks.
C. Not limited to expansion of activities but also career development responsibilities.
D. Job change as labor mobility is the ease of switching work, both on the same level; To a higher or lower level as well as to a different kind of work (Borjas 2000: 314).

McConnell, Brue and Macpherson (2010: 264) suggests several types of work changes: 1). Change of work but no change of occupation and residence. 2). No occupational change but no change of residence 3). Change of residence but without changing occupation. 4). Occupational change and residence.

The type of job change can be seen on the following page image:

![Figure 2.1 Type of job change](Source: McConnell, 1999: 276)

In Figure 2.1 consists of columns and rows. Columns section for residence and part row for occupation. It can be assumed that the residence as a location and occupation as a job. The work in question is the type of work. Job type is division and job title. Box 1 shows for locations that remain unchanged and jobs that remain unchanged. In box 2 it shows for the changed location and the work remains unchanged. In Box 3 it shows for a location that remains unchanged and the job is changing. In Box 4 shows for changed locations and changed jobs.

III. Result and Finding

This study assumes that the income of the hotel workers during a certain period of time depends on the seven main variables: job change itself, age, gender, marital status, education level, training and employment and income. Job changes as a dependent variable depend on Independent variable (AGE), sex (SEX), marital status (M_STA), education (EDU), training (TRAIN) and experience (EXPE) and Income Before Employment (INC). The nature of the dependent variable is the qualitative data of the nominal scale.

In this study consists of 4 (four) categories. Location Changed Permanent Work (LBPT) Changed Employment Changes (LTPB) and Changed Employment Changed Locations (LBPB) with Basic Category Fixed Location Fixed Work (LTPT)
The model that can be used is multinomial logistic regression model. Models with 4 (four) categories produce 3 (three) logit functions. Based on the Kenneth (2012) multinomial logit model, the logit model form in this research is:

\[
OC_{LBPT} = \ln \left( \frac{LBPT}{1-LBPT} \right) = \alpha_0 + \alpha_1 \text{AGE} + \alpha_2 \text{M_STA} + \alpha_3 \text{SEX} + \alpha_4 \text{EDU} + \alpha_5 \text{EXPE} + \alpha_6 \text{TRAIN} + \alpha_7 \text{INC} + \epsilon_1 \tag{3.1}
\]

\[
OC_{LTPB} = \ln \left( \frac{LTPB}{1-LTPB} \right) = \beta_0 + \beta_1 \text{AGE} + \beta_2 \text{M_STA} + \beta_3 \text{SEX} + \beta_4 \text{EDU} + \beta_5 \text{EXPE} + \beta_6 \text{TRAIN} + \beta_7 \text{INC} + \epsilon_2 \tag{3.2}
\]

\[
OC_{LBPB} = \ln \left( \frac{LBPB}{1-LBPB} \right) = \gamma_0 + \gamma_1 \text{AGE} + \gamma_2 \text{M_STA} + \gamma_3 \text{SEX} + \gamma_4 \text{EDU} + \gamma_5 \text{EXPE} + \gamma_6 \text{TRAIN} + \gamma_7 \text{INC} + \epsilon_3 \tag{3.3}
\]

\[
\text{INC} = \delta_0 + \delta_1 \text{OC}_{LBPT} + \delta_2 + \text{OLC}_{LTPB} + \delta_3 \text{OC}_{LBPB} + \epsilon_3 \tag{3.4}
\]

Where:
- \( \text{OC} \) = Job Changes
- \( \text{LTPT} \) = Job Change Fixed Location Fixed Job
- \( \text{OC}_{LBPT} \) = Job Changes Location Changed Fixed Jobs
- \( \text{OC}_{LTPB} \) = Job Changes Fixed Location Job Changed
- \( \text{OC}_{LBPB} \) = Change Jobs Location Changed Jobs Changed
- \( \text{AGE} \) = Age
- \( \text{M_STA} \) = Marital status
- \( \text{SEX} \) = Gender
- \( \text{EDU} \) = Duration of education
- \( \text{EXPE} \) = Experience
- \( \text{TRAIN} \) = Training Frequency
- \( \text{INC} \) = Income Change
- \( A \) = constant
- \( \alpha, \beta, \gamma, \delta \) = variable coefficients
- \( \epsilon \) = error (another independent variable outside the model)

Based on the results of research estimation by comparing wald statistic and chi square (sig) values, independent variable's probability of job change in the Changed Work Changes (LTPT) and Changed Employment Changes (LBPB) category with Basic Category of Permanent Location Permanent Work (LTPT) are summarized in tabular form as shows in Table 3.1.

Based on Table 3.1, the employee's opportunity to place a Changed Work Location (LTPT) based on each variable is as follows: For the age variable with category 1 (20-29 years) the job change opportunity is 0.7534214 or equal to 76 percent. While for age with category 2 (30-39 years) the job change opportunity is 0.5379242 or equal to 54 percent. For unmarried workers the opportunity to make a job change is 0.0006252 or equal to 0.06 percent. For the variable of worker with female gender the opportunity to make a job change is 0.617284 or equal to 62 percent. For high school education variables job change opportunity is 0.590667 or by 59 percent. While for the education variables diploma job change opportunity is 0.000687 or equal to 0.07 percent. For experience variables with category 1 (0-5 years) the job change opportunity is 0.000478 or 0.05 percent. For experience variables with category 2 (6-15 years) the job change opportunity is 0.000534 or 0.05 percent. For training variables with category 1 (without training) the job change opportunity is 0.000478 or 0.05 percent. For the training variable with category 2 (1 training) the job change opportunity is 0.000684 or equal to 0.07 percent.

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**Table 3.1.**

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>LBPT</th>
<th>LTPB</th>
<th>LBPB</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Exp(β)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>.986</td>
<td>1.009</td>
<td>1.684</td>
</tr>
<tr>
<td>Single</td>
<td>1.194</td>
<td>.831</td>
<td>.732</td>
</tr>
</tbody>
</table>
Based on Table 3.1, the employment opportunity of Changing Employment with Changed Employment Changes (LBPB) based on each variable is as follows: For the age variable with category 1 (20-29 years) the job change opportunity is 0.831255 or 83 percent. While for age with category 2 (30-39 years) job change opportunity is 0.784929 or equal to 78 percent. For unmarried worker variable the opportunity to make job change is 0.000815 or equal to 0.0815 percent. For the female worker variables the opportunity to make a job change is 0.637755 or 64 percent. For high school education variables the opportunity of job change is 0.554324 or equal to 55 percent. While for the education variables diploma job change opportunity is 0.534188 or by 54 percent. For experience variables with category 1 (0-5 years) job change opportunity is 0.000365 or 0.03 percent. For experience variables with category 2 (6-15 years) job change opportunity is 0.000539 or 0.05 percent. Thus it can be concluded that the employment opportunity of the Employment Changes with Changed Job Location Changes (LBPB) based on each of these variables, the greatest probability is based on the age of the worker.

The reference variables for the model based on table 3.1 above are:

\[
OC_{\text{LBPB}} = \ln \left( \frac{LBPB}{\text{LTPT}} \right) = -0.731 - 0.014SEX_0 + 0.177M_STA_0 + 3.864INC_1 + 1379INC_2 + 0.514INC_3 - 0.395EXPE_1 - 1.674EXPE_2 - 1.565EXPE_3 - 0.974EXPE_4 - 0.725EXPE_5 + 0.904AGE_1 + 1343AGE_1 - 0.976TRAIN_1 - 0.026EDU_1 + 0.609EDU_2\ldots(3.1.1)
\]

Based on the equation table 3.1 it can be explained that: the value of the female gender lower variables affect the worker to choose Location Changed Permanent Work (LBPT) with coefficient of 0.014 or Sex significantly affect the probability of workers doing LBPT job change lower than LTPT, with coefficient value 0.014 And odds ratio 0.986. For the marriage variable value the unmarried category is higher affecting the worker to choose Location Changed Permanent Work (LBPT) with coefficient 0.177. For the value of income variable before category 1 (low income) and category 2 (middle income low) and category 3 (high income) higher influence workers to choose Location Changed Permanent Work (LBPT) with coefficient 3.864 and 1379 and 0.514. In the category 1 (0-1 years) and category 2 (2-5 years) experience variables, 3 (6-10 years old) and 4 (11-15 years) experience experience variables and 5 (16-20 years) experience experience variables) Lower the worker's influence to choose a Changed Permanent Work Location (LBPT) with a coefficient of 0.395; 1.674; 1.565; 0.974 and 0.725. The variable value of age 30 category 1 (less than 30 years), category 2 (between 31 to 40 years old) is higher for workers to choose a permanent job change location (LBPT) with each coefficient of 0.904 and 1343. Variable value Training of training category 1 (Did not get training) lower influence workers to choose with coefficient 0.445 to choose Location Changed Permanent Work (LBPT). The variable value of lower secondary education influenced the worker to choose a permanent job change location (LBPT) with a coefficient of 0.026 but for higher Diploma education affecting the workers to choose Location Changed Permanent Work (LBPT) obtained coefficient 0.609.

\[
OC_{\text{LTPB}} = \ln \left( \frac{LTPB}{\text{LTPT}} \right) = -0.321 + 0.009SEX_0 - 0.186M_STA_0 + 4640INC_1 + 1839INC_2 + 0.425INC_3 - 0.342EXPE_1 - 1.263EXPE_2 - 0.916EXPE_3 - 0.975EXPE_4 + 0.744AGE_1 + 0.994AGE_1 - 0.264TRAIN_1 - 0.080EDU_1 + 0.200EDU_2\ldots(3.1.2)
\]

Based on the equation table 3.1 it can be explained that: the variable value Female gender is higher affecting the worker to choose Fixed Work Change Location (LTPB) with coefficient 0.009 or Gender affects the probability of the worker to change the LTPB work is lower compared to LTPT and significant, with coefficient value 0.009 and odds ratio 1.009. For the Marital Status variable value the unmarried category is lower affecting the worker to choose a Changed Work Changes Location (LTPB) with a coefficient of 0.026.
coefficient of 0.186. For the value of income variables before category 1 (low income) and category 2 (middle income low) and category 3 (high income) higher influence workers to choose Fixed Work Changes (LTPB) with coefficients 4640 and 1839 and 0.425. In the category 1 (0-1 years) and category 2 (2-5 years) experience variables, 3 (6-10 years old) and 4 (11-15 years) and 3 (16-20 years) ) Lower the employee's influence to choose a Changed Work Changes Location (LTPB) with a coefficient of 0.342; 1,263; 0.916; 0.601 and 0.975. The variable value of age 30 category 1 (less than 30 years), category 2 (between 31 to 40 years old) was higher for workers to choose a permanent job change location (LTPB) with each coefficient of 0.744 and 0.994 variable value Training category 1 Get training) lower training influence workers to choose with coefficient of 0.445 to choose Fixed Work Changes Location (LTPB). The variable value of the lower secondary education affects the worker to choose a permanent job change location (LTPB) with a coefficient of 0.080 but for higher Diploma education affecting the workers to choose the Permanent Fixed Work Location (LBPT) obtained coefficient of 0.200.

$$OC_{LBPB} = \ln \left( \frac{LBPB}{LTPB} \right) = \ln \left( \frac{\text{LBPB}}{\text{LTPB}} \right)$$

Based on the equation table 3.1 it can be explained that: the variable value Female gender is higher to influence the worker to choose the Changed Work Changed (LBPB) with the coefficient of 0.521 or Gender affects the probability of the worker to change LBPB work is higher than the LTPT and significant, with coefficient value 0.521 and odds ratio 1684. For the marriage variable value the unmarried category is lower affecting the worker to choose the Changed Work Changed Location (LBPB) with the coefficient of 0.312. For the value of income variable before category 1 (low income) and category 2 (middle income low) and category 3 (high income) higher influence workers to choose Changed Employment Changes (LBPB) with coefficients 4687 and 2059 and 0.579. In the category 1 (0-1 years) and category 2 (2-5 years) experience variables, 3 (6-10 years old) and 4 (11-15 years) and 3 (16-20 years) ) Lower the worker's influence to choose a Changed Work Changed Location (LBPB) with coefficient 2131; 2361; 1957, 1669, 1511, EXPE4 - 1511 EXPE5 + 1943 AGE1 + 1556 AGE1 - 0.438 TRAIN1 + 0.189 EDU1 + 0.207 EDU2…………………………..(3.1.3)

Based on Table 3.2 above coefficients, it can be arranged regression line equation as follows:

Revenue LTPT Now = 0.034 + 0.159 + 0.149 LBPB LBPT .............................................................. (3.1..4)

The explanation regression line as follows: Constant value of 8,094,211.823 shows that without a Fixed Location Works Equipment (LTPT), Location Changed Permanent Employment (LBPT) and Location Changed Permanent Employment (LBPB) the revenue to be received Rp 8,094 workers .211,823. While the regression coefficient Still Works Permanent Location LTPT at 118,794.506 show that if a variable location Fixed Works LTPT rose 1 times the income received by workers will increase by Rp 118,794.506 assuming variable Fixed Location Changed Jobs LBPT and LBPB considered constant . For variable regression coefficient values Transformed Works Permanent Location LBPT at 631,742.723 show that if variable LBPB Location Changed Jobs Berubahsebesar 664,385.738 show that if a variable LBPB Location Changed Jobs Berubahmeningkat 1 times the earned income of employees will increase by Rp 664,385.738 assuming variable Fixed Location Jobs Permanent Jobs Changed TetapLTPT danLokasi LBPB considered constant.

IV. Conclusion
The model with just entering intercept will result in a Log-Likelihood value of 1234.284 and the Log-Likelihood value will decrease to 1089.642 when the variable is entered in the model. From the value of pearson and deviance obtained value significance of Chi Square greater than 0.05 so it can be concluded that the model is fit or fit with empirical data.

\[-0.731 - 0.014 + 0.177 \text{M_STA}0 \text{ SEX0 } \text{ INC1} + 1379 + 3.864 + 0.514 \text{ INC3 INC2} - \text{ EXPE1} 0.395 - 1.674 \text{ EXPE2} - \text{ EXPE3} 1565 - 0, 974 \text{ EXPE4} - \text{ EXPE5} 0.725 + 0.904 + 1343 \text{ AGE1 AGE1} - \text{ TRAIN1} 0.445 - 0.026 + 0.609 \text{ EDU2 EDU1} \]

\[\text{(4.1)}\]

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>LBPT</th>
<th>LTPB</th>
<th>LBPT</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEX 0</td>
<td>.961</td>
<td>.970</td>
<td>.084</td>
</tr>
<tr>
<td>M_STA 0</td>
<td>.567</td>
<td>.503</td>
<td>.360</td>
</tr>
<tr>
<td>INC 1</td>
<td>.000</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>INC 2</td>
<td>.001</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>INC 3</td>
<td>.148</td>
<td>.179</td>
<td>.193</td>
</tr>
<tr>
<td>EXPE 1</td>
<td>.698</td>
<td>.719</td>
<td>.072</td>
</tr>
<tr>
<td>EXPE 2</td>
<td>.060</td>
<td>.120</td>
<td>.016</td>
</tr>
<tr>
<td>EXPE 3</td>
<td>.059</td>
<td>.229</td>
<td>.033</td>
</tr>
<tr>
<td>EXPE 4</td>
<td>.234</td>
<td>.429</td>
<td>.070</td>
</tr>
<tr>
<td>EXPE 5</td>
<td>.394</td>
<td>.231</td>
<td>.123</td>
</tr>
<tr>
<td>AGE 1</td>
<td>.072</td>
<td>.072</td>
<td>.001</td>
</tr>
<tr>
<td>AGE 2</td>
<td>.001</td>
<td>.003</td>
<td>.001</td>
</tr>
<tr>
<td>TRAIN 0</td>
<td>.108</td>
<td>.280</td>
<td>.152</td>
</tr>
<tr>
<td>EDU 1</td>
<td>.942</td>
<td>.793</td>
<td>.623</td>
</tr>
<tr>
<td>EDU 2</td>
<td>.055</td>
<td>.483</td>
<td>.578</td>
</tr>
</tbody>
</table>

Source: Results of the 2016 data
Significance at \( \alpha = 5\% \)

It can be concluded that partially independent variables on job change have positive effect. For gender variables (SEX), marital status (M_STA), experience (EXPE), training (TRAIN) and education (EDU) have positive but insignificant impact on job change in LBPT, LTPB and LBPT. While the income variable (INC) and age (AGE), have a positive and significant effect on job change in the three categories of LBPT, LTPB and LBPT. While simultaneously variable of job change category LBPT, LTPB and LBPT to earnings change have positive and significant influence.

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