### Reservations Wage of Young Workers in The Minimum Wage Perspective

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Keywords: Age, Education, Field of Study, Gender, Wages Reservations, Young Worker

Abstract: This study discusses the opportunities for young workers to choose a reservation wage between above the

Minimum Regional Wage (UMR) or below the UMR. Data used in this study are primary data with 100 respondents. Analytical technique used is binary logistic regression. The result of this study showed that education variables have a positive and significant effect. Gender variables also have a positive and significant effect, meaning that there is a difference in the opportunity to set a reservation wage between

male and female workers. Then the age variable has a negative and significant effect.

### 1 INTRODUCTION

Youth are described as human beings who are high-spirited, energetic and intellectually in accordance with the times, so they have a big role in a large civilization (Rusmana, 2016). Youth in economic demography is an asset to drive development, but on the other hand youth can be a burden (Mayella, 2017).

Labor conditions in the city of Palembang illustrate that the number of young workers in 2015 amounted to 301.137 people. This number decreased from 2014 which was 302.657 people. The number of working population increased in 2015, which 661.192 people to 663.315 people. The increase in the number of working population was followed by an increase in the workforce, from 729.121 people in 2014 to 733.121 people in 2015. The rate of increase in the labor force that was greater than the increase in the number of workers (working population) caused the percentage of unemployment rates also increased during 2014-2015 is from 9.32% to 9.52% Central Bureau of Statistics of Palembang City, 2015).

In contrast to the increase in the open unemployment rate, the labor force participation rate of Palembang City decreased slightly from 63.63% in 2014 to 62.91% in 2015. According to employment data and information center data, the population working in Palembang City in 2014 was more dominated by workers with education levels

High school with a total of 252.546 workers, then 148.314 people with primary education, followed by 133.097 university workers with university education.

This is the same as in 2015, namely the workers who dominate the labor market are workers with a high school education level, then workers with primary education levels, then workers with university education levels. Thus, in Palembang City young workers who control the labor market are residents with high school level. This is because many residents prefer to work after completing their school years, with the reason of not having the cost to enter university/college.

Existing labor offers can be formed using reservation wages, the lowest wage rates where a person still wants to work or the highest level of wages where a person is still unemployed. The supply of labor is represented by the characteristics of reservation wages which is an important concept in making a model of labor market dynamics (Tajibu, 2012).

Reservation wages play an important role in job search theory, labor supply and participation in the labor market (Brown, Roberts, & Taylor, 2008). Reservation wages are the highest wages for someone who is unemployed to remain unemployed or work/minimum acceptable wage(Killingsworth, 1983) in (Walker, 2003).

Reservation wages are a benchmark for someone to accept a job. Many factors can affect reservation wages. According to (Malk, 2014) personal

characteristics, household income levels and regional unemployment rates are important factors that influence the determination of wage levels. In addition, the duration of unemployment, gender and age also affects the level of wages.

Age greatly affects the reservation wages offered. Usually those aged 40 years and over will consider their reservation wages. According to research by (Humpert & Pfeifer, 2011) conducted in Germany, the level of employment decreased with increasing age after a maximum age of 30 to 50 years for men and 40 to 50 years for women. Hourly wages increase as men and women age.

Workers of young age will set a high reservation wage because the level of productivity of young workers is considered to be higher compared to older workers. Job opportunities in industries or other jobs will be more limited for older workers with longer unemployment compared to young workers. This is caused by: 1) decreased employment opportunities along with increasing age, and 2) limited employment opportunities that increase the length of unemployment for workers at a young age (Dygalo, 2007).

In addition to age, reservation wages are also very much determined by education. Education is considered capable of producing high-quality workforce, having a pattern of thinking and acting in a modern manner (Khusyono, 2014). But there is a tendency that the higher the education level of the labor force the longer the waiting period is. The waiting period of the workforce that has a high level of education is also due to the high targeted reservation wages.

Workers with a high level of education will also set high reservation wages, because highly educated workers are considered to have a more advanced mindset so that they will be better able to make decisions. According to (Astuti, 2013) higher educated workers earn higher annual income and increase faster than workers with low education from the same age group as they increase their employment.

Field of study can also affect reservation wages. According to the Undang-Undang Republik Indonesia Number 12 of 2012 is about Higher Education. Higher education is a level of education after secondary education which includes diploma, undergraduate, master, doctoral, professional and specialist education programs organized universities based on Indonesian culture. Universities are providers of higher education for vocational, academic and/or professional education. Reservation wages can be influenced by the type of

higher education that has been taken by those who want to work.

According to Maryani (2008) in (Khusyono, 2014) non-exact sciences majors are considered as second class after the exact sciences department. In addition, non-exact sciences are often considered as departments that cannot guarantee the future and are difficult to get a job. This is in accordance with what has been assumed by the public that workers with exact education backgrounds will find it easier to get jobs. Thus, workers with exact education will set their reservation wages higher than workers with non-exact education. Furthermore, the workforce with exact education background when continuing their education to university level will choose education with a scientific major.

The unemployed period or the duration of unemployment is a description of a new problem for the unemployment phenomenon that has never been resolved. Unemployment duration can also affect reservation wages. According to (Tarmizi, 2014)it is common for individuals to choose a wage higher than the reservation wage. There are two effects of this choice, first individuals will receive higher wages and reject lower-paying jobs. Secondly, this rejection will result in the probability of getting another job down and this will make the unemployment period longer. More selective young working in job searching their causes high potential for the unemployed, and the problem is characterized by the long duration of the labor force unemployed young age (Putra, Zain, & Madris, 2014).

Work force that comes out or works again according toMortensen and McCall (1976) in (Foley, 1997) is assumed to have a waiting time that is affected by the probability of the possibility of receiving the offered job and reservation wages. Reservation wages themselves are determined by costs when looking for work, unemployment income if available, distributed of expected wage offers and the possibility of receiving the next job in accordance with education, skills, experience and local demand conditions.

Brown, Taylor, Brown, & Roberts (2011) conclude that there is a gap between intergender reservation wages, especially with children under five, playing an important role in this gap. Labor without children, an unexplained component reaches 99 percent while for workers with children only reaches 22 percent. This indicates that discrimination in the labor market affects reservation wages.

Simanjuntak (2001) explains this because men are considered as the main breadwinners for families. This assumption is what makes men more selective in choosing jobs that match their aspirations both in terms of income and in terms of position.

### 2 LITERATURE REVIEW

Reservation wages are wage rates that are only sufficient for minimal living costs or the lowest wage rates where workers will be willing to accept certain types of work (Tarmizi, 2014). The definition of reservation wages implies that the person will not work at all if the market wage is less than the reservation wage, and the person will enter the labor market if the market wage exceeds the recurring wage (Borjas, 2013).

Before the process of finding a job, job seekers determine the lowest wage they are willing to accept, which is called the reservation wage. When a worker is unemployed they expect the unemployment period to end immediately which is possible when they receive the job offered. Workers will accept job offers with consideration of the minimum wage received. Workers take into account the costs of searching, income from unemployment, distribution of expected reservation wage offers and the possibility of accepting other jobs (Foley, 1997).

Reservation wages are used in explaining job search behavior through search theory (Job Search Theory). Optimal search theory with the assumption of stationary reservation wages predicting a positive correlation between the two, namely workers who have high reservation wages will tend to have a long unemployment period and vice versa (Tajibu, 2012).

Job search theory explains that a prospective worker does not get a job because there is a long period of time between available work and information obtained about the job (Tarmizi, 2014). This is because every job vacancy must have the terms, criteria and conditions that apply to prospective workers. So that only workers who have criteria in accordance with these conditions are acceptable.

Job search theory is a model method that explains the problem of unemployment from the point of supply, namely the decision of an individual to participate in the labor market based on the characteristics of individual job seekers (Yani, Hamidi, & Setiawan, 2014). Job search theory hypothesizes that the determinant of the unemployment rate is the cost of searching for a

reservation wage job, assuming that anything that can increase the cost of seeking employment will reduce the reservation wage. Thus, with the increasing demand for labor, job seekers will find jobs easier and mean lower costs of seeking employment and increase reservation wages (Sutomo, 1999) in (Khusyono, 2014).

Foley (1997) in (Astuti, 2013)explains that job search theory predicts that the unemployment period becomes longer when the reserve wages fall, the risk of obtaining employment is high (called positive dependence) and when the intensity of job search falls, the risk of employment opportunities will decrease (called negative dependency).

### 3 RESEARCH METHODS

This study discusses the decision of young workers to set reservation wages in Palembang City. The object of this study was the population with the age range of 15-24 years who had worked in the city of Palembang. The dependent variable in this study is the reservation wage based on the South Sumatra Regional Minimum Wage (UMR) in 2018 that is Rp. 2.595.995 and the independent variable in this study is age, education level, field of study, unemployment and gender

This study uses nonprobability sampling, sampling technique by means of purposive sampling, namely sampling techniques with certain considerations (Sugiyono, 2013). The number of population in this study was 301. 137 residents aged 15-24 working in Palembang City. Thus, the number of samples taken was calculated using the Slovin formula in this study as many as 100 people.

The data analysis technique used is a Binary Logistic Regression Model an asymptotic function (between 0 and 1) in the objective function.

Based on these equations, the models in this study are as follows:

$$RW (ln) = ln \left(\frac{p}{1-p}\right)$$

$$= \beta_0 + \beta_1 Age + \beta_2 Edu + \beta_3 DFs + \beta_4 UnE$$

$$+ \beta_5 DGen + \mu$$

Where: RW = Wages Reservations (1 = above the minimum wage, 0 = below the minimum wage); P = Probability of respondents who have a reservation wage above the minimum wage; 1-p = Probability of respondents who have a reservation wages below the minimum wage;  $\beta i = \text{coefficient of variables}$ ; Age = Age; Edu = Education; Fs = Field of study UnE =

Duration of unemployment; Gen = Gender;  $\mu$  = error rate.

According to Yamin & Kurniawan (2014) the results and the logistic equation cannot be directly interpreted from the coefficient value as in ordinary linear regression. Interpretation can be done by looking at the value of Exp (B) or the exponent value of the regression equation coefficient that is formed.

Nachrowi & Usman (2002) describe the interpretation of coefficients in a logistic model carried out in the form of Odds Ratio (comparative risk) or in an adjusted probability (probability occurs). Odds are defined as  $\frac{p}{1-p}$ (risk), p represents the probability of success and 1 - p states the probability of failure. *odds Ratio* (Risk ratio) is a value Odds ratio (risk) on the two individuals.

- Odds Ratio is a comparison of the value of Odds (risk) in two individuals.
- Odds Ratio is writtenas:

$$\psi \left| \frac{p(X_A/_1 - p(X_A))}{p^{X_B}/_1 - p(X_B)} \right|$$

Based on bivariate data (X, Y) where X is the one-zero variable and Y is the one-zero response variable, the Odds Ratio in the logistic model can be presented in the general form as follows:

$$p = p(Y - 1) = \frac{Exp(B)}{1 + Exp(B)}$$

 $P = P \ (Y = 1)$  states the proportion of the score/value of Y = 1 in the population among all possible zero scores/values. The magnitude  $p = P \ (Y = 1)$  is often also expressed as the probability or probability of an event/case determined by a score of Y = 1, if a /an individual is chosen randomly from a particular population (Nachrowi & Usman, 2002).

### 3.1 Goodness of Fit Test

To assess whether the model is fit with the data used in two ways (Sujarweni, 2014):

- Hosmer and Lemeshow Feasibility Test, i.e. if the probability value is>5%, it means that the binomial logistic regression model is feasible for further analysis.
- Assessing the appropriate model, which is a reduction in the -2Log value, possibly the initial value in the next step will mean the hypothesis of the model matches the data.

### 3.2 Variable Operational Definition

Table 1. Definition of Operational Variables

Wages Reservations  The first wage received by workers  UMR 0 = below UMR)  Age  Age workers  Year  Education  Duration education of worker  Field of Study  Educational programs undertaken by workers  Education: High school and undergraduate 0 = Vocational Education: High school, D1-D4, and polytechnics  Duration of unemployment  The transitional period workers wait for a first job	Variables	Definition	Indicator
Reservations  received by workers  UMR 0 = below UMR)  Age Age workers  Education  Duration education of worker  Field of Study  Educational programs independent programs in undertaken by workers  Education:  High school and undergraduate 0 = Vocational Education: High school, D1-D4, and polytechnics  Duration of unemployment  The transitional period workers wait for a first job			
workers  Workers  Workers  Workers  UMR 0 = below UMR)  Age  Age workers  Year  Field of Study  Education of worker  Field of Study  Educational programs undertaken by workers  I = Academic: junior high, high school and undergraduate 0 = Vocational Education: High school, D1-D4, and polytechnics  Duration of unemployment  The transitional period workers wait for a first job  Workers  Month	C	_	
Age Age workers Year  Education Duration education of worker  Field of Study Educational programs indertaken by workers  Education Duration education of worker  Field of Study Educational programs in this school and undergraduate 0 = Vocational Education: High school, D1-D4, and polytechnics  Duration of unemployment The transitional period workers wait for a first job	Reservations	•	`
Age Age workers Year  Education Duration education of worker  Field of Study Educational programs undertaken by workers  Education Duration education of worker  Field of Study Educational programs in this programs in the programs of the programs in the program of the programs in the program of the program		workers	
Age Age workers Year  Education Duration education of worker  Field of Study Educational programs undertaken by workers and undergraduate 0 = Vocational Education: High school, D1-D4, and polytechnics  Duration of unemployment The transitional period workers wait for a first job			
Education  Duration education of worker  Field of Study  Educational programs junior high, high school and undergraduate 0 = Vocational Education: High school, D1-D4, and polytechnics  Duration of unemployment  The transitional period workers wait for a first job  Year  1 = Academic: junior high, high school and undergraduate 0 = Vocational Education: High school, D1-D4, and polytechnics  Month			UMR)
education of worker  Field of Study  Educational programs junior high, high school and undergraduate 0 = Vocational Education: High school, D1-D4, and polytechnics  Duration of unemployment  The transitional period workers wait for a first job	Age	Age workers	Year
Field of Study  Educational programs junior high, high school and undergraduate 0 = Vocational Education: High school, D1-D4, and polytechnics  Duration of unemployment  The transitional period workers wait for a first job	Education	Duration	Year
Field of Study  Educational programs undertaken by workers  Undertaken by workers  Field of Study  Educational junior high, high school and undergraduate 0 = Vocational Education: High school, D1-D4, and polytechnics  Duration of unemployment  The transitional period workers wait for a first job  The transitional period workers wait for a first job		education of	
programs junior high, high school and undergraduate 0 = Vocational Education: High school, D1-D4, and polytechnics  Duration of unemployment period workers wait for a first job		worker	
programs junior high, high school and undergraduate 0 = Vocational Education: High school, D1-D4, and polytechnics  Duration of unemployment period workers wait for a first job			
undertaken by workers  high school and undergraduate 0 = Vocational Education: High school, D1-D4, and polytechnics  Duration of unemployment period workers wait for a first job	Field of Study	Educational	1 = Academic:
workers  and undergraduate 0 = Vocational Education: High school, D1-D4, and polytechnics  Duration of unemployment  The transitional period workers wait for a first job			junior high,
undergraduate 0 = Vocational Education: High school, D1-D4, and polytechnics  Duration of unemployment period workers wait for a first job			high school
0 = Vocational Education: High school, D1-D4, and polytechnics  Duration of unemployment period workers wait for a first job		workers	and
Education: High school, D1-D4, and polytechnics  Duration of The transitional month unemployment period workers wait for a first job			
Duration of unemployment The transitional period workers wait for a first job			0 = Vocational
DI-D4, and polytechnics  Duration of The transitional Month unemployment period workers wait for a first job			Education:
Duration of unemployment period workers wait for a first job			High school,
Duration of The transitional Month unemployment period workers wait for a first job			D1-D4, and
unemployment period workers wait for a first job			polytechnics
unemployment period workers wait for a first job			
wait for a first job	Duration of		Month
job	unemployment		
		wait for a first	
Gender Sey workers 1 - Male		job	
	Gender	Sex workers	1 = Male
0 = Female			

### 4 RESULTS AND DISCUSSION

### 4.1 Cross Tabulation Age and Wages Reservations

Age is a factor that can affect the reservation wage, the higher the person's age offered the reservation wage will also be reduced or smaller than the reservation wage offered on young workers. This is because labor is considered a young are more productive in performing tasks compared to those who are elderly.

Table 2 shows that most of the respondents in this study have reservation wages below the UMR. This can be seen from the 3 highest groups of respondents who are respondents aged 19-24 years with a reservation wage level below the UMR. Then there are 5 cells with a number of respondents that are less than 12%.

Table 2: Cross Tabulation Age and Wages Reservations

Age (Year)	Wages I	Total	
	above UMR below UMR		
17-18	2	3	5
19-20	1	14	15
21-22	11	37	48
23-24	4	28	32
Total	18	82	100

Source: Primary Data 2018

Then the lowest number is respondents aged 19-20 at the reservation wage level above the minimum wage, which is only 1%. This is because the respondents in this study were young workers who worked as salespeople whose average wages were received below the UMR.

# **4.2** Cross Tabulation of Education and Wages Reservations

Education can also be a determinant of a person's wages. The higher one's education, the higher the wages offered. This is because a person with high education has its own added value where they are considered to have better and more advanced thinking patterns than those who have a low level of education or who are not in school.

Table 3: Cross Tabulation Education and Wages Reservations

Education	Wages R	Total	
(Year)	(Rp)		
	above	below	
	UMR	UMR	
9	1	1	2
12	7	48	55
> 12	10	33	43
Total	18	82	100

Source: Primary Data 2018

Table 3 shows that there are the same number of respondents and the lowest is 1% with a junior high school education level (9 years) that has a reservation wage level above and below the UMR. The highest level of education with reservation wages above the UMR is at the level of education >12 years, which is 10%. But this number is still very far compared to the number of respondents who have a reservation wage below the UMR, at the level of education >12 years the number of respondents is 3 times more that is 33% and at the 12 year education level the number of respondents almost reaches 5 times, namely 48% compared with the

highest number of respondents on reservation wages below the UMR.

# 4.3 Cross Tabulation Field of Study and Wages Reservations

Field of academic study is considered better and higher than the vocational field of study. Public perception of the academic higher education has been embedded for a long time, so that workers with academic education background will set a higher reservation wages than workers who take vocational education. Table 4 shows the level of the reservation wage above the minimum wage with all kinds of fields of study has a number of respondents who are not more than 14%. It is inversely proportional when seen in reservation wages below the minimum wage.

Can be seen on the reservation wages below the minimum wage with a field of academic study are those that have the highest number of respondents, more than half of the total number of respondents who precisely as much as 60%. While the field of vocational study only 22%. The number of respondents in concentration vocational science majors is less than the concentration/majors in academic science, which is only 26%.

Table 4: Cross Tabulation Field of Study and Wages Reservations

	Field of	Wages Re	Total	
	Study	(Rp)		_
		above	below	<del>_</del>
		UMR	UMR	
	Academic	14	60	74
٦	Vocation	4	22	26
	Total	18	82	100

Source: Primary Data 2018

### 4.4 Cross Tabulation Duration of Unemployment and Wages Reservations

Duration of unemployment person can affect the reservation wage. The longer someone unemployed then the reservation wage will also decrease. Unless they were during idle receive severance pay or benefits and family support, they will dare to set a high reservation wage.

Table 5: Cross Tabulation Duration of Unemployment and Wages Reservations

Duration of	Wages		Total
unemployment	Reserva	tions (Rp)	
(Month)	above below		
	UMR	UMR	
0-11	13	66	79
12-23	2	8	10
24-35	2	4	6
36-48	1	4	5
Total	18	82	100

Table 5 shows the respondents with spells of unemployment that are in the 12-35 month time span has the same number of respondents i.e. 2% with the reservation wage rate above the minimum wage. This is the same when compared with the number of respondents who are in the idle period with a span of 36-48 months at a rate below the minimum wage reservation wage is 4%. While respondents with unemployment 0-11 months old have the highest number of respondents either the reservation wage level above or below the minimum wage is as much as 79%. That is, it can be concluded that the majority of respondents in this study were old unemployed respondents with no more than 11 months.

## 4.5 Cross Tabulation of Gender and Wage Reservations

Gender or sex has long been embedded in mind the public that there is always a difference between men and women. Men are considered more capable and shall be liable to the family so that the male wage reservation will also be higher than the reservation wage of women.

Table 6 illustrates that the number of female respondents more than the number of male respondents. At the level of the reservation wage below the minimum wage, female gender of respondents with more than respondents with male gender is 59%. The reservation wage rate above the minimum wage of respondents with male gender 2% more than women.

Table 6: Cross Tabulation of Gender and Wage Reservations

Gender	Wages Reservations		Total
	(Rp)		
	above	below	•
	UMR	UMR	
Man	10	23	33
Woman	8	59	67
Total	18	82	100

Source: Primary Data 2018

### 4.6 Binomial Logistic Regression Estimation Results

Log likelihood value in Table 6 there is a reduction in the value of -2LL at step 0 is equal to 94.279 with a value -2LL in step 1 of 84.424. Thus, it can be stated that the hypothesized models fit the data.

Table 7: Log Likelihood

Step			-2 Log Likelihood
$\overline{/}$	0		94.279
	1		84.424
~		D 2010	

Source: Primary Data 2018

Based on the calculation value B Table 7, the regression model that will be formed as follows:

$$Zi = \ln(\frac{p}{1-p}) = 0.141 - 0.349Age + 0.368Edu + 0.163DFs + 0.019UnE + 1.322DGen$$

Table 8: Results of Logistic Regression

Variables	В	Sig	Odds	Odds
		Ü	Ratio	Ratio
				Dummy
Age (Age)	-	0.091	0.705	-
	0.349			
Education	0.368	0.048	1.445	-
(Edu)				
Field of study	0.163	0.809	1.177	0.54
(Fs)				
Duration of	0.019	0.480	1.019	-
unemployment				
(UnE)				
Gender (Gen)	1.322	0.024	3.749	0.79
Constant	0.141	0.969	1.152	-

Source: Primary Data 2018

As well known, the coefficient value in logistic regression is difficult to interpret directly. Thus, to explain the logistic regression model the coefficient

value needs to be interpreted as a probability value called Odds Ratio (Nachrowi & Usman, 2002).

Age variables have a negative and significant influence (at the 10% significance level) on the reservation of young workers in Palembang City. This can be seen from the coefficient value of -0.349 with the Odds Ratio value of 0.705. This Odds Ratio value indicates that the more labor age increases the probability or opportunity to set a reservation wage above the 0.705 UMR is lower than the reservation wage below the UMR. That is, when age increases, the reservation wages offered will decrease and when the age of the workforce decreases (young) the wages offered will increase. This happens because it is seen from their ability/productivity level at work.

Young laborers will set high reservation wages because the level of productivity of young workers is considered higher when compared to workers who are not classified as young. This will affect the employment opportunities of elderly workers to get a job. The results of this study are supported by research conducted by by (Humpert & Pfeifer, 2011)where the findings of their research stated that the wages offered depend on worker productivity and company decisions.

Besides that, when viewed from the income side, when in the productive period in general the age increases, the income will increase, depending on the type of work done. A person's physical strength to carry out activities is closely related to age. Because when someone has passed the productive period, then the level of productivity will decrease and the income will also decrease (Putri & Setiawina, 2013).

But on the other hand, based on the data obtained in the field, in this study the most participating respondents were respondents who worked as salespeople. Therefore, Table 1 shows that many young workers have low reservation wages (below UMR). This is in line with the theory described by (Borjas, 2013)that when workers are young, the relative wages will be low. Because working as a salesperson, when they decide to start working with a minimum educational background of high school will receive a low wage. Besides that, usually the work as a salesperson is limited by age because what is needed is a young and attractive workforce. When their age increases, the wages offered will be low. This contrasts with Borjas's (2013) theory which explains when adult workers' reservation wages will increase. Then, when entering old age the relative wages will fall again, because workers with old age are certainly no longer attractive if they work as salespeople.

In the education variable, the results show that, the higher the education level of a worker, the probability or opportunity to set a reservation wage above the UMR is 1.445 times higher than the reservation wage below the UMR. This can be seen from the coefficient value of 0.368 and the Odds Ratio value of 1.445. This shows that the education variable has a positive and significant influence on the reservation wages of young workers in the city of Palembang. When the workforce has a high level of education, he can set the reservation wage above the UMR. Workers with a high level of education should get decent wages to support their lives to be more prosperous.

The results of this study are in line with the research of (Istekli & Senturk, 2016)that the factors that influence someone's reservation wages are education. When viewed from human capital, increasing education causes an increase in reservation wages. That is, the higher the level of education pursued by a person, the higher the wages of the reserve. Likewise, the opinion of (Becker, 1975)in the theory of Human Capital says that wage rates are influenced by education, training, skills and work experience. In other words, the level of wages received is determined by the investment in human capital itself.

According to (Miswar, 2018)education, type of work, working hours and work experience have a positive and significant effect. The length of school one year will increase wages assuming other variables are constant. That is, the length of a workforce going to education will increase the level of wages received by the workforce. Then in research (Khusyono, 2014)also obtained the results that education is considered capable of producing high-quality workforce, having a pattern of thinking and acting in a modern manner. Therefore, workers with a high level of education will also set high wages compared to workers who have a low level of education.

The effect of field of study variables on the reservation wages of young workers in Palembang City shows that the field of study variable has a positive and insignificant effect. This can be seen from the coefficient value of 0.163 with an Odds Ratio value of 1.177.

Because the field of study variable's dummy, the Odds Ratio value needs to be interpreted further, so that the dummy Odds Ratio is 0.54. Thus, it can be seen that workers with academic field of study have the opportunity to set reservation wages above the UMR of 0.54 times higher than workers with field of vocational studies. Because the results were not

significant, it means that in this study there was no difference in the opportunity for reservation wages above the UMR between workers and academic fields of study and vocational training for young workers in Palembang City. That is, both academic education and vocational education are considered to be the same as setting the reservation wage above the UMR.

The views of the public so far have always considered that the academic field of study is always higher than the field of vocational studies, so they assume that if taking academic education it will increase the reservation wage. Therefore, vocational education is still underestimated by society, while the needs of the industrial world for graduates from diplomas are high.

However, the Director General of Learning and Student Affairs of the Ministry of Research, Technology and Higher Education, Intan Ahmad in 2016 said the industry as an economic and development driver requires workers who have competence. As for skills and competencies, many are produced by vocational education. This is because in its curriculum, vocational education provides a greater portion of practice than theory. In terms of welfare, vocational education can also emphasize educated unemployment. Because graduates of vocational education are ready to use so that it is needed by industry.

(Wilkins, 2001)said that vocational education is one of the factors in ensuring economic development, competitiveness and social stability in all countries, both developing and industrialized countries. This is due to a belief that the success of vocational education in producing skilled labor is an important part of the human resource development strategy to provide the community with the knowledge and skills needed in the world of work and industry.(Wilkins, 2001)said that vocational education is one of the factors in ensuring economic development, competitiveness and social stability in all countries, both developing countries and the industrialized countries. This was due to a belief that the success of vocational education to produce skilled workforce is an important part of human resource development strategy to provide the public with a stock of knowledge and skills needed in the world of work and industry.

Judging from the duration of unemployment variable coefficient value of 0.019 with Odds Ratio of 1.019 and the results of this logistic regression explained that the unemployed old variable had a positive and insignificant effect on the reservation of young workers in Palembang City. Thus, it can be

seen that the duration of unemployed a workforce, the probability oropportunity to set a reservation wage above the UMR is 1.019 times higher than the reservation wage below the UMR. That is, the longer a person is unemployed, the higher the wages will be. This is because the workforce gets some kind of compensation during the period of unemployment then after he gets a job, the compensation given must be returned by the way the income he receives must be deducted. This is in line with (Cahuc & Zylberberg, 2004)opinion that the average length of unemployment is influenced by a number of compensation paid for those who are looking for work.

The duration of unemployment variable does not have a significant effect, because in fact when a person maintains a high reservation wage, the unemployment period will be longer, so that he will reduce his wage level in order to get a job. This is the same as the optimal search theory, assuming that stationary reservation wages predict a positive correlation between the two, namely that workers who have high reservation wages will tend to have long periods of unemployment and vice versa (Tajibu, 2012).

But on the other hand there are several studies that explain that the longer a person is unemployed then the reserve wage will also increase. Like the research conducted by (McConnel, Brue, & Macpherson, 1999)that if someone chooses a higher reservation wage and rejects a low wage, the expected wage (when he works) will be greater. The more refusing job offers will reduce the probability of finding a job at the time, so this increases the duration of unemployment or unemployment. An unemployed person will choose the wage for his reservation so that the marginal benefit equals the marginal cost.

In addition, research (Foley, 1997)explains before the process of looking for work, job seekers will set the wage of the reservation. When a worker is unemployed they expect the unemployment period to end immediately which is possible when they receive the job offered. Workers will accept job offers with consideration of the minimum wage received. Workers take into account the costs of searching, income from unemployment (if any), distribution of expected reservation wage offers and the possibility of receiving another job. That is, they will accept the job offered in consideration of the costs they have incurred when they are looking for work.

In this study gender are also variable's dummy. From Table 5, the coefficient value is 1.322 and the

Odds ratio value is 3.749. Because the gender variable's dummy, the Odds Ratio value needs to be interpreted further, so that the dummy Odds Ratio value is 0.79. That is, the probability or opportunity for male workers to set reservation wages above the UMR is 0.79 higher than female workers. This result shows that the gender variable has a positive and significant influence, meaning that there is a difference in the reservation rates of young workers in the city of Palembang when viewed from gender.

Appropriate with previous theories and research that there are differences in reservation wages between men and women. Where men are considered capable of setting higher reservation wages than women because men are the backbone of the family so men should get higher wages than women.

According to (Brown et al., 2011)there are differences in reservation wages between men and women. This is intended because usually women when after marriage then having children will hamper their work. So, workers who do not have children or do not have children have more opportunities to set high reservation wages than women who already have children. This indicates discrimination in the labor market.

Another reason also mentioned by (Caliendo, Lee, & Mahlstedt, 2017)differences in reservation wages also arise from differences in productivity between male and female workers. Male laborers who are considered more agile, fast and flexible in carrying out work, so that they will be given high wages compared to female workers. In addition, the research of (Bhattarai, 2017)also stated that gender variables are the most significant factor in influencing the level of wages received by workers in the UK.

### 5 CONCLUSION

Based on the results of data analysis and discussion, it can be concluded that in this study the variables that positively and significantly influence the wages of reservation for young workers in the city of Palembang are education and gender variables. While at the level of 10% significance level the age variable has a negative but significant effect.

Educational variables have a positive and significant effect, meaning that the higher the level of education in the workforce, the more likely it is to obtain a reservation wage level above the UMR. Then the gender variable also has a positive and

significant effect, meaning that there are differences in the odds of reservation wages above the UMR or below the UMR between male labor and female labor.

Furthermore, the age variable has a negative and significant effect on the significance level of 10%, which means that the increasing age of the workforce, the opportunity to set a wage reservation above the UMR will be lower. While the field of study and unemployment duration variables have a positive but not significant effect. This means that there is no difference in the chance of obtaining a reservation wage above the UMR, both those who have concentrations/majors in academic vocational sciences and the longer unemployment period of a laborer, the opportunity to set a reservation wage above UMR will be higher than the reservation wage below the UMR.

In further research, it is expected that researchers use other variables to look at variables or variations of other variables that can affect the reservation wages of young workers. For example, using variables such as health, skills or skills, marital status and financial wealth.

### REFERENCES

Astuti, M. (2013). Faktor-Faktor Yang Mempengaruhi Lama Menganggur Bagi Pekerja Di Industri Perkebunan Kelapa Sawit Ogan Komering Ulu. *Ilmiah STIE MDP*, 2(2), 130–149.

Badan Pusat Statistik. 2015. Berita Resmi Statistik BPS of Palembang City

Becker, G. S. (1975). Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education. *The Economic Journal*, 76(303), 635. https://doi.org/10.2307/2229541

Bhattarai, K. (2017). Determinants of Wages and Labour Supply in the UK \*, 16(3), 126–140. https://doi.org/10.17265/1537-1506/2017.03.002

Borjas, G. (2013). *Labor Economics* (Sixth). United States: McGraw-Hill. New York.

Brown, S., Roberts, J., & Taylor, K. (2008). Sheffield Economic Research Paper Series SERP Number: 2006002. *Aids*, 80(May). https://doi.org/10.1016/j.suronc.2016.12.006

Brown, S., Taylor, K., Brown, S., & Roberts, J. (2011). The Gender Reservation Wage Gap: Evidence form British Panel Data The Gender Reservation Wage Gap: Evidence form British Panel Data, (5457).

Cahuc, P., & Zylberberg. (2004). *Labor Economics* (1st ed.). London: Cambridge.

Caliendo, M., Lee, W. S., & Mahlstedt, R. (2017). The gender wage gap and the role of reservation wages: New evidence for unemployed workers. *Journal of Economic Behavior and Organization*, 136, 161–173.

- https://doi.org/10.1016/j.jebo.2017.02.011
- Dygalo, N. (2007). On Unemployment Duration and Narrowing Job Opportunities at Older Ages, *10*(21), 1–6.
- Foley, M. C. (1997). Determinants Of Unemployment Duration In Russia.
- Humpert, S., & Pfeifer, C. (2011). by, (214).
- Istekli, M., & Senturk, I. (2016). Determinants Of Reservation Wages In Turkey \*, (2014), 258–266. https://doi.org/10.17261/Pressacademia.2016219266
- Khusyono, C. (2014). Pengaruh karakteristik individu terhadap lama mencari kerja bagi pns di kota makassar.
- Malk, L. (2014). Determinants of Reservation Wages: Empirical Evidence for Estonia.
- Mayella, A. (2017). Pemberdayaan Masyarakat oleh Sarjana Penggerak Pembangunan Perdesaan (Psp3) di Kelurahan Sekijang Kecamatan Bandar Sekijang Kabupaten Pelalawan Tahun 2014-2015. *Jom Fisip*, 4(2), 1–15. https://doi.org/10.1111/j.1740-8261.1992.tb00148.x
- McConnel, C. R., Brue, S., & Macpherson, D. (1999). *Contemporary Labor Economics*. San Frasisco: MCGraw Hill International.
- Miswar. (2018). Analisis Faktor-Faktor yang Mempengaruhi Tingkat Upah Pekerja di Aceh. Ekonomi Dan Kebijakan Publik Indonesia, 5, 17–34.
- Nachrowi, D. N., & Usman, H. (2002). Penggunaan Teknik Ekonometrika (Revisi). Jakarta: PT Raja Grafindo Persada.
- Pusat Data dan Informasi Ketenagakerjaan. 2014. Badan Perencanaan dan Pengembangan Ketenagakerjaan Kementerian Ketenagakerjaan. http://pusdatin.kemnaker.go.id/
- Putra, A. R., Zain, M. Y., & Madris. (2014). Estimasi Model Struktural Determinan Durasi Menganggur Pada Angkatan Kerja Usia Muda, 3(2), 180–188.
- Putri, A. D., & Setiawina, N. D. (2013). Pengaruh Umur, Pendidikan, Pekerjaan Terhadap Pendapatan Rumah Tangga Miskin Di Desa Bebandem. EP Unud, 2, 173– 180.
- Rusmana, N. (2016). Tiga Peran Pemuda dalam Perubahan Sosial. Retrieved from https://www.kpk.go.id/id/berita/publik-bicara/102-opini/3875-tiga-peran-pemuda-dalam-perubahan-sosial
- Simanjuntak, P. (2001). *Ekonomi Sumber Daya Manusia*. Jakarta: Lembaga Penerbit Fakultas Ekonomi Universitas Indonesia.
- Sugiyono. (2013). Metode Penelitian Kuantitatif, Kualitatif dan R&D. Bandung: Alfabet.
- Sujarweni, V. . W. (2014). SPSS Untuk Penelitian (1st ed.). Yogyakarta: Pustaka Baru Press.
- Tajibu, M. J. (2012). Kesejahteraan Tenaga kerja Perspektif Upah Reservasi: Kasus Industri di Kota Makassar. Malang.
- Tarmizi, N. (2014). *Perilaku Pasar Tenaga Kerja*. Palembang: Unsri Press.
- Walker, R. (2003). Reservation Wages Measurement and Determinants: Evidence From The Khayelitsha / Mitchell 'S Plain (Kmp) Survey, (38).

- Wilkins, S. (2001). Human resource development through vocational education in the Uunited Arab Emirates: the case of dubai polytechnic. *Vocational Education and Training*, 6820, 1–20. https://doi.org/10.1080/13636820100200185
- Yamin, S., & Kurniawan, H. (2014). SPSS Complete: Teknik Analisis Statistik Terlengkap dengan Software SPSS (2nd ed.). Jakarta Selatan: Salemba Infotek.
- Yani, A., Hamidi, W., & Setiawan, D. (2014). Analisis Lama Mencari Kerja bagi Tamatan Universitas Riau. *JOM FEKON*, 1(2), 17.