Labor Welfare based on the Intensity of Job Search

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Abstract
This study discusses the differences in welfare workforce as measured by the revelation of willingness to work that describes the characteristics of the workforce offers and the variables that influence in the city of Makassar. Job search intensity is added as a factor that distinguishes welfare workforce, and the decomposition analysis of the 384 people sampled, and analytical results indicating that the workforce is getting job from word of mouth information have better welfare than getting a job by using advanced technology.

Keywords: reservation wage, searching for job, technology, welfare

1. Introduction
Generally, human activities have economic objectives to get a good life, satisfactory, or welfare that can be achieved when a person has the power to control all matters affecting their welfare. Efforts were made for someone to get pleasure, satisfaction, or well-being described in economics as a form of production activities and transactions that occur in some markets. Labor market is one form of a dynamic marketplace which is a forum in which individual humans exert effort to get welfare. Effort is a potential deployment of human capital, which will then be rewarded with a salary of a recipient of services in this company. Return for wages paid workforce, comparable with the activities of exertion that is revenue that can be spent. Received a wage value of labor-power can give him a chance to improve their living standards in order to achieve a higher level of prosperity.

The concept of welfare used to determine the level of satisfaction with the individual using the concept of utility parameters. As for other forms of satisfaction that builds individual satisfaction in the form of job satisfaction, financial satisfaction, health satisfaction, housing satisfaction, leisure satisfaction, environment satisfaction, social-life satisfaction, marriage satisfaction, general satisfaction. New macro-economic outlook assumes a classic perfect labor market. People changing workforce offers appropriate wage rate changes and interest rate, if they are unemployed because they do so voluntarily. According to this flow, loss of income due to unemployment is deliberately chosen and those who are unemployed do not enjoy the satisfaction (utility). In contrast, Keynesian macroeconomic diagnose the presence of involuntary unemployment (involuntary), due to price and wage rigidity. People who are unemployed want a job at the prevailing wage rate, but those who did not manage to find it and improves satisfaction.

Wage is the balance the result of the interaction between supply manpower with workforce demand in the labor market. The reality of the prevailing wage rate is the wage that has been distorted due to the failure of the market which makes it deviated from a perfect labor market wage rates. Differences in wage levels also reflect the differences in accessibility to the labor market workforce. Basically workforce accessibility level is level overview owned welfare workforce. The difference between the wage in a perfectly competitive market with prevailing wage workforce shows the level of accessibility to the market. The smaller the difference, the higher the level of accessibility of manpower and the higher level of welfare workforce, and vice versa.

Offer existing workforce, can be formed by using reservation wage, the lowest wage level where someone still wants to work, or the highest wage rate in which a person is still unemployed. Offers workforce is represented by characteristic reservation wage (reservation wage), is an important concept to model the dynamics of the labor market. Reservation wage is the highest wage rate in which a person is not going to work. Wage rates below the reservation wage will not change behavior, whereas when the wage rate is above the reservation wage then someone decides to work (Walker, 2003).

Differences in accessibility due to differences in reservation wage workforce bring due to differences in wages. This raises the issue of wage inequality of income distribution which also means that the distribution of welfare / wealth. Distribution of wealth is important in economic development. Besides being a primary requirement for human welfare, welfare assessment is always interesting to discuss because of a technical study on the welfare measure labor market, particularly on the supply of labor-power has not been widely discussed.

This study discusses the differences in welfare workforce as measured by the revelation of willingness to work that describes the characteristics of the workforce offers and the variables that influence in the city of Makassar. Macroeconomic variables have a role in determining the reservation wage rate, aggregate demand (in this case the derived demand workforce) may affect the distribution of offered wages (wage offer) and the arrival rate of wages offered. Other variables that could also affect the duration of unemployment and depreciation is human
capital (human capital). This research will add variables in the information technology job search in Indonesia as a new factor that also affects the reservation wage level. This is complementary to previous studies that have not been factored technology, making it one of the currency of this study.

Reservation wage plays an important role in job search theory, supply manpower and labor market participation in some previous studies on the importance of reservation wages by Sant (1977), Moller and Aldashev (2007), Brown, Taylor, and Roberts (2011), and Arent and Nagl (2011).

The focus of the research is to answer the question of whether the factors that differentiate the welfare of workers seeking jobs through word of mouth compare with workers welfare who seeking employment in a more modern way.

2. Theoretical Model

Labor-supply function derived from the general model of consumer demand, in which a number of endowment commodities remains divided into two parts sections, the first sold to the market and the other consumed directly. This endowment in the form of a block of time (T) is subdivided into time to work (h) and time spent on other leisure activities, (l), so that $T = h + l$.

Demand for leisure $l$, a rest period of time spent on other work activities. Someone with a characteristic (e.g. age or gender) have a well behaved utility function (real-valued, continuous, and quasi-concave) with the intention to consume commodity $x$, and worked (h):

$$U = U(x, h; A, \varepsilon)$$

where $\varepsilon$ is a parameter of "taste" the individual, $\varepsilon$ is a parameter that unobserved.

Partial derivatives of $U$ with respect to $x$ is assumed positive and the derivative with respect to $h$ is negative and the relative prices of commodities have not changed. Individuals sell services to consumers in product markets either directly (self-employed) or indirectly when he worked at a company to produce the commodity. Total individual compensation $c$ for the operation in the market depends positively on the amount of time allocated for activities that: $c = c(h)$. Every hour of work valued at a fixed rate that $w$ and $c(h) = wh$. So the average payment and marginal payment for the time allotted for the work is the same. If $p$ is the price and the commodity bundle $y$ is income, then its budget constraint is linear and homogeneous in degree 0 in $p$, $w$, and $y$ to form a relationship:

$$p x = w h + y$$

Individuals are assumed to do the best with the constraints that it faces. Or, more formally, individuals choose the value of $x > 0$ and $h > 0$ that maximizes equation (1) that satisfies the budget constraint equation (2).

According to Pencavel (1989) that when individuals choose the number of hours of work to be supplied to the market (starting to work), the first order derivative terms to achieve maximum value requires that the commodities consumed and hours of work must be chosen such that the negative value of the marginal rate of substitution (m) hours worked equals the real wage ($w / p$):

$$\left(\frac{w}{p}\right) = -m(x, h; A, \varepsilon) = -\frac{\partial U}{\partial h} \frac{\partial U}{\partial x}$$

The reduced form equation when substituted into the budget constraint equation

$$x = x(p, w, y; A, \varepsilon)$$

$$h = h(p, w, y; A, \varepsilon)$$

if $h > 0$

Interior solutions for working hours declared to the concept of individual reservation wage, $w^*$. Real reservation wage, $w^*/p$, is the slope of the indifference curve between commodity consumption and hours of work are evaluated at $h = 0$. Reservation wage values vary for each person because reservation wages will depend on $x$ and $y$ for each depends on the value of $A$ and $\varepsilon$. Reservation wage is also negative marginal rate of substitution of the working hours are evaluated on the value of commodities $h = 0$: $w^*/p = -m(x, 0; A, \varepsilon)$. Reservation wage is the implicit value of time when the individual is between participating or not participating in the labor market. If someone is on the boundary, the market value of his time, $w$ is greater than their individual values $w^*$, then he would participate in the labor market and contribute a positive amount of hours of work, namely:

$$w > w^*$$

Conversely, if on the other hand, if the market value of his time, $w$ is less than or equal to the value of individual $w^*$, then he will not participate in the labor market or if

$$w \leq w^*$$

if $w > w^*$, then $h = h(p, w, y; A, \varepsilon) > 0$

(5)

Conversely, if on the other hand, if the market value of his time, $w$ is less than or equal to the value of individual $w^*$, then he will not participate in the labor market or if

$$w \leq w^*, then h = 0.$$
3. Data and Sampling Method

Sampling method using the sampling method (simple random sampling) of the population of the entire workforce in the city of Makassar to ensure that the people interviewed have sufficient ability to provide accurate answers to the questions given. In 2005 the labor force in the city of Makassar reached 490,050 people and the work is as much as 421,259 people (BPS, 2007). With a population of 1,272,349 people in 2009 (BPS, 2011) the estimated labor force of 500,000 from the city of Makassar in 2011. Assuming the number of manpower so then set the total sample of 348 people.

The type of data that will be used is the data taken directly from the answers to the questions submitted by the respondents through questionnaires. Core questions include questions whose answers are expected to provide an understanding of the reservation wage workforce.

4. Results and Analysis

The analysis of the welfare of the workforce groups that do not use information technology to conduct job searches via the decomposition technique, showed a significant difference between the two groups with a coefficient value of -0.0447 at a significance level of 1.6 percent. Manpower is looking for a job with a more intensive use had a lower level of wellbeing than those who use simple technologies (eg information by word of mouth).

Table 1 Decomposition Analysis of Labour Welfare Based on the intensity of job search

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Coef. Std. Err.</th>
<th>t-Stat</th>
<th>[95% Lower CI]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>group 1</td>
<td>0.1591220</td>
<td>0.012239</td>
<td>17.20</td>
</tr>
<tr>
<td>group 2</td>
<td>0.3037495</td>
<td>0.016839</td>
<td>18.00</td>
</tr>
<tr>
<td>difference</td>
<td>-0.1446275</td>
<td>0.014820</td>
<td>-9.41</td>
</tr>
<tr>
<td>explained</td>
<td>0.0046021</td>
<td>0.0083098</td>
<td>0.47</td>
</tr>
<tr>
<td>unexplained</td>
<td>-0.0041703</td>
<td>0.0083098</td>
<td>-0.52</td>
</tr>
</tbody>
</table>

Source: Data processed. Source of this difference is explained by unexplained factors with a significance level of 2 per cent, through the Work Experience variable (significant at the 8.4 percent level) and variable spell of unemployed (significant at the 8.3 percent level). While unexplained factors explain the this difference as the
significance level reached 86.9 percent. Employee are doing job searches with low intensity, more expect an increase in the welfare of:

1. Employment status, that is they are expecting an increase in welfare through changes in the status of manpower status does not remain a permanent status.
2. Work experience, point by increasing the length of their work, they expect a change and increase the wages earned.
3. Spell of unemployed, the intention is that the more quickly they are absorbed into the workforce, will make them earn a decent wage. That is because companies have a view that is not too good for too long idle employee.
4. Education levels, the intention is the higher education workforce, it will be easier for them to get jobs with high wages.

Motivations that encourage workforce to look for a new job is to get the status of permanent employment, even though the monthly salary to be received later is smaller than the wage he received today. Benefits such as pensions and insurance benefits received by the workforce remains a more intensive encourage them to find a new job that can change their employment status.

While the workforce is doing more intensive job search, just expect an increase in the welfare of the employment status and education level. This is consistent with the theory of man (human capital theory) as proposed by Schultz (1970), which assumes that formal education is needed to increase the production capacity of the population. In short human capital theorists argue that an educated society is a productive society because education increases productivity and workforce efficiency through increased levels of human economic production capacity.

Both of these variables are also the variables that are the cause of the segregation between the two groups, but the effect is smaller than the two that are unexplained variable work experience and the spell of unemployed, so in general the unexplained variables become more dominant. These variables are more dominant in distinguishing two groups of well-being. The effects of the coefficient difference of -0.04473 indicates that an increase in the intensity of job search actually have negative effect on the welfare of manpower, because the longer the unemployed, the lower the reservation wage, as well as the longer work experience higher wage will be received so the effect will increase welfare.

While the employment status variables significantly affect the incidence of labor-power difference between the two groups, with the status of permanent employment and higher education levels will have implications for the further away the different levels of wellbeing.

5. Conclusions
Job search by using the advanced technology yet has better effectiveness than by word of mouth. This difference has implications for their well-being, where the search for work from word of mouth information has higher welfare than the workforce that getting information through advanced technology. Efforts to improve the well-being through the use of advanced technology should be done by expanding the workforce accessibility to the labor market so that firms have higher expectations for accessibility workforce so that more efficient markets can be realized.

References
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