THE EFFECTS OF MINIMUM WAGE AND GROSS REGIONAL DOMESTIC PRODUCT (GRDP) ON EMPLOYMENT IN EAST JAVA

Journal

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ABSTRACT

This paper aimed to analyze what variables give influence towards employment. The independent variables used in this study were minimum wage and Gross Regional Domestic Product. This study used a secondary annual time-series data from 2009 to 2013. The method used in this study was panel data regression with the approach of Fix Effect Model. The result of this study showed that minimum wage is significant towards employment while Gross Regional Domestic Product is insignificant towards employment. Both are negative impact towards employment. The result also showed that minimum wage is more dominant in influencing the employment.

Keywords : Employment, Minimum Wage, GRDP

A. INTRODUCTION

Background

Economic development is one of the development process executed by one region or country in order to prosper the citizen or the nation (Witjaksono.2009). Economic development can be determined by comparing the amount of goods and services production from the previous year. There are some substances which must be recognized in the economic development process, for the example is the human resource (HR), the nature resource (NR) and the technology. The human resource is an input factor in the national income production process, the bigger the employee’s number the bigger the national income and the higher economic growth (Khusaini.2007). The development is the effort of the structural changing to increase productivity and create the job opportunity which aims to increase the
citizen income (Ferdinan.2011). The purpose of the development is to create the equality of human living and increase the rate of the human living. The efforts which are applied by the government to achieve the purpose of the development are the income equality, reducing the poverty and supplying the employment for the society.

Employees and employment are the issues which always become government main consideration from time to time. Almost every year, the workers/labors in every region always demand labors’ prosperity. The government always increases the minimum wage. However the workers/labors always demand higher wage raise. The employment problems become urgent because it has a strong line with unemployment directly or indirectly. The employment problems reveal that if the numbers of the unemployment getting higher it will increase the probability of poverty, criminality, and social-economy phenomenon in society. Employment is the basic aspect in human living because it involves social and economy dimensional. One of the purposes of the economic development is to provide enough employment to achieve the employment growth which has faster growth than job opportunity. The employment problems are not only because of the limited job field or job opportunity but also the low productivity. However, the most important problem is the failure of creating new employment.

One of the factors which can engage the employee is the minimum wage. Minimum wage is the standard minimum applied by the businessman for the workers as a payroll in their working-hood. According to Pratomo and Saputra (2011) minimum wage is a minimum monthly compensation as the payroll from the businessman to the employee in return for one work or service done or will be done and in the form of money based on an agreement or regulation orders also settled based on working agreement between the businessman and the employee including the allowance, not only for the employees but also for their families.

Minimum wage determination signifies to Minimum Living Needs (MLN). The government determines the wage according to MLN and productivity also economic growth. The minimum wage determination which is growing every year will become a dilemma for companies considering as the high minimum wage. The wage has the influence to employment. If the wage determination is higher, it will increase the cost of employee payment and so will the production cost (Simanjuntak, 1998). High production cost causes bigger expense for the company, therefore it is not efficient. Due to the efficiency, the company is insisted to reduce the employees, it will cause on the low of the job opportunity rate and the high of unemployment rate.

To recognize the economic growth of a region, it can be learnt by the Gross Regional Domestic Product (GRDP). The GRDP is the final goods and services which is the result from any economic activities in one region for one period. The GRDP also shows the ability of a region to manage its nature
resource. If the GRDP of a region is higher, the potential income resource will be higher as well. GRDP also influences on the amount of working employees, if one region’s GRDP increases, the output amount will also increase. The increase of output income will cause the high of demanded employment rate.

According to the stated background, this research will analyze on how are the influences of the minimum wage and Gross Regional Domestic Product (GRDP) on the employment in East Java.

1. How does the minimum wage influence the employment in East Java?
2. How does Gross Regional Domestic Product (GRDP) influence the employment in East Java?
3. Which factor of minimum wage and Gross Regional Domestic Product GRDP does have the most dominant influence to the employment in East Java?

B. LITERATURE REVIEW

The Employee

Mulyadi (2003) stated that employee is the productive-aged citizen (age 15 – 64 years old) or the amount of the citizen in one country producing goods and services, when there is a demand on their employees and they want to participate in the activities. Due to Regulation No. 13 of 2003 about Employment, the meaning of employee is every people who capable to work for producing goods and services, not only to fill their needs but also for the society.

Employee is one of the production factors used in the process of production. In the production process, the employees accepts payment as the income of what they have done, it is called as wage. The meaning of employee demand is the employees which are demanded by the businessmen on various wage rate (Boediono, 1992).

The citizen of a country is divided into two, they are employee and non-employee. According to Employment Regulations No.13 Year 2003, employee is the working-aged citizen (age 15 and more). Working-aged citizen is grouped into labor force and non-labor force. Labor force is the citizen who is considered as working-aged person who has a job, or working-aged person who has a job but temporarily unemployment and looking for jobs. Non labor force is not the working-aged citizen or unemployment because of studying, managing the households and accepting an income but it is not a direct salary of what they have done, for the example is the retiree. This non-labor force, sometimes, offers their services to work. Therefore, this group is often named as potential labor force (Simanjuntak, 1998).
Employment

Employment is the overall people who are able to work in a company or a division, employment will take all the available employees if the available employments are enough or equal with the available employees (Tambunan 2001).

According to CBS (2003) the meaning of job opportunity is the overall people who work for a company or a division. This job opportunity will take all the available employees if the available employments are enough or equal with the available employees. On the other hand, the term of employment means the part of the work, workers or instance where someone works or has worked.

Engagement of the Employees

The ability of the employment to engage the number of the criteria-based employees in employment is known as the engagement of the employees (Nur Feriyanto, 2014:74). The engagement of the employees could be the equal or smaller than the available job opportunities. If the engagement of the employees is equal with the job opportunity, there will be no unemployment. However, if the engagement of the employees is smaller than the job opportunity, there will be unemployment.

Basically, the engagement of the employees depends on the rate of the employees demand. Generally, it indicates how big the ability of the company to engage the numbers of employees to produce some products. The ability to engage the employees is different from one sector to any other (Sumarsono, 2003). The sector which uses a lot of people, commonly and relatively produce more goods and services. Every sector develops different growth rapid. The ability of every sector engages the employees, as well.

The Labor Market

In classic point of view, the wage will adapt by itself to normalize the great number of demand in the employees market. The decreasing of the great number of demand will create over employees supply. As the result, the wage will decrease until the number of the employees supply is equal to the employees demand, so it will recover the stability in the employees market. On the consideration of the new lower wage rate, it will make someone getting his/her desirable job. If the number of the demanded employees and the number of the supplied employees achieve the stability to raise and reduce the wage, there will be none of the unemployment standing above the frictional and structural number.

The Minimum Wage

The minimum wage is the minimum monthly income as the payroll from the company to the employees, since they have done the work or the service, in
form of money based on the agreement or regulations order, and it is given based on the agreement between the businessman and the employee, including the allowance, not only for the employees themselves and also for their family. Based on the Government Regulations No. 8/1981, the minimum wage could be determined with the regional minimum, regional or sub-sectors minimum, even though regional minimum wage is the only type applied by every regions. Moreover, minimum wage consists of main wage and fixed allowance (Pratomo and Saputra, 2011).

In the context of competitive or perfect competition in the employees market, the businessman and the employees can be freely enter and exit from the employment market, so the employee allocation occurs at the efficient equilibrium. In this market, using profit maximal thorough, the businessman will hire the employees until their marginal cost is equal to marginal revenue product of labor. The figure 2.2 will explain minimum wage in competitive market or perfect competition one.

**Figure 2.2 Minimum Wage in the Competitive Market**

![Minimum Wage in the Competitive Market](source)

In figure 2.2, it indicates the condition of the price stability and the employees from the competitive model point of view. The employee demand curve drawn downward sloping indicates marginal revenue product of labor (MRP). This downward MRP indicates that output (productivity) contribution will increase on the diminishing rate unless the employees are added. On the other hand, the employee supply curve is upward sloping indicates alternatives supply accepted by the employees. The stability rate of wage and employee shown by the meeting of demand curve (D) and supply curve (S). Figure 2.2 shows that the stability wage rate is $W_0$, meanwhile the stability of employee is $E_0$. If the minimum wage is above the stability rate $W_1$, this condition will create excess supply of labor indicating that only $E_1$ will be hired with the number of employees
available on $E_1$. The excess supply causes decreasing the employees who will be hired from $E_0$ (stability rate) to $E_1$. Automatically, $E_1$ shows new stability rate after the minimum wage policy in the competitive market (Pratomo and Saputra, 2011).

The monopsony market model is another theory beside the competitive market model. Monopsony model assumes that there is only one company dominates the employment market therefore a businessman has the power to determine the wage rate which will maximize the profit (monopsony power). The wage rate raising given to the employees, in this case, will become the attraction for the next employee or increase the employee supply. The figure 2.3 will explain about minimum wage in monopsony market.

**Figure 2.3 Minimum Wage in the Monopsony Market**

![Figure 2.3 Minimum Wage in the Monopsony Market](source)

In figure 2.3, it indicates that before the minimum wage existed, marginal revenue product of labor (MRPL) is downward sloping showing additional income as the effect of additional the number of employee. On the other hand, the employee supply curve (S) is upward sloping because of a monopsonist must pay a higher wage to attract or add extra employees to be hired. S curve also shows average cost (ACL) indicating average cost rate which should be paid if a businessman or monopsonist wants to hire extra employees. Unlike in competitive market, marginal cost of labor (MCL) is higher than the ACL because the businessman must pay a higher wage to both new employees and old employees who have been working in the company in long term. In this situation, the businessman will hire the employees until the MCL is equal to MRPL. In figure 2.3 also shows that the businessman will get a maximum profit if the MCL curve cuts the MRP curve. Stability wage rate is the wage in $W_0$ and employee rate in $E_0$. (Pratomo and Saputra, 2011)
If the minimum wage raising, for example, in \( W_1 \) which is higher than the stability wage rate, so the marginal cost of labor (also the employee supply curve) is in the horizontal line in \( W_1 \), because hiring extra employees does not always mean additional wage rate as long as the employee willing to be paid lower or at least, as much as the minimum wage. This condition will continue if the curve cuts the real S curve. If the MCL curve cuts the real employee supply curve, S will become the upward sloping (following the real S curve), showing that the businessman must pay above the minimum wage if they will hire extra employees. On the other words, S curve is kinked when the number of employee is in \( E_1 \). The new stability rate after the minimum wage will become \( E_1 \) and \( W_1 \), if MCL meets MRPL. As the result, unlike the competitive model, the minimum wage raising will increase the number of employee from \( E_0 \) to \( E_1 \) in the monopsony model.

**Principles in The Determination of Minimum Wage Policy in Indonesia**

According to the Regulation of the Minister of Manpower No. 01 / MEN / 1999, at least ten principles to be followed in setting the minimum wage policy in Indonesia.

1. The minimum wage is the lowest monthly wage consists of basic salary and fixed allowance.
2. The minimum wage must be paid to work on a monthly basis or by agreement between workers and employers, for example to pay weekly or weekly wage.
3. The amount of the wages of workers who have permanent status, it is not fixed, or on probation is as low as possible for the minimum wage.
4. The minimum wage applies only to workers who work under one year.
5. A review carried out by agreement between the wages of workers / unions and employers.
6. A worker with a contract system or the lowest result of lower unit is equal to the minimum wage for a monthly salary.
7. The daily paid workers wages are set on a monthly basis based on the presence (with a prorated basis).
8. Companies that have given wages above the minimum wage is not allowed to lower wages.
9. With the minimum wage increase, workers are required to maintain job performance (productivity) whose size was formulated jointly by the workers and employers.
10. Employers who are not able to implement the minimum wage policy for workers permitted to conduct temporary suspension to the government or a designated official.
Gross Regional Domestic Product (GRDP)

According to Arsyad (1997) the term of Gross Regional Domestic Product (GRDP) generally is: “The overall amount of additional value (product) is caused by any working activities in a region without considering the owner of the production factor”. GRDP is able to show the ability of one region to manage the available nature resource. Therefore, the GRDP value produced by each region depends on the nature resource potential and the region production factor themselves. Some concepts to understand the GRDP counting mechanism according to Tarigan (2007) is by some approaches:

The Correlation of Gross Regional Domestic Product (GRDP) on Employment

Basically the GRDP is an output activity of an economy. If the produced output increases, the number of employee will increase. It is linked with the production function concept which is stated that the increasing output will be achieved if the input (the employee) is in the maximum.

The Correlation of Minimum Wage on Employment

According to Sulistiaawati (2012) research explained that minimum wage has the significant influence and positive effect on the employment. It means that if the wage raising occurs, it will have a great potential to reduce the employment, especially the low-productive employee. According to Pratomo (2011) research explained that the minimum wage has non-significant impact on the employment. The minimum wage of the employee becomes non-significant because the employee on the minimum wage has shown that there is no significant impact on total paid employment because of the non-compliance problem in Indonesia.

C. RESEARCH METHOD

The Type of the Research

This research uses quantitative research type. The purpose of the quantitative approach is to recognize how big is the variables (in numbers). By using the quantitative method, the research will recognize the significance of the different groups or the significance of the correlation among the variables.

The Type and Source of the Data

The type of the data which is used in this research is the quantitative data, and the data resource which is used in this research is the secondary data in the form of panel data in 2009-2013. The panel data is the combination between the time series data and the cross section. In this research the data is obtained from
the Central Bureau of Statistics (CBS) and the Department of Employment Transmigration and Population about the minimum wage data, GRDP, and the employment (also another source which has relation with the research title).

**The Data Analysis Method**

This research uses the quantitative research method with the panel data. The econometric model which is used in this research is the simple linear regression analysis. This analysis is one of the methods applied to analyze the correlation between variables which can be written in the form of similarity connection between the free variable and dependent variable (Nachrowi and Usman, 2002).

Hypothesis test to test the effect of simultaneously between the independent variables on the dependent variable it is necessary to test F, while to know the effect of a variable testing the partial use of the t test and test coefficient of determination (R²) is used to determine how far the model in explaining the dependent variable variation independent variables.

Classical assumption test there normality test, multicollinearity test, autocorrelation test, and heterocedastity test. Classic assumption test is performed to determine the data passes or not.

**D. RESULTS**

**The Effects of Minimum Wage on Employment**

From the regression result, it is recognized that the minimum wage (X1) has negative and significant influence to the employment in East Java with the coefficient of -0.231932 which means if the minimum wage increases for one percent, the employment will decrease for 0.231932 percent. It indicates that the minimum wage rate probability is 0.0330 smaller than (0,05). The result is suitable with the hypothesis in the research, stated that the minimum wage has negative and significant influence to the employment in East Java.

From the previous research of Sobita and Suparta (2014) explained that the minimum wage has the negative and significant influence to the employment. From the previous research of Pratomo (2011) explained that the employee on minimum wage has shown that there is no significant impact on total paid employment because of the non-compliance problem in Indonesia.

Sukirno (2000) stated that one way to make the employment increases by a country is the income policy, which means controlling the employee income raising demand to avoid the over production cost raising. If the wage rate is suitable to the mechanism market it is expected that the investor will increase the output because of the production cost decrease, including the employee production factor cost. I will cause to the aggregate supply increasing which slowly will reduce the unemployment so the economic can close to the full
employment (the unemployment rate less than 4 percent) condition. However, if the employee prosperity is still low, this policy will be less effective. The more realistic part to do is to determine the proper minimum wage followed by advance the employee skill so the productivity increases equally to the minimum wage raising.

According to Sumarsono in (Pratomo and Saputra, 2011). The increasing of the wage value is able to generate the proper life increasing of an employee, but if the wage value raising is too high without the working productivity raising, it will encourage the businessman to: (a) reduce applying the employee by decreasing the production; (b) apply the tight-budget technology; and/or (c) raise the goods selling price which will cause to the inflation.

According to Bappenas (2010) stated that theoretically, the company only pay the employee wage equal to their productivity, which means the low productive employee will accept the low wage or vice versa. However, the fact is the minimum wage which has been determined is more determined by the price rate raising aspect than the productivity raising. The productivity has not been the main determiner of the wage determination.

From the result of the research, it is found that the minimum wage is able to decrease the employment. It indicates if the minimum wage raising occurs, it will give a good potential to decrease the employment, especially the low productive employee. In addition, the wage rate raising will make the company to apply the budget capital into the production process so the productivity rate and the bigger efficiency which is achieved will sacrifice the employee. From this research, it is suitable with the previous researches which explained that the minimum wage has negative and significant influence to the employment. Furthermore, it can be concluded that this research hypothesis is acceptable.

**The Effect of Gross Regional Domestic Product (GRDP) on Employment**

From the regression result, it is found that the GRDP (X2) has negative and non-significant influence to the employment in East Java with the coefficient for -0.044439 which means if the Gross Regional Domestic Product (GRDP) increases for one percent, the employment will decrease for 0.044439 percent. It indicates that the GRDP probability is 0.3609 which is bigger than alpha (0,05). This result is not suitable to the hypothesis which stated that the GRDP has positive and significant influence to the employment in East Java.

From the previous research of Mujahidul (2014), it indicated that the GRDP has significant influence and positive effect to the employment. The raising of GRDP will generate to the employee number. The GRDP is the output from the economic activity. If the produced output increases, so the hired people will also increase.

The GRDP has non-significant influence to the employment because the main establisher of the East Java economic is from the trading sector, hotel and
restaurant which are capital intensive, it is expected that they will be the most important role in the East Java Development while the labor intensive sector which has low-enough contribution, such as the electricity sector, gas and clean water or even the mining and digging sector. From the BPS data stated that nominally, the contribution is from the trading sector, hotel and restaurant to the East Java GRDP for 139,431 million. Meanwhile the electricity, gas and clean water sector only contribute for 5,486 million also the mining and digging sector contribute for 8,697 million. From the data, it is concluded that the economic structure in East Java is dominated by the capital intensive sectors, while the electricity, gas and clean water or the mining and digging sectors which are the high employment sectors only give low contribution. This condition is often called jobless economic growth in employment. This condition indicates that the economic growth in East Java is not in good quality because the available sectors are only able to engage few employees. It will create unstable economic growth, because it will only satisfy some economic player.

From this research, it indicates that the GRDP has non-significant influence and the negative effect to the employment, and one of the reasons is the employee quantity. With more number of the employee, it is not a guarantee, it will cause to the goods and service quality produced by the employee especially from the low productive employee. The decreasing of GRDP will generate to the employee number. The GRDP is the output of the economic activity if the produced output decreases, the number of hired people will also decrease. From the research result, it is not suitable to the previous researches which became the basic theory on the research. It is concluded that the research hypothesis is not acceptable.

**Dominant Variable**

The research result indicates that the dominant variable compared to the other independent variable is the minimum wage. The estimated result shows that the minimum wage variable has the significant influence to the employment in East Java. The estimated result also shows that the coefficient amount of the minimum wage is 0.231932 which means the minimum wage has the biggest and the most significant influence compared to the GRDP.

According to Sumarsono in (Pratomo and Saputra, 2011) if the wage value increases, it will create the proper life of the employee increasing, but if the wage value is too high without advancing the working productivity, it will encourage the businessman to decrease applying the employee by reducing the production, applying more intensive budget technology, and raising the goods selling price which will cause inflation.

The determination of the minimum wage is based on the minimum living needs of the employee. Therefore, the government determines the minimum wage according to the minimum living needs by considering the productivity. The wage
influences the job opportunity. If the wage rate is higher, it will influence on the cost to pay the employee payment which means increasing the production cost.

The minimum wage is the purpose of the employee while seeking an income to fulfill their living needs. However, sometimes the employee feels unsatisfied by the recent wage, so the employee demands for more wages. If the wage increases, it will reduce the employee number especially to the low productive employee. In this analysis, it is concluded that if the minimum wage raising is bigger, it will generate to the cost raising for paying the employee payment which will cause bigger reducing of the employee number.

E. CONCLUSION AND SUGGESTION

The conclusion

According to the research result and the analysis about The Effect of Minimum Wage and Gross Regional Domestic Product (GRDP) on Employment in East Java Province in 2009-2013, it could be drawn conclusion as below:

1. The minimum wage variable has negative and significant influence to the employment in East Java Province. It means, if the minimum wage increases, it will also decrease the employment.
2. GRDP variable has negative and non-significant influence to the employment in East Java Province. It means, if the GRDP increases, it will also decrease the employment.
3. The minimum wage variable is the dominant variable to the employment in East Java Province. It is able to show, if the minimum wage increases, it will also create a bigger decreasing of the employment.

The Suggestion

1. The minimum wage has negative effect to the employment. The high wage raising will cause to the employment decreasing. The wage raising will give benefit to the employee who already had a job, but the wage raising will not give any benefit to the employee who is seeking for a job. The government should determine the minimum wage rate properly by considering the living cost standard. By determining the minimum wage rate properly, it is also followed with advancing the employee skill so the productivity increases equal to the minimum wage raising.

2. The GRDP has negative influence to the employment. It means that the GRDP raising is not the indication to the bigger probability of the employment. Therefore, it is expected that the government maximizes more dominant sectors in East Java Province so the employment will increase from year to year.
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