JEJAK

Journal of Economics and Policy

http://journal.unnes.ac.id/nju/index.php/jejak

The Impact of GRDP and RWP on Regional Minimum Wage

Robert Tua Siregar[1] , [2]Hery pandapotang Silitonga, [3]Khairunnisah Lubis, [4]⊠Acai Sudirman

[1,2,4]Mangement Department, Sekolah Tinggi Ilmu Ekonomi Sultan Agung, Pematangsiantar
[3]Governance Sience Department, Medan Area University, Medan

Abstract

The purpose of this research was to find out the effect of the percentage in development of Pematangsiantar city's regional minimum wages, and the problem in this study how GRDP and RWP affect on the percentage of development of Regionl Minimum Wage at Pematangsiantar City. The method used was quantitative descriptive analysis. Data analysis used were Classic Assumption Test, Multiple Linear Regression, Correlation Coefficient, Determination, F-test and t-test object on RMW at Pematangsiantar city. Finding of research and results of the study can be summarized as follows: 1). The results of the multiple linear regression analysis test are that the GRDP and RWP had a positive effect on the RMW of Pematangsiantar City, 2). The results of the correlation coefficient indicate that the GRDP and RWP of Pematangsiantar City on its RMW were at a very strong level, while the coefficient of determination of 67.5% at high or low of the minimum wages can be explained by the GRDP and RWP, while the remaining of 32.5% was influenced by other factors which were not included in this study, 3). Hypothesis Test for F-test indicates that the GRDP and RWP influences significantly on Pematang city's RMW, and for the t- test indicates that the GRDP and RWP had a positive and significant effect on the RMW in Pematangsiantar City from 2005 to 2018. This means that as the GRDP increases, the value of setting Pematangsiantar City's minimum wage in the following year will also increase, and vice versa. The increase of laborers/workers demands will affect the standard of regioanalwages that will be determined, this happens because wages will always adjust to the labor market demand. The stipulation of the minimum wage, it has an impact on GRDP in Pematangsiantar City, because the consumptive rate will be carried out in the place where it gets paid.

Key words : Gross Regional Domestic Product, Rate of Workforce Participation, Regional Minimum Wage

⊠ Corresponding author : Acai Sudirman
 Address: St.Surabaya, No. 19 Pematangsiantar
 E-mail: acaivenly@stiesultanagung.ac.id

INTRODUCTION

National development is a process in improving the standard of living of the Indonesian people by following the objectives stated in the Preamble to the Constitution of the Republic of Indonesia. Principally, the purpose of development is to overcome or get out of the problems that have been faced by a nation, so that the standard of living of the nation increases. One way to improve the standard of living of the nation is to prosper the community. Public welfare is a condition in which the material, spiritual, and social needs of the country's population are fulfilled to live properly and be able to develop themselves, so they can carry out social and economic activities. In Indonesia, the public welfare can be illustrated by the poverty rate. Poverty is a condition where the community cannot meet the basic needs of life. Poverty occurs not because of the will of the poor, but because of circumstances that cannot be avoided by its power. Poverty is a disease in the economy, so it must be overcome or at least reduced. The problem of poverty is indeed a complex and multidimensional problem. Therefore, efforts to reduce poverty must be carried out comprehensively, cover various aspects of community life, and be implemented in an integrated manner (Yusnedi, et al., 2019).

Economic growth and income per capita are the most important indicators to measure the success of the development of an area/region. Each country will strive to achieve optimal economic growth. In many countries in the world, the main requirement for the realization of poverty reduction is economic growth. The minimum wage is an indicator of income per capita. A low minimum wage means that populations in the region have a low standard of living and consumption, while a city or regency that has a high minimum wage means that populations in that city or regency have a high standard of living and consumption (Hasbi & Dahri, 2019). Per capita income is the size of the average income of a population in a country. It is obtained from the distribution of national income of a country and the country's population. It also reflects GDP per capita. Besides, it is often used as a measure of a country's prosperity and development level; the greater the income per capita, the more prosperous the country (Hasbi & Dahri, 2019).

Income Distribution is the spread of earnings within the community. In the process of production, the owners of the factors of production will receive a reward equal to the factor of production contributed to the production process. In this income distribution process, there will occur a cycle (turnover) of consumers who have to pay the price of goods. However, at other times, they will be a provider of capital, labor, natural resources, or expertise factors so that they will receive a share of income at a certain time, and they will pay the price of goods at other times (Kalalo, et al., 2016). Income Distribution is a measure used to see how much of the national income is received by the community. Based on this calculation, a portion of the national income controlled by a percentage of the population can be seen. The purpose is to see how much control of the national income has so that it can be known whether there is national income by only a few people or there is an even distribution among the population in the country. (Siradjuddin, 2012).

Imbalance is still a crucial issue concerning with employment condition in Indonesia where the growth of labor/work force keeps increasing from year to year while at the same time its demand is not in line with the number of job availability. Moreover, the increasing of population growth is another

factor that contributes this condition to happen causing many more people unemployment. On the other hand, wage issues and welfare in employmentship appear the major and very dominating problems as the source of conflict between labor/worker and employer since long time ago. Wage is closely related to the aspect of individual economy or income and as far as the employment issues arise within its various dimensions and variables it is always connected with wage. Additionally, wage issue is not only a fundamental problem in Indonesian but also in other countries as claimed by Reich, Allegretto & Goddy, (2017); Fairris & Bujanda (2008); Mayneris, Poncet, & Zhang (2014); Allegretto & Reich (2018); Otten et al. (2017); Luce (2012); Dreier (2014); Waehning (2015); Stephenson (2015).

Since wages become a reference to improve the welfare of workers or labor/worker's life; therefore, wages must be sufficient to fulfill and support the fair needs of the workers' life and their families. The fairness or appropriateness of wages can be seen and measured by looking at the adequacy of labors/ workers in fulfilling and supporting their basic needs for decent living (see Rao & Min, 2018; S. A. Allegretto & McMahon, 2006). In fact, workers (laborers), employers, the government and the community; however, have the same interests concerning with policy of waging system. In the perspective of companies, on the first hand, wages are considered as one component of production costs which might reduce the rate of company's profit. Consequently, companies try making it necessary to reduce wages to the minimum level as possible so that the company's profit can be increased. Sadly, very few employers see that their workers as partners in running the company business. Despite the fact that they can generate profits for them. On the other hand, very few employers consider their labors/workers as business partners to keep the company running and to produce profit for them.

Indonesia is an agrarian country where the population employment is more dominated by the agricultural sector, so that the economy is more supported by this sector. However, in recent years, in some countries, particularly in developing countries such as Indonesia, structural changes have occurred, in which there is a transition from traditional agricultural societies to modern industrial economies. The dominant sector in the economy was initially the agricultural sector. But, with this structural change, the dominant sector in terms of employment is the industrial sector because this sector requires more workers in carrying out its production activities. Labor problems will arise if the number of workers offered is higher than the existing employment in each business sector. In other words, the existing employment is unable to accommodate (employ) the existing workers, especially the untrained and uneducated workers. This problem will cause increasing unemployment rates and poverty rates, which will have an impact on the economic development process. The high population growth rate absolutely results in the population to increase and gives impacts on the number of workers to increase. Therefore, the faster growth of the working-age population in the labor market must be balanced with the expansion of employment (Muslihatinningsih & Karlina, 2019).

It is said that workers (laborers) are parties who give services to the company which they are working for and play an important role in a production process. As the compensation of the service they are giving, the company rewards it by giving what it is called wage. Regardless, wage is so important that it is considered as one of the indicators to determine the adequacy of workers/labors decent living. It is the reason why the workers and union workers always expect a higher wage to improve

their standard of life (Sinaga, 2008). In the regard to the importance of minimum waging system, a number of studies have attempted to investigate its impact based on a number of indicators such as its distribution impact distribution and the increase of minimum wage. For example Dewi (2018) examined the effect of gross regional domestic product, population and capital expenditure on regional own-source revenue. Next, by Lbn Raja & Hasugian (2018), who investigated the policy of minimum wage system and cash transfer program. Then, Guzman (2018) who reported the impact of local minimum wages on price increases (in S. Allegretto & Reich, 2018b).

Regional expansion could be a strength to improve the performance of local governments and aims to make governments at regional level to be more focused on escalating potential sectors in their regions (Rahayu, Maria & Suryana, 2019). As for Indonesia, each region has set different system of minimum wages. This is determined by the particular defining factors that are different in each region such as standard of living costs. Nevertheless, based on the literature study on the policy of increasing minimum wages, Izzaty (2013) argues that minimum wage system always has a quite negative and insignificant impact on Gross Regional Dosmetic Products (GRDP) and Rate of Workforce Participation (RWP). It causes, for example, the occurrence of competitiveness of the workforce in looking for work. Like the situation when there was an increase in the minimum wage in Latin America which had a negative impact on job availability by decreasing the volume of employment. In the regard of Izzati's research findings (2013), when it is compared with other countries in the world, Indonesia also experienced thesame thing as in Latin America.

However, there are different research findings concerning with minimum wage in the North Sumatra region. For example, research conducted by Sari (2007) who found that the GRDP and RWP in Secondary Level of Education (ie.Junior and Senior High graduates) have given a positive value to employment opportunities in 4 regions in North Sumatra. The findings confirm that not all regions of Indonesia have the same impact as Latin America. It is concluded that the variables that have positive and significant influence are secondary level of education. It is also concluded that GRDP is a variable that gives a positive value but is not significant enough. It is in contrast to RWP in which its variable is significant and gives a positive effect, althoughit occurred only into 2 regions but not for all regions in North Sumatra, namely Pematangsiantar city and Binjai where its variables is not signifant and gives positive impact especially in Medan regency and Tebing Tinggi. However, the difference between this study and previous ones are there in time series of research data. Previous studies used a period of 15 years from 1997-2005, while this study analyzed 13 years of time period, namely from 2005-2018. In addition to differences of the time series of research, the cross-section data is different as well. If Sari (2007) measured it in 4 regions of North Sumatra, namely Medan, Pematang Siantar, Binjai and Tebing Tinggi; however, this study focuses on examining the positive and significant effects of regionalminimum wages in Pematangsiantar City.

In a different context, other previous findings also explained that there had a change in employment opportunities particularly after the enactment of the minimum wage in Bogor Regency. Job opportunities in Indonesia generally have increased, but surprisingly this did not happen in Bogor district. Yuliarti (2006) came to conclusion that minimum wage might

have not only positive impact but also negative one as well. With the existence of the enactment of Law No.22 of 1999 concerning regional autonomy in which all central government authority is transferred to the regional government, this also creates a labor problem for local government whose authority should be use particularly as an effort to increase and widen employment opportunities, as well as to improve the quality of Human Resources (HR) and increase the minimum wage in accordance with the components of the workers' Decent Living Needs. The research conducted by Erni was carried out by processing the minimum wage data and employment opportunities data within a period of 5 years namely from 1992 to1997, while this study also used the shift share method. The focus of Yuliarti's study (2006) was to analyze the negative impact, namely the decrease of employment opportunities post the minimum wage policy in Bogor Regency. Obviously, this research has differences from the previous research in the manner of collecting the data of time series and cross section. Besides, in the aspect of theories applied, this research is also different eventhough both analyze the impact on the implementation of a policy, for example Yuliarti (2006) used labor theory in the aspect of theory.

From the three previous research findings, it was found that there was a growth in the level of employment opportunities due to an increase in the minimum wage in the sense there was also a decrease in the amount of labor demand. On the other hand, in the side of the workforce which was measured in the rewards that had to be generated due to the recompense of the energy and time that the labors/workers had sacrificed, it turns out that it could also increase the desire of the workforce to work more effectively and increase the desire of

those who hadn't had job yet to find job. Certainly, it had increased significantly because of the additional minimum wage.

The wage system is a framework in which the wage payment framework is regulated and determined to improve the welfare of workers. According to Sumarsono (2009), the wage system in Indonesia is generally based on three wage functions, including: a) giving a guarantee of a decent living for workers and their families; b) reflecting the rewards for the workers' work results; c) providing incentives to encourage increased workers' productivity. Furthermore, Sumarsono (2009) states that some economists notice that setting minimum wages will inhibit the establishment of employment. Another group of economists with empirical evidence shows that applying minimum wages is not always followed by a decrease in employment opportunities, but it will even be able to drive the process of economic recovery.

Siantar Pematang becomes interesting to be used as a cross section because in the period of 15 years, namely from 1997 to 2005, its GRDP had a significant effect on the minimum wage and the RWP had a positive effect. This is hard to find in other areas of North Sumatra. This research is different from previous ones because it started from looking at how the impact after the implementation of policy by using public policy theory. Even though previous findings with the same context used the same theory, namely the labor demand and supply theory but this research is relatively new since it formulated the impact of gross regional domestic product (GRDP) and the rate of work force participation (RWP) on regional minimum wages in Pematangsiantar City by using public policy to see how impact of regional minimum wages policy after its implementation on GRDP and RWP.

At a macro level, there are many factors that influence the gross regional domestic product (GRDP) and the rate of labor/work

force participation (RWP) towards regional minimum wage, particularly in the city of Pematang Siantar.For this regard, this study focused on analyzing four factors including the GRDP, the Pematang Siantar City's regional minimum wage, the RWP and government expenditure based on policy. Policy making is started from an initial formulation process. Therefore, this research startedat first from identifying the policy problem through the stages of policy formulation. This research used public policy theory in order to develop policy formulation itself and find the necessary impact that will come to emerge concerning with the policy of regional minimum wage itself. This research has conducted policy formulation based on observing and following the development of policy formulation. The process of policy formulation in public policy goes through 4 stages, namely: Defining Problems, Policy Agenda, Selection of alternative policies and Stage of policy determination, as explained by Winarno (2012).

The minimum wage is a minimum standard used by entrepreneurs or industry owners in providing wages to workers in their business environment. A proper fulfillment of the needs in each different region is called the City Minimum Wage. The process to determine reference value of the minimum wage in Indonesia has been carried out for a long period of time. The first meeting was initiated by the Regional Wage Council (DPD) at the district / city level which consisted of representatives of bureaucrats (government), academics, laborers and entrepreneurs. Then, the meeting resulted in setting up a survey team and schedule to go down to the field to gather information on the number of items or basic needs of living concerning with the current price of goods in the market. In

reality the Governments in the region in General still gets a subsidy from the local Government Center. One reason for the cause of such subsidies is due to Central Government activities in areas that still have not been able to overcome by funds obtained government region itself so the regional government budget have yet to describe the ability of local government as a whole (Siregar, 2016). After the survey was carried out, they were able to figure out the Standard of Decent Living. Regulations regarding decent living standards, are set up by the Minister of Manpower Decree No. 13 of 2012, in which decent living refers to the standard of needs that must be fulfilled by a single person to be able to live properly, both physically and non-physically within a period of one month. In addition, Article 89 of Law No. 13/2003 also explains that necessities of living properly in minimum wages will be achieved gradually. The use of Decent Living Needs (DLN) in the component to determine minimum wages since 2005 is a good signal in improving the welfare of workers (Ministerial Regulation Number 17 of 2005). The Decent Living Needs (DLN) as the basis can be categorized as the main consideration, so that it can be concluded that if there is an increase in the Decent Living Needs (DLN), it will be followed by an increase in the City Minimum Wage.

The needs of living properly are used as a limitation on determining standard of wage and the decent needs are obtained through a survey of the good prices. The standard components which are always considered in calculating the needs of a decent living are included in food and beverages, clothing, housing, education, health, transportation, recreation and savings. Among the other seven components, it is also claimed that food, beverages, and transportation.are the main causes the value and standard of the minimum wage to increase. The stipulation of recent regional minimum wage (RMW) refers to the added value

produced by workers themselves while working, where employer as wage provider giving wages to workers is seen from their working productivity by calculating the amount of output they produced. The ammount of the outputs is called the Gross Regional Domestic Product (GRDP). GRDP is one of the factors that influence the standardization of RMW where the rate of output produced by laborers or workers will affect the company profits. If the company profit increases, automatically the minimum wage shall be increased as well as. This means that the increase in the Gross Domestic Regional Product (GDRP) output that occurs is economic growth for a region. An increase in the GRDP will give income from the tax and retribution sectors to increase, which will directly increase the region's Original Local Government Revenue (OLGR). Thus, if there is an increase in GRDP, the minimum wage should be increased.

In addition to the GRDP, Rate of Workforce Participation (RWP) plays an important role in standardizing dan determining the value of the regional minimum wage, namely by which the value of work force demand can be adjusted with labor wages. The Labor Force Participation Rate (LFPR) is an employment indicator that provides an overview of the economically active population in daily activities referring to a time in the survey period conducted. The decline in RWP is usually caused by a limited number of job field. The basis for establishing Province Minimum Wage in North Sumatra and Regional Minimum Wage in Pematangsiantar city refers to Government Regulation Number 78 of 2015 concerning wages.

The formulation of the problem in this study was how GRDP and RWP affect on the percentage of development of Regionl Minimum Wage at Pematangsiantar City.

Based on the problem formulation above, the purpose of this study was to find out the effect of the percentage to the development of regional Minimum Wage.at Pematangsiantar city. The significance of this research was in hope that the result of the study can be used as a reference or consideration material of policy for government in determining standard of Minimum Wage in the future.

METHOD

The research approach employed in this study was an associative approach. The research design used by the writer was library research. Data obtained through this research were from secondary data in the aspects of theory, and other concepts. This research was conducted for approximately three months which begun from September 2019 to November 2019. The place of research was conducted in the City of Pematangsiantar. The subject of this research was data which were collected from the Pematangsiantar City's Central Statistics Agency (BSP) concerning with data of GRDP, RWP, and RMW. The type of data used in this study was quantitative data. The quantitative data in this study was colleted from the Central Statistics Agency (BPS) of Pematangsiantar City during the period of 2005-2018 year. The technique of data analysis applied in this study were as follows; Quantitative Descriptive Analysis, Classical Assumption Test, Multiple Linear Regression Analysis, Hypothesis Test, Correlation Coefficient and Determination. Method Can Be the Present Review Introduces Methods of Analyzing the Relationship Between Two Quantitative Variables. The calculation and interpretation of the sample product moment correlation coefficient and the linear regression equation are discussed and illustrated. common misuses of the techniques are considered. tests and confidence intervals for the population parameters are described,

and failures of the underlying assumptions
are   highlighted.

RESULTS AND DISCUSSION

This regression analysis is often used to determine whether there is an effect of independent variables on the dependent variable. In this study, independent variable were the structure of assets and company size, while dependent variables were capital structure. Thus, it is necessary to have multiple linear regression analysis.

Table 1. Results of Multiple Linear Regression Analysis

Coefficients[a]	
Unstandardized Coefficients	
B	Std. Error
760232,865	1513626,427
264467,635	100872,894
54156,110	19563,838

a. Dependent Variable: RMW

Source: Results of data processing (2019)

Based on the results of the multiple linear regression analysis above, thus it was obtained the regression equation model as follows:

$$\hat{Y} = 760,232,865 + 264,467,635X_1 + 54,156,110X_2 \quad (1)$$

This means that GRDP and RWP have a positive effect on the Regional Minimum Wage of Pematangsiantar City from the year of 2005 to 2018. The interpretation of these results is described as follows: (1) A constant value of 760,232,865 with a positive relationship shows that if the GRDP variable and Labor Force Participation Rate are considered constant, the City Minimum Wage has been formed of 760,232,865; (2) The regression coefficient of the effect of GRDP on City Minimum Wage is 264,467,635 with a positive relationship, meaning that if the GRDP is increased by one unit, it will increase City Minimum Wage by 264,467,635; (3) The regression coefficient of the effect of the Labor Force Participation Rate on City Minimum Wage of 54,156,110

with a positive relationship, meaning that if the Labor Force Participation Rate is increased by one unit, it will increase City Minimum Wage by 54,156,110.

Table 2. Result of Correlation Coefficient and Determination Coefficient

Model Summary[b]			
Model	R	R Square	Adjusted R Square
1	,822[a]	,675	,616

a. Predictors: (Constant), GRDP, RWP

b. Dependent Variable: RMW

Source: Results of data processing (2019)

Based on table above, the results obtained from coefficient r was 0.822 which means that there is a very strong correlation or relationship between the minimum wage with the GRDP and RWP. While the coefficient of determination (R square) of 0.675, which means 67.5% of high and low minimum wages can be explained by the GRDP and RWP. Regarding the remaining 32.5%, it was influenced by other factors which were not included in this study.

Simultaneous test (F test) is used to test whether the independent variable in the regression model is able to explain the change in the value of the dependent variable or not.

Table 3. F test Result

ANOVA[a]			
	Model	F	Sig
1	Regression	11,418	,002[b]
	Residual		
	Total		

a. Dependent Variable: RMW

b. Predictors: (Constant), RWP, GRDP

Source: Results of data processing (2019)

Based on the table 3 above, it was obtained the value of F-*calculated was* 11.418 and F-*table* with df = (14-2-1) = 11, then it was obtained F-*table* of = 3.98. This shows that F-

calculated> F-*table* (11.418 > 3.98) or significant 0.021 < 0.05, then Ho is rejected, it means that GRDP and RWP have a positive and significant effect on the minimum wage of Pematangsiantar City in 2005-2018.

The t- test is used to determine whether the independent variables partially have a significant or not significant effect on the dependent variable. The results of t-test in this study can be seen in table 4

Table 4. t- Test Result

Coefficients^a		
Model	T	Sig.
(Constant)	,502	,625
1 GRDP	**2,622**	**,024**
RWP	**2,768**	**,018**
a. Dependent Variable: RMW		

Source: Results of data processing (2019)

Based on the table 4 above, it can be seen the effect of each independent variable on the dependent variable as follows:

GRDP has a $_{t\text{-}count}$ of 2.622 <from $_{t\text{-}table}$ with df = nk (14-2) of 2.179 So $_{t\text{-}count}$< t-*table* (2.622 < 2.179) or with a significant level of 0.024 < 0.05 then H$_o$ is rejected, meaning that the GRDP has a positive effect and significant minimum wages in Pematangsiantar City in 2005-2018.

RWP has a $_{t\text{-}count}$ of 2.768 > from $_{t\text{ -}table}$ with df = n-k (49-2) of 2.179. So $_{t\text{-}count}$>$_{t\text{-}table}$ (2.768 > 2.179) or with a significance level of 0.018 <0.05, thus H$_o$ was rejected which means that RWP has a positive and significant effect on the Pematangsiantar City minimum wage in 2005-2018.

Fiscal policy is a major part of government expenditure. Fiscal policy can be interpreted as an action taken by the government in regulating the sustainability of the country's economic activities by determining the amount of government revenue and expenditure each year. Fiscal policy has the aim of spurring economic growth, increasing output and employment opportunities as well. Fiscal policy also has an impact in stabilizing prices and labor/worker supply. The ultimate goal of government expenditure is to encourage aggregate demand which can be achieved through increasing output generated from the economic sector. Besides, it also can be achieved by increasing the level of community income, because government expenditure is a source of community income. Producers will increase their production output if there is an increase in aggregate demand. If this happens then the producer will need additional production inputs where one of the addition is labor/ worker demand. With an increase in government expenditure, certainly there will be an increase in labor demand and supply in which these stages are in accordance with the stages of public policy formulation.

The impact of determining minimum wages is that low-wage workers are protected because they will not earn below the average wages. The increase in labor wages can reduce overtime work hours because the increase in wages will increase their income. However, the increase in the minimum wage will have an impact on the decrease in employment because the increase in wages will increase the costs in the company so the company reduces the number of workers. Employment is very important because if the employment in an area is low and there are no jobs, there will be an increase in unemployment which will result in high poverty.

Theoretically, the minimum wage can be used as a tool for companies to increase the productivity of their workers. The determination of wages can protect workers. Appropriate wages will lead workers to work professionally. However, if the wages earned are classified as below the average, the workers will

leave the company to earn a better wage in another company. In its implementation, when the minimum wage ignores the interests and abilities of the company and merely considers the interests of the workers, it is possible that many companies that are unable to carry out the minimum wage will end up with bankruptcy of the company (lockout). When the minimum wage set is increased, it will be followed by the increase in the company's production costs, which in turn will increase the cost per unit of goods produced. Rising prices of goods will make consumers respond directly to reduce consumption or not buy the goods produced. As a result of these conditions, a lot of the production of unsold goods makes the producers reduce the amount of production (Rahayu, 2019).

Steven (1994) also said that along with government expenditure, the increase of economic growth (GDP) would run at a slower pace. Government expenditure also plays a role in encouraging economic movements by absorbing labor and capital goods in the field of social infrastructure development (health, education, and public / public facilities) that are budgeted in development expenditure or direct expenditure. In total, the government's final consumption expenditure in the city of Pematang Siantar showed an increase, both on the basis of current prices and on the basis of constant prices in 2010. The contribution of this component is quite stable in the range of 11-12 percent. In 2014, the total government final consumption expenditure based on current prices was 1,105,437.72 million rupiahs, then in subsequent years, it was 1,221,318.28 million rupiahs (2015); 1,305,346.34 million rupiah (2016); 1,402,809.72 million rupiah (2017), and 1,493,096.55 million rupiah (2018). From the fiscal policy derived from government expenditure, it was found that the GRDP and

RWP significantly influence the minimum wage of Pematangsiantar City, and the GRDP and Labor Force Participation Rate have a positive and significant effect on the Pematangsiantar City's minimum wage in 2005-2018.

The increase of a GRDP indicates that the amount of output value or the number of sales in all economic units of a region has also increased as well. The greater the output or sales made by the company, the bigger the chance of the company to increase the demand for workforce. This is done in order to maximize production for current increasing sales. As the result, this condition increases the supply or the demand of workforce at the same time. Based on the multiple linear regression test, it was found that GRDP has a positive effect on the minimum wage. Particularly, in this study, based on t- test results, it indicates that GRDP has a positive and significant effect on regional minimum wage of Pematangsiantar City from the year of 2005 to 2018. To be able to absorb more labor at a decent wage level, economic growth is expected to continue to increase to create new jobs in the city of Pematangsiantar so that people's welfare will be realized. For this reason, the development of the minimum wage level in Pematangsiantar City seems to increase every year, so the correlation test will improve welfare.

GRDP at current prices indicates the added value of goods and services calculated using the prevailing price every year, whereas GRDP at constant prices indicates the added value of the goods and services that are calculated using current prices, at a certain time, as a base year. The GRDP based on current prices can be used to see shifts in economic structure, while the calculation on the basis of constant prices is used to determine real economic growth over years, in which the factor of price changes has been issued. The positive value of GRDP shows the suitability of 7 output produced that increases, so that the number of people employed also rises. This can

be associated with the concept of a production function, which states that an increase in output can only be achieved if the input (workers) is increased in use. Demand for goods and services in an economy will affect the level of output that must be produced so that it also affects the use of inputs (workers). It is thus in line with the theory of production which states that the input drives the demand from output demand, which means that demand for new input occurs when there is demand for output. The demand for workers and services is the background of companies or industries to make production. It is because every company will try to earn profit by looking at opportunities to enter a market (Rahayu, 2019).

The results of the analysis of the Minimum Wage variable on the t test results that the GRDP had a positive and significant effect on the minimum wage in Pematangsiantar City in 2005-2018. This means that as the GRDP increases, the value of setting Pematangsiantar City's minimum wage in the following year will also increase, and vice versa. This shows that the City Minimum Wage variable (RMW) is one of the factors affecting the declining unemployment rate in Pematangsiantar City. This result is in accordance with the Efficiency Wage theory described by Mankiw which states that the average quality of a company's workforce depends on the wages paid to its employees. However, workers who choose to take jobs elsewhere will not immediately move away but will have to compete with other job applicants. So that the period of time the worker waits to find work in the new place will increase the unemployment rate.

The Decree of the Minister of Energy of the Republic of Indonesia No. PER-01 / MEN / 1999 of 1999 concerning Minimum Wages as amended by Decree of the Minister of Manpower and Transmigration of the Republic of Indonesia No. KEP-226 / MEN / 2000 of 2000 is one of the government's efforts to protect workers so that they get a fair wage and live well, and to be a reference for employers in fulfilling their obligations to pay wages for workers or workers. Thus, with the stipulation of the minimum wage, it has an impact on GRDP in Pematangsiantar City, because the consumptive rate will be carried out in the place where it gets paid.

This means that if GRDP increases, the value of regional minimum wage in Pematangsiantar city will also increase in the following year, and vice versa. This is in line with the opinion of Bersales (2014), that the GRDP is a consideration of the government and the Board of remuneration in setting minimum wages. The results of this study are also in line with those who conducted by Pratomo and Saputra (2011), Erna Agustina (2007), Musriha (2010), Ilham and Kristianto (2013). They concluded that if there is an increase of laborers/workers's productivity by which can be measured by GRDP, then the minimum wage should be increased as well.

The Labor Force Participation Rate (LFPR) is an employment indicator that provides an overview of the economically active population in daily activities referring to a time in the survey period conducted. The Rate of Workforce Participation (RWP) is a percentage for calculating labor/workforce participation. The results of multiple linear regression test shows that RWP has a positive effect on regional minimum wage of Pematangsiantar City from 2005 to 2018 year. In addition to this test, the t- test results also indicates that RWP has a positive and significant effect on the Pematangsiantar City minimum wage from 2005 to 2018. This means that if RWP increases, the standard in determining the regional minimum wage in Pematangsiantar City will

also increase in the following year, and vice versa. This result findings are also in line with the view of Bersales (2014), according to him, RWP can be used to find out laborers/workers demands, reversely they can be used to adjust to a standard of reasonable wage level for workers or laborers. If laborers/workers demand increases, it can reduce the rate of minimum wages. The increase of laborers/ workers demands will affect the standard of regioanalwages that will be determined, this happens because wages will always adjust to the labor market demand.

RMW is determined by the Pematangsiantar City government every year by taking into account the components of the cost of living in different regions. So it becomes natural if the RMW is different in each region too. From the analysis results obtained based on the results of the multiple linear regression analysis above, the regression equation model is as follows: $\hat{Y} = 760,232,865 + 264,467,635 X_1 + 54,156,110 X_2$ This means that GRDP and RWP have a positive effect on RMW Pematangsiantar City in 2005-2018. Other factors can also be seen from the increased level of consumption that encourages the emergence of new types of businesses that have the potential to add new jobs.

The reality in the implementation of labor wages is determined by the balance point (equilibrium) between the amount of labor market supply and the demand for labor in the factor (producer) market. In microeconomics, in reality, concrete things sometimes happen to market failure (Market Failure), where the equilibrium value respects labor costs under its socio-economy, so this makes labor experienced a hardship in the course of its welfare. In principle, the economy explains that sometimes it takes the presence of the Pematangsiantar City government to improve the market

mechanism comprehensively. The presence of the government is expected to fix market failures so that they become more efficient and equitable. Regional development as an integral part of national development is carried out on the basis of the principle of regional autonomy and the regulation of national resources that provides an opportunity for democratic improvement and regional performance to improve the welfare of the community towards a corruption-free, collusion and nepotism civil society (Siregar et al., 2020).

The results of the study showed that the GRDP and RWP had a positive effect on the size 264,467,635 and 54,156,110 Pematangsiantar city, so that an increase in welfare increased, and this would provide an opportunity to be free of corruption, collusion and nepotism. In this case the Pematangsiantar City government must make a binding regulation related to the minimum wage of labor. The minimum wage policy is carried out by the government by setting a lower floor (price floor) of wages above the supposed balance point, so that workers are more prosperous. The decrease in laborers/workers force demand, it will create an excessive supply of laborers/workers, consequently wages will fall down. The result of the study is also in line with research findings conducted by Musriha (2010), Nurtiyas (2016).

CONCLUSION

From the results of the study that have been described, it can be concluded that the GRDP and RWP have a positive effect on the regional minimum wage of Pematangsiantar City from 2005 to 2018 year. From the results of the correlation coefficient and determination, it was obtained correlation coefficient (r) which indicates that there is a very significant correlation between minimum wages with GRDP and RWP. While the coefficient of determination (R square) of 0.675, which means

67.5% of high and low minimum wages can be explained by the GRDP and RWP, while the remaining 32.5% is influenced by other factors. From the F- test results, it shows that the GRDP and RWP have a positive and significant effect on the regional minimum wage in Pematangsiantar City in 2005-2018. Similarly, from the t test result, it shows that the GRDP and RWP have a positive and significant effect on RWP in Pematangsiantar City in 2005-2018. The GRDP growth which is an increase in economic growth means that the income per capita will also increase, so the increase in the minimum wage in Pematangsiantar City will continue. To further increase the level of Labor Force Participation Rate, the effort that can be carried out is by increasing the level of education, both in terms of quality and quantity so that workers can compete in the work circumstances. By increasing the quality and quantity of qualified workers in Pematangsiantar City, it is expected that economic growth can continue to drive the availability of jobs for job seekers. The researcher suggests Pematangsiantar City Government to make policies in alleviating poverty in Pematangsiantar City Government. The researcher suggests Pematangsiantar City Government to be careful in setting the City Minimum Wage (UMK) so that the number of poor people does not increase. The researcher suggests Pematangsiantar City Government to carry out income distribution to alleviate poverty in Pematangsiantar City Government.

REFERENCES

Allegretto, S., & Reich, M. (2018a). Are Local Minimum Wages Absorbed by Price Increases? Estimates from Internet-Based Restaurant Menus. *ILR Review*. https://doi.org/10.1177/0019793917713735

Allegretto, S., & Reich, M. (2018b). Are Local Minimum Wages Absorbed by Price Increases? Estimates from Internet-Based Restaurant Menus. *ILR Review*, *71*(1), 35–63. https://doi.org/10.1177/0019793917713735

Bersales, Lisa, & Grace. (2014). Determinant of Regional Minimum Wage in the Philippines. *Statistics Journal*.

Dewi, S. G. (2018). The Effects of Minimum Wage Throughout the Wage Distribution in Indonesia. *Signifikan: Jurnal Ilmu Ekonomi*, *7*(2), 221–232. https://doi.org/10.15408/sjie.v7i2.6125.

Dreier, P. (2014). The Battle over the Minimum Wage, City by City. *New Labor Forum*. https://doi.org/10.1177/1095796014542615

Fairris, D., & Bujanda, L. F. (2008). The dissipation of minimum wage gains for workers through labor-labor substitution: Evidence from the Los Angeles living wage ordinance. *Southern Economic Journal.*

Guzman, W. (2018). Social Policies in Ecuador : The Effects of Minimum Wages and Cash Transfers. The London School of Economics and Political Science.

Hasbi, A. R., & Dahri, A. AP. (2019). The Effect of Economic Growth and Minimum Wages on Perapita Income in East Luwu Regency [*Pengaruh Pertumbuhan Ekonomi dan Upah Minimun Terhadap Pendapatan Perkapita di Kabupaten Luwu Timur*]. *Jurnal Equilibrium, 8*(1), 45-63.

Izzaty, R. (2013). Minimum Wage Setting Policy in Indonesia [*Kebijakan Penetapan Upah Minimum di Indonesia*]. *Jurnal Ekonomi & Kebijakan Publik, 4*(2).

Kalalo, et al. (2016). Analysis of Community Income Distribution in Airmadidi District, North Minahasa Regency.

Faculy of Economics and Business, Sam Raturangi University Manado.

Kristianto, I. (2013). Analysis of Jember Regency Minimum Wage Determination. University of Jember

Kuncoro, M. (2013). Easy to Understand and Analyze Economic Indicators. Yogyakarta: UPP STIM YKPN

Lbn Raja, T. H., & Hasugian, P. R. T. (2018). Influence Product Domestic Regional Bruto (PDRB), Total Population, And Capital Expenditures On Pad (Regional Generated Revenue) (A Case Study In District And Towns In North Sumatera Province). *Advances in Social Sciences Research Journal,* 5(1), 185–196. https://doi.org/10.14738/assrj.52.4116.

Luce, S. (2012). What Next for the US Living Wage Movement? *Social Justice and Growth: The Role of the Minimum.*

Mayneris, F., Poncet, S., & Zhang, T. (2014). The cleansing effect of minimum eage: minimum wage rules, firm dynamics and aggregate productivity in china. *CEPII Working Paper.*

Muslihatinningsih, F. & Karlina, K. (2019). Absorption of Labor In The Processing Industry Sector [Penyerapan Tenaga Kerja Pada Sektor Industri Pengolahan]. *Journal Ekuiibrium,*3(2), 77-82.

Musriha. (2010). Determination of Regency / Municipal Minimum Wages That Are Conducive in East Java. *Periodical Journal of IImu Economics, 4*(2)

Nurtiyas. (2016). Analysis of Factors Affecting the Provincial Minimum Wage in Java in 2010-2014. Yogyakarta State University.

Otten, J. J., Buszkiewicz, J., Tang, W., Aggarwal, A., Long, M., Vigdor, J., & Drewnowski, A. (2017). The impact of a city-level minimum-wage policy on supermarket food prices in Seattle-

King county. *International Journal of Environmental Research and Public Health.* https://doi.org/10.3390/ijerph14091039.

Pratomo, D. S., & Saputra, P. M. A. (2011). Minimum Wage Policy for Equitable Economics: Overview of the 1945 Constitution. *Journal of Indonesian Applied Economics, 5* (13).

Rao, N. D., & Min, J. (2018). Decent Living Standards: Material Prerequisites for Human Wellbeing. *Social Indicators Research.*https://doi.org/10.1007/s11205-017-1650-0.

Rahayu, Y. P., Maria, M. S., & Suryana, P. (2019). Reposition of Sectors Before and After Regional Division in Manokwari. *Journal of Economics and Policy. 12*(2), 345-364.

Rahayu, Y. (2019). The Influence of Provincial Minimum Wages and PDRB on Labor Absorption in Jambi Province [*Pengaruh Upah Minimum Provinsi dan PDRB Terhadap Penyerapan Tenaga Kerja di Provinsi Jambi*]. *Jurnal Development, 7*(2), 174-188.

Reich, M., Allegretto, S., & Goddy, A. (2017). Seattle's Minimum Wage Experience 2015-16. *SSRN Electronic Journal.* https://doi.org/10.2139/ssrn.3043388.

Sari, K. (2007). Analysis of Employment Opportunities Between Several Regions in North Sumatra. University of Northern Sumatra.

Sinaga, T. (2008). Wage Policy in Indonesia. *Journal of Manpower, 3*(2).

Siradjuddin, 2012. Introduction to Macroeconomic Theory [*Pengantar Teori Ekonomi Makro*]. Alauddin University Press. Makasar.

Stephenson, J. (2015). The organisation of work and wages in the London building trades in the long eighteenth century. The London School of Economics and Political Science.

Sukirno, S. (2004). Macroeconomics Introduction Theory. Jakarta: PT Raja Grafindo Perkasa.

Sumarsono, S. 2009. Human Resource Economics Theory and Public Policy [*Ekonomi Sumber Daya Manusia Teori dan Kebijakan Publik*]. Jogyakart: Graha Ilmu.

Waehning, N. (2015). Consumer motives to purchase regional products: the relationship with regional cultural differences and demographic variables. University of Hull.

Winarno, B. (2012). Public Policy (Theory, Process and Case Study). Yogyakarta: CAPS.

Yuliarti, E. (2006). Analysis of Post-Wage Minimum Employment Policy Growth in Bogor Regency. Bogor Agricultural Institute.

Yusnedi, et al. 2019. The Effect of District Minimum Wages (Umk) and Income Distribution on the Number of Poor People in Indragiri Hulu Regency [*Pengaruh Upah Minimum Kabupaten (Umk) Dan Distribusi Pendapatan Terhadap Jumlah Penduduk Miskin di Kabupaten Indragiri Hulu*]. *Jurnal Ilmiah Mahasiswa Manajemen Bisnis (JIM2B), 2*(1), 52-60.