Effect of Minimum Wage and Real Interest Rates on Employment, Economic Growth and Social Welfare in the Ex Besuki Residency-East Java-Indonesia

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ABSTRACT:*Human Resources is the wealth of a country, therefore investment in human capital capital, should be the government's focus on increasing employment. Investing in human capital is indispensable especially in the country of Indonesia so it is a prerequisite for achieving sustainable economic development. The goal is to expand employment, increase economic growth and prosperity of the people, especially in the regions, so the planning should be comprehensive. The Indonesian government is paying attention to the minimum wage policy. If the wage is linked to the interest rate, it will affect the individual's decision on whether to spend more or keep the money in savings. The purpose of this study: To analyzing the effect of minimum wages, real interest rates on economic growth together or partially in the Ex Besuki Residency.*
KEYWORDS: *Upah minimum, Jember-Indonesia,pertumbuhan ekonomi, sumber daya manusia*

I INTRODUCTION

The problem of employment, usually concerning wages, is theoretically the workers will receive a wage that is equal to the value of their contribution in producing goods and services (Mankiw, 2003: 11) .1 Economic theory and empirical research over the past few years have found that wage increases minimum tends to reduce employment. This means that the higher the minimum wage relative to the competitive wage in the market, the decreasing the absorption of labour that occurs. Whereas the minimum wage policy aims to improve the welfare of society. As a result, the total output produced is smaller, so the added value of all sectors of the economy is also small. On the contrary, there is an indication that minimum wage increases can increase employment and welfare, although some say that your minimum wage increase does not affect that variable.

This indicates that the inconsistency of the research findings concerning the increase of minimum wage for labour absorption. This debate has the implications of a minimum wage policy constantly updated in an effort to improve the welfare of the workforce. This situation allows researchers to conduct research with different methods and locations. The goal is to bridge the gap between the results of research and empirical policies, as well as existing theories. For that reason, the analysis should be done, using a number of theoretical approaches and different empirical studies to examine the effects of minimum wages and their impact on economic growth.

[1]. *Mankiw*. N. Gregory.. *Makroekonomi*. Edisi Kedua. (Jakarta: Erlangga,2003)*p.11.*

If the minimum wage is related to Fisher's theory, wages are income in the form of money and can give a small picture of the size of the development. As a result, money has an important meaning to expand the choice, especially for the poor in improving their welfare. If the price of goods rises then the purchasing power tends to decrease so vice versa. Price changes will affect trading volume and trading volume affect the interest rate. The interest rate of money (nominal interest) moves in the same direction as the price level. (Fisher, 1930: 232). [2] The evidence for both relationships is not only empirical but rational. Rising prices will increase both actual and prospective gains, so profit-takers expand their business. The widening / rising income stream requires financing and increasing loan demand, resulting in high-interest rates.

The results of this study are expected to be used as a reference for the government, especially in East Java in making a policy in the field of ideal wage in the future. This is to maintain the welfare of the workforce and make collective agreements in developing a fair remuneration system. Furthermore, minimum wages

become effective wages that apply to the formal and informal labour market to improve their welfare. Based on an intensive study on various theory gap and research gap, the purpose of this research is: Analyzing the influence of minimum wage, the real interest rate to economic growth. Economic growth is influenced by the growth of total output and population growth. Population working as labour is used in productive employment such as agriculture and sector. This will provide the condition of the division of labour and specialization which is the main cause of economic growth.

II   LITERATURE REVIEW

Wage issues by the state have been recommended for four main reasons: (1) as a means of establishing minimum wages without competitive pressure and employers Should not force labor; (2) as a means to improve the efficiency of labor and industry; (3) as a means to prevent or reduce strikes; (4) as a means To boost consumer purchasing power and, therefore, increase the quantity of goods produced and consumed, and increase employment (Douglas, PH1934: 184).[3] How much labor wage usually depends on contracts made between both sides, whose interests are not at all the same. The desire of workers to get as much as possible wages, on the contrary entrepreneurs give as little as possible. The first is involved to combine to raise, the last to lower the wage of labourers.

The effect of minimum wages on employment as a whole is disadvantageous, so there is a correlation between minimum wage and employment is negative. The higher the minimum wage, the greater the number of workers being excluded (Stigler, 1946: 358) [4]. If the employer has significant control over the wage rate, he will pay the minimum wage for skilled labour, since the minimum wage is brought closer to the value of the marginal product, at the same time increasing the aggregate output. So a minimum wage increase has a negative impact on employment. The opinion of Friedman (1966: 144) [5] is also the same, that the minimum wage law is a law for employers who should discriminate people with low skills. This is to ensure that people with low skills will not be employed. Conversely, the argument against a minimum wage increase would result in harm to the newly employed youth, and to those who are poorly educated and encourage employers to replace low-skilled labour that would create unemployment. Some workers who have received wages well above the minimum will benefit, as they will face competition from unskilled workers. That is why many unions support a higher minimum wage rate.

Lewis theory (1954) [6] discusses the development occurring in developing countries with labour surplus. The balance between agrarian and industrial fields must be maintained. If the wage in the industrial sector is higher than the subsistence level, then the labour of the agrarian sector will move into the industrial sector. As a result, laborers working in the agrarian sector are less, while efficiency and productivity in the industrial sector are not a problem. The assumption is that when the industrial sector gets a profit, then the sector will make investments and savings. The goal is to keep investments and savings always greater than inflation and wages. Furthermore, this process will always increase the absorption of labour.

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[2]. Fisher, I. 1930.*The Theory of Interest, as determined by Impatience to Spend Income and Opportunity to Invest it.* (Liberty Fund, Inc).p.232.

[3]. Douglas, P.H. (1934) *The Theory of Wages* (New York: Macmillan).p.184

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[5]. Friedman M. 1966. Minimum-Wage Rates"Newsweek, An Economist's Protest*: Columns on Political Economy*, (1): 144-145.

[6]. Lewis. W. Arthur 1954. Economic Development with Unlimited Supplies of Labour**.** *The Manchester School*, 22 (2): 139-191.

Farmers are regarded as hardworking and always save. The main problem is the capitalist sector that is too small, so it can hardly change agriculture by adding capital raising.If there is an increase in the minimum wage in an effort to increase human resources, will increase capital, so that the absorption of labour increases and output growth also increases. The surplus of labour in a sector will contribute to the growth of production and the supply of labour in other sectors. The sectors of the performance economy are increasing, so the overall output also increases.

Workers working in the agricultural sector receive higher wages from stages 1 and 2. This stage is the end of the take-off in a country so that the economy experiences an independent economic growth. Solow (1957: 127) [7] and Ranis-Fei (1961) .[8] Three stages in the process of economic development according to Ranis-Fei:

1. Phase I occurs when MPP = 0, ie the total productivity curve marks an excessive labour force, resulting in MPP (Marginal Physical Product) or additional output resulting from the addition of 1 unit of input in the agricultural sector is zero;

2. Phase 2 is when the positive MPP is less than the institutional wage. At this stage, there is no excess labour, but there are still hidden unemployment Phase 1 and 2 both indicate an idle workforce in disguise;

3. Phase 3 is the MPP greater than the institutional wage rate that is assumed to apply at the break-even point. As a result, laborers working in the agricultural sector receive higher wages from stages 1 and 2. This stage is the end of the take-off in a country so that the economy experiences economic growth that is independent.

Economic growth will result in increased per capita income while economic development increases life expectancy, health and community education so that they can become more useful individuals. The existence of economic growth is described by the increase of Gross Domestic Product or Product Domestic Regional Gross must function for the community. This is to avoid hunger and to extend life expectancy which is one component of welfare (Sen, 1785: 46) .[9] The role of capability and function in the assessment of living standards is an achievement, while the ability is the ability to achieve it. There are two different ways to see the standard of living in utility terms. Utility in a certain form indicates a state of mind is what is valuable, and indeed it is the only one that is valuable. The second is looking at utilities as valuational tools, which are used to evaluate the value of other objects, for example, goods owned. Utility as pleasure and happiness, the pleasure we must seek to give every form makes sense. Pleasure can be seen as "happiness, to see pleasure is the well-being and standard of living.The standard of living has an aspect that is inseparable from the perspective of freedom.

III   RESEARCH METHOD

This research is an explanatory research, that is research which intends to test and explain the influence of District Minimum Wage and real interest rate to economic growth in Ex Besuki Residency. The data will be analyzed by using panel data that is the combination of time series data from 2005-2014 and cross section 4 Regency in Eks Karesidenan Besuki East Java Indonesia. Cross section data is data collected in one time against many individuals while time series data is data collected from time to time against an individual as much as 4 districts.The combination of time series and cross section observations gives more information, more variety, less collinearity between variables, more degree of freedom and efficiency (Gujarati, 2012: 406) .[10]

Secondary data required is District Minimum Wage (MSM), real interest rate, economic growth 11. This research type is quantitative research, hence statistic test is needed to state whether empirical data that support or not support the theory. Explanation of all mathematical results based on generally accepted guidelines. The research location includes four (4) districts in Besuki Residency, namely: Jember, Bondowoso, Situbondo, Banyuwangi. The year of study is 2005 to 2014 (for 10 years) with consideration of availability and completeness of research data. The expectation of the researcher in the future so that other researcher is more developed and equips with other variables so that the minimum wage and its impact on the growth of the variable economy are multiplied.

[7.] Solow R.M. 1957. A Contribution to the Theory of Economic Growth. *The Quarterly Journal of Economics,* 70 (1):65-94

[8.] Ranis-Fei. 1961. A Theory of Economic Development . The American Economic Review, 51(4): 533-565

[9.] Sen. A.1785.The Standard of Living. Columbia University Press

[10.] Gujarati, Damodar N dan Dawn C. Porter. 2012. *Dasar-Dasar Ekonometrika*. Edisi 2 Jakarta: Salemba Empat.

[11.] Badan Pusat Statistik Provinsi Jawa Timur. 2015. *Jawa Timur Dalam Angka*. Surabaya: BPS Jawa Timur

Regional Overview of Research in Ex-Residency Besuki East Java-Indonesia. Besuki residency exports food to outside Java (Arifin in Nawiyanto 2012) .12 The integration of Besuki Residency into Dutch power and the creation of political stability opens opportunities for expansion of economic exploitation, in particular, the opening of state-run colonial plantations (Cultuurstelsel) to private parties since 1870.

Such a process continues to accelerate and elevate the position of Residency Besuki. Until now Besuki Residency is known as a leading region in the agricultural sector in Indonesia. The residency was an administrative division in a province in the Indies (Indonesia) until the 1950s. A residency (regents-happen) consists of several districts (afdeeling). The word residency comes from the Dutch Residentie. headed by the resident, who is from the Dutch Resident. Above the resident was the governor-general, who ruled on behalf of the King and Queen of the Netherlands. Not in all provinces in Indonesia has ever been residency. Only on the island of Java, Sumatra, Kalimantan, Bali, Lombok and Sulawesi only. Usually, this happens in areas with a lot of population. The base economic sector in ex Besuki Residency is the agricultural sector. This is indicated by the number of people who work as farmers and farm labourers, and the agricultural sector has contributed the most to the Regional Gross Domestic Product. Economic growth per category of business field in the Year 2014 showed a positive development but the amount varies greatly.

The government sets minimum wages based on decent living needs and with due regard for productivity and economic growth. In order for the fulfilment of a decent life, the wages of Workers / Workers must be able to meet physical, non-physical and social needs, including food, beverages, clothing, housing, education, health, old age insurance, and recreation. Therefore, wage policy should also be able to encourage economic growth and expansion of employment opportunities and improve the welfare of workers/workers and their families. Economic growth is a change in the Gross Regional Domestic Product (GRDP) of that year compared with last year's GDP at constant (real) prices expressed in% (%) units.

The remuneration arrangement shall be determined by agreement between the employer and the worker/laborer or the union/labor union shall not be lower than the remuneration stipulated by the applicable laws and regulations. The district minimum wage is stipulated by the Governor with due regard to the recommendations of the Provincial Wage and/or Bupati / Walikota Council. The Governor shall have to determine the UMK no later than 40 days prior to its enactment on 1 January of the current year. The average regional minimum wage in the Besuki Residency increases each year. This is to increase people's purchasing power. Furthermore, in the effort to improve the welfare of the community, especially the workforce needs to encourage the increasing role of workers in implementing the Production process with the improvement of workers welfare through minimum wage mechanism. Wages for workers with a working period of 1 (one) year or more are negotiated bipartite between workers or union with employees in the company concerned.

Jember regency as one of the rice granaries of East Java Province reflects that the agricultural sector is a sector that has a large role (leading sector) or about 35.49% of the total added value created in 2012. In Bondowoso regency economic growth per category, the field of business in 2014 shows a positive development but the amount varies greatly from the lowest of 0.75 percent to the highest of 9.4%. The highest economic growth occurred in the category of transportation and warehousing category of 9.40 percent, followed by business services category of 9.04 percent and third in the category of Information and Communication category which grew by 8.84 percent. The economic structure of Bondowoso Regency depends on the agricultural sector because this sector still contributes the most to the total PDRB of 33.72 percent, followed by the manufacturing industry by 20.84 percent. Large and Retail Trade; Repair of Cars and Motorcycles, by 14.25 percent and construction sector accounted for 9.15 percent. While the smallest contribution is the electricity and gas procurement sector that is equal to 0.04 percent.

In Situbondo Regency 2014 economic growth of 5.53 percent and in 2013 could reach 6.31 percent. The high level of prices in post-crisis lately, resulting in production in some sectors of the economy stagnated and a slow increase in production due to high price levels of production costs perceived by economic units for the middle to lower scale. While Banyuwangi regency is the widest regency in East Java Province. The land area of Banyuwangi extends from the highlands in the western part of the mountains as a producer of plantation products; to the lowlands of the east and south as producers of agricultural products. Banyuwangi beach line stretches from north to south, as a producer of various marine biota. Banyuwangi Regency consists of a mountainous plateau that produces plantations, while areas that produce marine biota and food crops, namely the north to the south coast.Various advantages and natural potential is a huge capital to improve the welfare of its people. Residents of Banyuwangi Regency are mostly livelihoods in the field of Agriculture / Perkebunanyang which dominate the total population.

[12.] Nawiyanto. 2003. *Agricultural Development in a Frontier Region of Java: The Residency of Besuki*, 1870s-the Early 1990s. Yogyakarta: Galang Press.

IV   RESULT

To analyze the hypothesis done by multiple regression analysis:

$Y_1 = a + b_1 X_1 + b_2 X_2 + e$

Information :

Y_1 = Economic growth

X_1 = Minimum wage

X_2 = Real interest rate

a, b_1, b_2 = constant number (constant) of variable coefficients

e : error factor

The hypothetical model is described as follows:

$Y_1 = F (X_1; X_2)$, meaning that the minimum wage, real interest rates together and individually affect the economic growth in the Ex Besuki Residency East Java.

Hypothesis test results

Table1. ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4,694	2	2,347	5,986	,006[b]
	Residual	14,508	37	,392		
	Total	19,202	39			

a. Dependent Variable: Economic growth
b. Predictors: (Constant), Real interest rate, Minimum wage

Source : Data Processing with SPSS 22.0 under windows

Based on Table 1, ANOVA, variables Y, X1 and X2 regarding Test F are to test: the effect of the minimum wage and the real interest rate collectively on economic growth in the Besuki Residency.

The guidance is at the 95% significance level (α = 0.05), if the significance of the research results <0.05., Then the independent variables together have an influence on the dependent variable. In table 1. ANOVA sig value. 0.006 or less than the probability value of 0.05, it means that the multiple regression coefficients are significant so that the minimum wage and the real interest rate are jointly significant against the economic growth in the Besuki Residency.

Table 2. Coefficients[a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1(Constant)	4,863	,312		15,565	,000		
Minimum wage	1,289E-6	,000	,454	3,120	,003	,966	1,036
Real interest rate	,026	,030	,129	,890	,379	,966	1,036

a. Dependent Variable: Economic growth

Source : Data Processing with SPSS 22.0 under windows

Table 2. Coefifficients variable Y, X1, X2 explains that multiple regression equations are as follows:

$Y = a + b_1 X_1 + b_2 X_2 + e$

$Y = 4.863 + 1.289 (10)^{-6} X1 + 0.026 X2$

The regression coefficient marked positive means that the effect of minimum wage on economic growth is unidirectional, meaning if there is a minimum wage increase, then economic growth also increases. On the contrary, if minimum wage decreases it will cause economic growth also decrease

The results of this study are supported by The Solow Theory (1957), [13] describes two main points discussed in this model: the role of capital and technological change in economic growth.

[13.] Solow, R.M.1957. Op. Cit.p.5

Solow's economic growth model for a while considers that constant technological change, so it will be known how the role of capital in the growth process. Under conditions without technological change, capital accumulation will encourage output growth per workforce, resulting in increased marginal product labour and increased wages. The employment rate should maintain marginal product labour since marginal productivity depends only on the capital-labour ratio. In a production function, a certain level of output can be created using various combinations of capital and labour. Can occur even if a number of capital changes there is a possibility that the level of output does not change. This means even if the amount of fixed capital, but if the amount of labour is added, then the amount of output can increase.

Basic income is used here as a proxy for access to resources for a decent standard of living. The study also reviews several key factors, particularly public access to food and social services, such as water, education and health needs. There are also empirical studies that find strong evidence that higher minimum wages lead to an increase in income between families at the bottom of income distribution and that wages will reduce poverty levels. Minimum wage increases will dampen some benefits, especially those around the poverty line, as a safety net. As a result, mutual increase, complementing the minimum wage and income support to increase the income of families who are at the bottom of the poverty line.

The regression coefficient for the real interest rate is positive, this means that if the real interest rate increases, then economic growth also increases and vice versa. The results of this study accept the theory of Fisher, that interest rates move in the same direction with the price level. The theory that interest rates move in the same direction as price levels. If interest rates fall, prices fall too, this encourages consumers to spend their income so as to increase the consumption (expenditure) of goods. The demand for goods increases as a consequence of increasing labour demand. The interest rate is determined by two forces; savings deals are

primarily determined by households and investment and capital demand primarily from the business sector. There is a positive relationship between the interest rate and the volume of savings, so if the interest rate increases than the volume of savings increases. This means that if interest rates rise, many people save and reduce spending on consumption. Raising interest rates is the central bank's central tool to combat inflation. As a result borrowing costs are increasingly expensive so that the amount of money circulating in the community will decrease and the economic activity will decrease. Conversely, the decline in interest rates will cause the cost of borrowing becomes cheaper. Investors will tend to be driven to expand the business or new investments, and consumers will increase their spending. Thus the output of the economy will increase and more labour is needed.

Money income is the wage earned by the workforce, so it is ready to be spent which is usually called expenditure. Expenditures and investments differ only in degrees, depending on the length of time elapsed between expenditure and enjoyment. Spending is paying the money for the immediate pleasure, while investing is by paying money for suspended pleasure later (Fisher, 1930: 9) .14 Real interest rates are the interest rates expected by investors, savers or lenders (or expect to receive) after deducting inflation. This can be described more formally by the Fisher equation, which states that the real interest rate equals the nominal interest rate less the rate of inflation. For example, an investor invests at an 8% interest rate for the coming year and anticipates a 3% price hike, which means the investor expects to earn a real interest rate of 5%. Price changes affect trading volume and trading volume affects the interest rate. The evidence for both relationships is not only empirical but rational. Rising prices will increase both actual and prospective gains so that profit-takers expand their business. Their widespread or increasing income stream requires financing and increasing demand for loans, resulting in high-interest rates. The impact of changes in interest rates on sustainable economic growth is an effort to maintain price stability.

The current guideline is that if the VIF value of the two variables is not greater than 10 then that means there is no multicollinearity in the two independent variables. The classical requirement of good linear regression is that which is free from multicollinearity. Under the terms of the classical assumption of linear regression with Ordinary Least Square (OLS), then the linear regression model is both are freed from the existence of multicollinearity. Thus, the above model has been freed from the existence of multicollinearity.Next if the value of prob. t (sig.) <0.05 then the independent variable has the significant effect on the dependent variable, and vice versa if sig value> 0.05 then independent variable has no effect on the dependent variable. In this study, there is no multicollinearity, it is proven in table 2, VIF value for the minimum wage variable and the real interest rate is 1.036, while the Tolerance 0.966. The effect of the minimum wage variable on economic growth is significant, as evidenced by the magnitude of sig = 003 less than 0.05, while the real interest rate on economic growth is not significant (sig = 0.379> 0.05). Based on the results of this test means that the minimum wage has a significant effect on economic growth, on the contrary, the real interest rate does not affect the economic growth in the Besuki Residency.

[14.] Fisher, I. 1930.Op. Cit.p.6.

Actually, if economic activity increases, then the process of using production factors to produce output, also increases. As a result, will result in a flow of remuneration to the factors of production owned by the community. With the economic growth, it is expected that the income of the community as the owner of factors of production will also increase. If economic activity is too high it will cause an increase inflation. This should be anticipated more carefully. The higher the rate of inflation so that the price of goods and services more expensive. The absence of a real interest rate partial on economic growth in the Besuki Residency could also be because if interest rates decline the industry players will respond by lowering domestic production as a result of risk management policies to minimize potential losses. This problem is a challenge for other researchers to be able to explain completely.

V CONCLUSION AND RECOMENDATION

Conclusion

1. The district minimum wage jointly or partially affects economic growth in the Besuki Residency. This means that if there is a minimum wage increase, then the economic growth in the ex-Residency Besuki also rise;

2. Real interest rates when not combined with the minimum wage variable have no direct effect on economic growth in the Besuki Residency. The fact that when real interest rates rise, then what happens is the decline in economic growth;

RECOMENDATION

Minimum Wage only applies to workers who have a working period of less than 1 (one) year. This should be for workers with a working period of more than 1 (one) year should be larger and tiered

proportionately. Adjusted to the prevailing wage structure and scale. A number of wages becomes very important because the workers want a decent income so as to meet the needs for himself and for his family.

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