



The Effect of Minimum Wage on Employment Opportunity with Quality of Human Resources as Moderating Variables in Central Java

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ABSTRACT

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The purpose of this study was to analyze the effect of the influence between the minimum wage and employment opportunities and the quality of human resources as a moderation variable. This study uses secondary data obtained from the Central Bureau Statistics (BPS). In this study, the data collected is panel data consisting of ten regencies/cities with the highest LFPR levels and ten regencies/cities with the lowest LFPR levels in Central Java Province within a span of 5 years, starting from 2016 – 2020. This research uses a quantitative approach by converting the results of all observations into numerical which is then analyzed through statistics. Based on the effect of research and data analysis using t-tests showed that: (1) There is the influence of GRDP on LFPR of Central Java Province, (2) There is an Effect of Minimum Wage on LFPR of Central Java Province, (3) There is no quality of human resources influence on LFPR central Java Province, (4) there is an influence of GRDP moderated by quality of human resources on LFPR of Central Java Province, and (5) and there is no effect of minimum wage moderated by quality of human resources on LFPR Central Java Province.

Keywords:

Labor Force Participation Rate, Minimum Wage, Employment Opportunities, Quality of Human Resources.

INTRODUCTION

Indonesia's economy is continuing its path of structural transformation, this presents new job opportunities, labor market services a work can be an effective tool for connecting people to good jobs and promoting inclusive growth at the regional level. However, gaps in employment outcomes persist across population segments and provinces, and informality remains high (Ministry of Industry in the Kemenperin.go.id portal).

The ongoing COVID-19 pandemic crisis is a major challenge for the local workforce in Indonesia. Young workers and informal workers, as well as the tourism and industrial sectors are vulnerable and at risk of being affected, for example, termination of employment which results in a person becoming unemployed. According to Suryadarma et al. (2005) the increase in unemployment is caused by the poor

who are entering a mature age, are not working, and to some extent are not poor who have low education and are unemployed, and become desperate workers. These are people who have lost their jobs but are not looking for work because they believe they can't find it.

Therefore, while it may be successful in increasing the general welfare, the program will not reduce the unemployment rate. At the macro level, strong economic growth is considered the best way to create jobs. According to Sabia (2015), minimum wage increases can serve as an engine of economic growth and help low-skilled individuals during downturns in the business cycle. Minimum wage increases redistribute GDP away from low-skilled industries and towards higher-skill industries and are largely ineffective in helping the poor during peaks and troughs in the business cycle. According to Bell (1997), this happens because working in rich countries demands higher wages as a means of limiting the exploitation of labor by multinational companies, while also increasing the competitiveness of their own manufacturing sector.

BPS noted that economic growth in Indonesia throughout 2020 experienced a contraction of 2.07% year on year. The conditions for economic growth were not to say low but sparked growing concerns that further large increases in

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the minimum wage could dampen long-term economic growth and sluggish job growth in the modern industrial sector.

Population involvement in economic activities can be measured by the number of people who are included in the labor market group (working and looking for work), this is called the Labor Force Participation Rate (LFPR), this job opportunity gives a big picture of the level of labor that can

be absorbed. According to Mankiw (2011), an increase in the minimum wage will increase the supply of labor. An increase in wages makes the price of time relatively expensive, jobs become more attractive, improves their quality and replaces free time (substitution effect) which can indirectly encourage an increase in LFPR (Sudarsono, 1990). LFPR also shows a big picture of the level of labor that can be absorbed in each region in the Central Java region in the last 5 years.

Table 1. Labor Force Participation Rate (LFPR) by Regency/City in Central Java (%) 2016-2020

Regency/City	Labor Force Participation Rate (TPAK) %					Total
	2016	2017	2018	2019	2020	
Cilacap Regency	64.31	66.22	62.62	65.34	67.79	65.26
Pemalang Regency	64.45	66.41	65.41	66.5	66.52	65.43
Tegal Regency	63.66	65.57	65.29	66.27	65.57	65.70
Banyumas Regency	62.68	65.19	67.74	67.34	66.66	65.92
Pati Regency	67.33	67.42	67.18	66.08	66.65	66.17
Magelang City	64.84	65.32	68.89	64.95	67.61	66.32
Tegal City	65.75	66.33	65.54	69.61	64.57	66.36
Brebes Regency	65.12	66.83	66.78	66.08	63.85	66.49
Purworejo Regency	66.67	70.78	67.71	66.26	65.17	66.98
Kendal Regency	66.10	66.49	66.34	67.91	70.5	67.47

Source: Statistics Indonesia (BPS)) 2016-2020

Table 1. 1 shows the lowest Labor Force Participation Rate (LFPR) by District/City in Central Java (%) In 2016-2020, as a whole 10 districts/cities in Central Java were taken as samples, with t the lowest LFPR rate obtained in 2016-2020. Although there is an increase every year, the low LFPR of 10 Regencies/Cities in Central Java is one of the most striking, caused by the Covid-19 pandemic which caused a crisis and disrupted the economic sector and industrial operations. In addition, the increase in the population of districts/cities in Central Java is also a major factor.

From a policy perspective, the central and provincial governments in Indonesia need to maintain a minimum wage to motivate and help workers earn a decent wage and improve worker competencies through education that improves the quality of human resources (human investment). Furthermore, arrangements regarding working age and work experience are needed to facilitate the availability of a qualified workforce. The Indonesian government also needs to consider minimum wages, education, working age, and work experience as policy instruments to increase labor force participation rates.

The selection of the moderating variable, namely the quality of human resources, is based on previous research conducted by Pusposari (2010) and Septiani (2019). The research they have done shows that the quality of the workforce has a positive effect on job opportunities. The indicator used to measure the quality of human resources in this study is the Human Development Index (HDI). According to Human Development Report 2020, the HDI is

a summary measure to assess long-term progress in the three basic dimensions of human development with aspects of longevity and health, access to knowledge and a decent standard of living. Good and quality human resources can be an investment for the organization, so that it can improve work skills and lead to good work productivity. With high labor productivity, of course they will be more competitive and have high bargaining power in the labor market. This benefit will reduce the unemployment rate and increase job opportunities (Septiani, 2019). The purpose of this study was to analyze the effect of the influence between the minimum wage and employment opportunities and the quality of human resources as a moderation variable.

LITERATURE REVIEW

Job opportunities are not just about fulfilling a certain amount or percentage by the company. Although there are quotas, for example to participate in a training program, or a recruitment quota, or a quota for representatives of a company or organization, the normative and administrative requirements (through fair competition) still apply, and the targeted quota should not be imposed. Sudarsono (1990) in Sholeh's work reveals that the demand for labor is the relationship between the level of wages and the number of workers who are desired to be employed in a company or organization. Becker (1962) argues that individual workers have a set of skills or abilities that they can improve or accumulate through training and education. As job candidates accumulate human resources, their value in the market should

increase as it brings more expertise and effectiveness to their jobs. If human capital is increased with additional education, the market value of a worker will theoretically increase in proportion to the amount of education he receives, often captured by the number of credits accumulated. Ricardo (1817) in his book Principles of Political Economy and Taxation expresses his opinion on wages known as the 'Iron Law of Wages', stating that workers are paid to enable them to survive and even achieve a stable life without increasing or decreasing. This theory is based on the assumption that if workers are paid more than the subsistence wage, the number of workers will increase which in turn can reduce the prevailing wage rate. If the value of wages falls below the standard of living, workers may experience a phase of life at a low level. So this theory states that wages in the long run will tend to be the minimum value needed to keep workers alive and to achieve life stability.

In Indonesia, the minimum wage is the minimum standard or benchmark used by employers to legally pay workers. The minimum wage includes not only physical needs but also a little comfort or what is known as conventional needs. With this minimum wage setting, the aim is to protect workers from wages that are too low, but it also has the aim of ensuring fairness and equitable results for all workers. The regional minimum wage until 2000 is set by the Ministry of Manpower. In determining the minimum wage, the minister receives a recommendation from the provincial governor. In formulating recommendations, the governor receives a recommendation from the provincial tripartite council consisting of representatives of employees, employers, and the government.

RESULTS AND DISCUSSIONS

Classical Assumption Test

1. Normality test

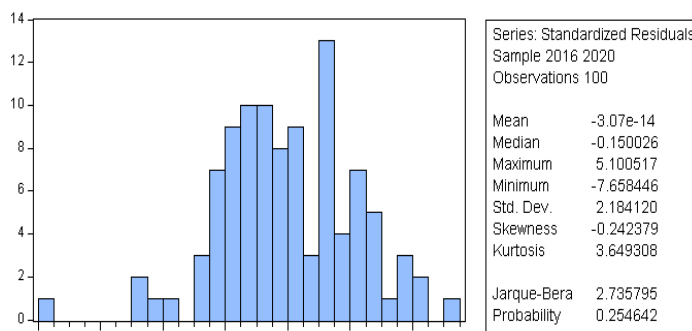


Figure 1. Normality Test

Based on the picture above, it shows that the value of Jarque-Berra is 2.7357 with a probability value of 0.254642. Because the probability value is greater than 0.05 (0.254642 > 0.05), then the residuals are normally distributed.

METHODS

In this study, a quantitative approach was used by converting the results of all observations into numerical ones which were then analyzed through statistics. According to Merwe (1996), quantitative is a research approach that aims to test theories, determine facts, demonstrate relationships between variables, and predict outcomes. The object of this study is the labor force participation rate (LFPR) in Central Java Province from 2016 – 2020. The type of data used is secondary data obtained by researchers through annual census reports sourced from BPS, various literature sources such as articles and books and other sources that have existed before. In this research, the type of data used is panel data which is a combination of time series data and cross section. The data used are labor force participation rate data, GDRP data at constant prices, regional minimum wage data, and human development index data. Moderation analysis is used to determine whether the relationship between the two dependent variables (moderated by) the value of the moderator variable with the following equation formula:

$$Y_{it} = \alpha + \beta_1 GDRP_{it} + \beta_2 \text{minimum wage}_{it} + \beta_3 HR_{it} + \beta_4 GDRP_{it} + \beta_5 \text{minimum wage}_{it} \cdot HR_{it} + e_{it}$$

Description:

- Y_{it} = individual LFPR to i period to t
- α = constant number
- β_1 = GDRP_{it}
- β_2 = minimum wage_{it}
- β_3 = HR_{it}
- β_4 = GDRP coefficient . HR_{it}
- β_5 = coefficient minimum wage_{it}
- e_{it} = individual residual (error) to i period to t

2. Multicollinearity Test

The model is declared free from multicollinearity if the value of Variance Inflation Factor (VIF) < 10 and tolerance > 0,1 The following are the results of the multicollinearity test in the table below.

Table 1. Multicollinearity Test

Coefficients ^a		Collinearity Statistics	
Model		Tolerance	VIF
1	(Constant)		
	UM	0.841	1.189
	SDM	0.879	1.138
	PDRB	0.889	1.125

a. Dependent Variable: TPAK

Source: Output SPSS

Based on the table 2, it shows that the all variables value of $VIF < 10$ and $tolerance > 0,1$. Thus that variables used in this study are not affected by multicollinearity.

3. Heteroscedasticity Test

In this study, the Heteroscedasticity Test was performed using the Cross-section Heteroscedasticity LR test. Here are the results of the heteroscedasticity test in the table below.

Table 3. Results of Heteroscedasticity Test Cross-section

	Value	df	Probability
Likelihood Ratio	45.13912	20	0.0011

Source: Output E-views 10

Can be seen from the output above, the probability value is $0.0011 < 0.05$, which means that the data analyzed in this study based on the Cross-section

Heteroscedasticity LR test. Then the test is continued with the Panel Period Heteroskedasticity LR Test with the following results:

Table 4. Heteroscedasticity Test Results

	Value	df	Probability
Likelihood Ratio	6.899924	20	0.9970

Source: Output E-views 10

It can be seen from the output results in above that the probability value is $0.9970 > 0.05$, which means that the data analyzed in this study based on the Panel Period Heteroskedasticity LR test there is no heteroscedasticity problem.

4. Autocorrelation Test

Autocorrelation test aims to test whether in the linear regression model there is a correlation between the confounding error in a certain period and the error in the previous period. The following is an autocorrelation test in the table below.

Table 5. Autocorrelation Test Results Durbin-Watson

DL	1.6131
DU	1.7364
DW	1.3390
4-DL	2.3869
4-DU	2.2636

Source: Output E-views 10

Based on the table above it can be it can be seen that the Durbin-Watson (DW) value of the regression model is 1.3390 which is smaller than the value of $DU = 1.7364$ and DW is smaller than the value $(4-DU) = 2.2636$ and the DW value is smaller than the value of DL

$= 1.6131$, so it can be concluded there is a positive autocorrelation in the model. Furthermore, the correlation test was carried out with the Residual Cross-Section Dependence (Correlation) Test as follows:

Table 6. Correlation Test Results

Test	Statistic	df	Probability
Breusch-Pagan LM	221, 6520	190	0.0576
LM scaled	1.623713		0.1044
Distribution CD	1.204509		0.2284

Source: Output E-views 10

Based on the table above, it is known that the correlation test results with residual cross-section dependence In the test, there is no autocorrelation problem because all probability values are > 0.05.

Moderation Analysis

Moderation regression equation where the minimum wage (X1), HR (X2) and GRDP (X3) variables are independent variables that affect the LFPR variable (Y) as the dependent variable with moderating variable 1 (M1) namely HR*UM and the moderating variable 2 (M2), namely HR*GDP. The results of the moderation regression are presented as follows:

Table 7. Moderation Regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	147.3994	27.83915	5.294681	0.0000
MW	-3.14E-05	1.71E-05	-1.837590	0.0693
HR	-1.123310	0.387800	-2.896620	0.0047
GDRP	-0,001516	0.000265	-5.716013	0.0000
M1	4.52E-07	2.37E-07	1.909527	0.0592
M2	2.11E-05	3.72E-06	5.664193	0.0000

Source: Output E -views 10

Based on the regression results above, it can be obtained an equation of the regression line as follows:

$$TPAK_{it} = 147.3994 - 3.14E-05 UM_{it} - 1.123310$$

$$SDM_{it} - 0.001516 GRDP_{it} + 4.52E-07 MI_{it} + 2.11E-05 M2_{it} + \epsilon_{it}$$

With the interpretation, namely:

- Coefficient with coefficient value -3.14E-05, it can be interpreted that every increase in MW by 1 rupiah will reduce LFPR by 3.14E-05 percent.
- The HR coefficient with a coefficient value of -1.123310 means that every 1 point increase in HR will reduce the LFPR by 1.23310 percent.
- GRDP coefficient with a coefficient value of -0.001516, it can be interpreted that every increase in GRDP of 1 billion Rupiah will reduce LFPR by 0.001516 percent.
- The M1 coefficient with a coefficient value of 4.52E-07, it can be interpreted that the ME variable moderated by HR (M1) gets a coefficient value of 4.52E-07. So that when M1 increases by 1 unit, it will increase the LFPR by 4.52E-07 percent.
- The M2 coefficient with a coefficient value of 2.11E-05, it can be interpreted that the GRDP variable moderated by HR (M2) gets a coefficient value of 2.11E-05. So when M2 increases by 1 unit, it will increase the LFPR by 2.11E-05 percent

Hypothesis Test

1. t-test

The way to do the t test is to look at the prob value. If the prob value. of an independent variable less than 0.05, it can be interpreted that an independent variable individually affects the dependent variable. Based on the table 7, the results are as follows:

H1: GDRP has a negative effect on LFPR.

The significance value of the influence of GDRP on LFPR is 0.0000 with a negative regression of -0.001516. So this means that H1 is accepted and Ho is rejected because the significance value is less than 0.05 (0.0000 < 0.05). The results of this study indicate that partially GDRP has a negative and significant effect on LFPR.

H2: Minimum Wage has a positive effect on LFPR.

The significance value of MW's effect on LFPR is 0.0693 with a negative regression of -3.14E-05. So this means that H2 is rejected and Ho is accepted because the significance value is greater than 0.05 (0.0693 > 0.05). The results of this study indicate that partially minimum wage has no significant effect on LFPR.

H3: HR has a negative effect on LFPR.

The significance value of HR's influence on LFPR is 0.0047 with a negative regression of -1.123310. So this means that H3 is accepted and Ho is rejected because the significance value is less than 0.05 (0.0000

<0.05). The results of this study indicate that partially HR has a negative and significant effect on LFPR.

H4 : GRDP has a positive effect on LFPR moderated by HR.

The significance value of the GRDP variable moderated by HR (M2) on TPAK is 0.0000 with a positive regression of 2.11E-05. So this means that H5 is accepted and Ho is rejected because the significance value is smaller than 0.05 (0.0000 <0.05), so that HR can strengthen the influence of GRDP on LFPR.

H5: Minimum wage has a positive effect to LFPR moderated by HR.

The significance value of the Minimum wage variable moderated by HR (M1) to TPAK is 0.0592 with a positive regression of 4.52E-07. So this means that H4 is rejected and Ho is accepted because the significance value is greater than 0.05 (0.0592>0.05), so that HR cannot moderate the influence of Minimum wage on LFPR

2. F Test

Table 8. Anova

R-squared	0.315986	Akaike info criterion	4.510253
Adjusted R-squared	0.279603	Schwarz criterion	4.666563
F-statistic	8.684834	Hanan-Quinn criter	4.573514
Prob (F-statistic)	0.000001	Durbin-Watson stat	1.339035

Source: Output E-views 10

Based on the data on the output of E-Views, it can be seen that the independent variables (Minimum wage, HR, GRDP, M1 and M2) have a P-Value of 0.00001 which is smaller than 0.05. Thus Ho is rejected and Ha is accepted. So the results of the analysis show that together or simultaneously the independent variables (Minimum wage, HR, GRDP, M1 and M2) have a significant effect on the dependent variable (LFPR).

3. Coefficient of Determination (R²)

Based on the results of the common effect regression model in table 8, the results of the Adjusted-R2 value obtained 0.2796 . This can be interpreted that the ability of the Minimum wage (X1), HR (X2) and GRDP (X3) variables as well as the moderating variables M1 and M2 in explaining the variation of the LFPR variable (Y) is 27.96 percent, while the remaining 72.04 percent explained by other independent variables that were not included in this research model.

DISCUSSION

The results of this study indicate that the variables of GRDP, Minimum wage, HR Quality, HR Quality moderate GRDP, HR Quality moderates Minimum wage have a joint influence on LFPR. It can be seen in table 4.12 that the P-Value value is smaller than 0.05 so that Ho is rejected and Ha is accepted.

H1: GDRP has a significant negative effect on LFPR.

The first hypothesis states that GDRP has a significant positive effect on LFPR. The results showed that the beta coefficient value was -0.001516 and a significant value was 0.0047. This means that the GDRP variable has a negative and significant effect on LFPR, so the first hypothesis is accepted. The findings in this study are in accordance with the phenomena that occur in the field where in 2018 Central

Java Province experienced a decrease in the labor force participation rate of 0.30 percent. Meanwhile, on the other hand, Central Java's GDRP in 2018 increased by Rp. 47,340,848 (BPS, 2022). This indicates that the Labor Force Participation Rate is experiencing a downward or negative trend. This means that the supply of labor available to produce goods and services decreases or the percentage of the economically active working age population decreases. The background of the negative relationship is suspected to be due to:

1. Incompatibility between the quality of human resources and the demands of the industry which causes the decline in LFPR in Central Java Province.
2. Because human resources come from outside the province of Central Java and work in Central Java province, which causes the GDRP of Central Java to continue to grow but does not absorb LFPR in Central Java Province.
3. GDRP grew due to the capital aspect in the factory industrial sector which prioritized machine power over human power. This certainly has an impact on reducing LFPR in Central Java Province.

The results of this study are in accordance with previous research conducted by Andika Syahputra (2020) which analyzed partially and simultaneously the effect of wages, education, GDRP and population on the level of labor force participation in North Sumatra Province. The results of this study explain that GRDP has a negative and significant effect on the Labor Force Participation Rate.

H2: The minimum wage has a significant positive effect on LFPR.

The second hypothesis states that the minimum wage has a significant positive effect to LFPR. However, the results showed that the beta coefficient value was -3.14E-05 and a

significance value of 0.0693. This means that the minimum wage has a negative and insignificant effect to LFPR, so the second hypothesis is rejected. The minimum wage greatly affects the absorption of LFPR because wages or salaries are the main benchmark in a job. As stated by Simanjuntak (2005) that an increase in wages will negatively affect the supply of labor, where an increase in wages on the one hand will increase income which tends to reduce the LFPR. The findings in this study show that in 2018 the LFPR in Central Java Province decreased by 0.30 percent, but on the other hand the minimum wage in 2018 increased by Rp. 131,000 or by 8.74 percent from 2017. This shows that when there is an increase in the minimum wage it will reduce the Labor Force Participation Rate.

The results of this study are in accordance with previous research conducted by Vera Siti Rodiah (2019) which analyzed partially and simultaneously the Effect of GDP, Minimum Wage, Literacy Rate and Average Years of Schooling on District/City Labor Force Participation Rates in Banten Province in 2010 -2015. The results of this study indicate that the minimum wage has no significant and negative effect on LFPR.

H3: HR quality has a significant negative effect on LFPR.

The third hypothesis states that HR quality has a significant negative effect on LFPR. The results showed that the beta coefficient value was -1.123310 and the significance value was 0.0000. This means that the quality of human resources has a negative and significant effect to LFPR, so the third hypothesis is accepted. The reason for this negative relationship is because the increase in the quality of human resources has also more or less affected the decrease in LFPR, why is that because with the increase in the quality of human resources it also increases the value of the workforce and the industry is required to prepare higher production costs, this makes the industrial sector choose to recruit HR classified as unskilled or low educated in order to cut production costs. It is not uncommon for the industrial sector to replace human labor with robotic technology as well to cut production costs.

This is in line with the opinion of Agustina and Kartika (2017), with an increase in the human development index (HR quality) indicating that labor productivity is good. The good productivity makes the selling power of the labor expensive. This is what is then strated by the company to replace the workforce with technology such as robots to reduce production costs. The findings in this study, that in 2018 the quality of human resources in Central Java Province was 71.12 points, an increase of 0.6 points compared to 2017. On the other hand, the LFPR of Central Java Province in 2018 decreased by 0.30 percent. This shows that when there is an increase in the quality of human resources, it will reduce the Labor Force Participation Rate.

H4: The quality of human resources moderates the effect of GRDP on LFPR

The fourth hypothesis states that the quality of human resources strengthens the influence of GDRP on LFPR. The results showed that the GDRP moderated by the quality of human resources had a coefficient value of 2.11E-05 and a significance value of 0.0000. That is, the quality of human resources is able to moderate the influence of GDRP on LFPR, so the fourth hypothesis is accepted. The results of this study prove that the quality of human resources can strengthen the influence of GDRP on LFPR. That is, with the quality of human resources that is getting better, it will further strengthen the increase in GDRP, so that it is likely to increase the LFPR. The quality of human resources certainly strengthens GDRP towards LFPR, because good quality human resources can also increase LFPR and reduce LFPR, the industrial sector prefers or prioritizes standard HR because it can cut production costs and reduce LFPR. This happens because qualified human resources are certainly well developed and want high wages based on the knowledge and understanding they have.

According to BPS data during the 2016-2020 period, Central Java Province has a GDRP value that continues to increase as well as for the Quality of Human Resources which experiences an increasing trend or increase every year, then for LFPR also tends to increase or increase every year.

H5: The quality of human resources moderates the effect of the minimum wage on LFPR

The fifth hypothesis states that the quality of human resources strengthens the effect of the minimum wage on LFPR. However, the results of the study show that the minimum wage moderated by the quality of human resources has a coefficient value of 4.52E-07 and a significance value of 0.0592. This means that the quality of human resources is not able to moderate the effect of the minimum wage on LFPR, so the fifth hypothesis is rejected. The results of this study prove that the quality of human resources cannot moderate the effect of the minimum wage on LFPR. That is, with the quality of human resources getting better when the minimum wage in Central Java Province has increased, there is not necessarily an increase in the Labor Force Participation Rate in Central Java Province.

The quality of human resources can strengthen the effect of the minimum wage on LFPR if the quality of human resources who have skills but are not educated or those who are illiterate do not go to school but have special skills and expertise that are trained so that they have competencies that can certainly increase their value. This is evidenced by data according to the Central Java Province BPS in 2018 the minimum wage of Central Java Province has increased, which is followed by an increase in the quality of human resources, but for LFPR itself it has decreased by 0.30 percent

CONCLUSIONS

Based on the results of the discussion of the influence of GRDP, Minimum Wage, Human Resources, GRDP moderated by HR, Minimum Wage moderated by HR, several conclusions can be drawn, namely:

Jointly the variables GRDP, Minimum Wage, Resources Humans, GRDP moderated by HR, Minimum Wage moderated by HR have a significant effect on LFPR in Central Java Province. Partially, the effect of the independent variable on the dependent variable is as follows:

1. The GRDP variable does not have a significant effect on LFPR in Central Java Province.
2. Minimum Wage variable has a significant effect on LFPR in Central Java Province.
3. The HR Quality variable does not have a significant effect on LFPR in Central Java Province.
4. The GRDP variable moderated by HR has a significant effect on LFPR in Central Java Province.
5. Minimum Wage variable moderated by HR does not have a significant effect on LFPR in Central Java

Based on the research results obtained, this research can have implications for the government is expected to take a policy of expanding job opportunities through increasing GDRP, expected to coordinate with industry and labor unions regarding the determination of the minimum wage, expected to provide training and certification to improve competence by maximizing job training centers. For HR, it is hoped that they can improve their ability and adapt to the needs of the industrial sector.

There are several limitations experienced by the author when conducting research, including period used was only 5 years of observation, namely 2016 to 2020, thus allowing for less representative research results. The data used is secondary data which may contain errors in entering data in the form of numbers. This research does not include elements of the Covid-19 pandemic that occurred in 2020

REFERENCES

1. Abalos, J. (1997). *International Journal of Political Economy: Marx's Theory of Wages*. 27 (4). pp. 96-114.
2. Adebessin, F., Kotzé, P & Gelderblom, H. (2011). Design research as a framework to evaluate the usability and accessibility of the Digital Doorway. pp 306-323
3. Arsal, R. (2006). Efisiensi: Kebijakan Pembangunan Kualitas Manusia dalam Perspektif Administrasi Publik.. 6 (3,) DOI: 10.21831/efisiensi.v6i3.3902.
4. Baswedan, R. (1996). *Economic Journal of Emerging Markets: Pendayagunaan dan Pengembangan Sumber Daya Manusia dalam Rangka Strategi Pembangunan Jangka Panjang*. 7, 1996, pp. 15-27.
5. Becker, Gary, S. (1994). *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*, 3rd Edition. University of Chicago Press
6. Bell, LA. (1997). The Impact of Minimum Wages in Mexico and Colombia. *Journal of Labor Economics*. 15 (3). S102-35
7. Bird, K & Manning, C. (2008). Minimum Wages and Poverty in a Developing Country: Simulations from Indonesia's Household Survey. *World Development*, Elsevier. 36 (5). pp 916-933. DOI: 10.1016/J.WORLDDEV.2007.05.012
8. Charysa, N. *Economics Development Analysis Journal: Pengaruh Pertumbuhan Ekonomi dan Inflasi Terhadap Upah Minimum Regional di Kabupaten/Kota Provinsi Jawa Tengah Tahun 2008-2011*. 2 (4). <https://doi.org/10.15294/edaj.v2i4.2489>
9. Creswell, JW (2018). *Research design* (5th ed.). SAGE Publications.
10. Dewi, S. (2018). *Signifikan: Jurnal Ilmu Ekonomi: The Effects of Minimum Wage Throughout the Wage Distribution in Indonesia*. 7 (2). pp 221- 232. DOI: 10.15408/sjie.v7i2.6125. E-ISSN: 2476-9223
11. Dunk, A. (2003). Accounting Organizations and Society: Moderated regression, constructs and measurement in management accounting: a reflection. 28. pp 793-802. [https://doi.org/10.1016/S0361-3682\(02\)00057-0](https://doi.org/10.1016/S0361-3682(02)00057-0)
12. E. Smith. (2020). *International Encyclopedia of Education* (Third Edition)
13. Hutagalung, PS, & Purbayu, BS (2013). *Diponegoro Journal of Economics: Analisis Pengaruh Upah Minimum dan Inflasi terhadap Kesempatan Kerja Sektor Industri Pengolahan Besar dan Sedang di Jawa Tengah (35 Kab/kota)*. 2 (4), 2013, pp. 144-155
14. Junankar PN (2008). Labor Supply. In: *Economics of the Labour Market*. Palgrave Macmillan. London. https://doi.org/10.1057/9781137555199_4. Online ISBN: 978-1-137-55519-9
15. Liana, L. (2009). *Jurnal Teknologi Informasi DINAMIK: Penggunaan MRA dengan Spss untuk Menguji Pengaruh Variabel Moderating terhadap Hubungan antara Variabel Independen dan Variabel Dependen*. 14 (2). 90-97
16. Lubis, N., (2019). Pengaruh pertumbuhan ekonomi dan upah minimum terhadap tingkat partisipasi angkatan kerja Provinsi Sumatera Barat (Doctoral dissertation, IAIN Padangsidempuan).
17. Maharani, AS, (2017). Analisis Faktor-faktor yang Mempengaruhi Tingkat Partisipasi Angkatan Kerja di Pulau Kalimantan.
18. Mamik. (2016). *Manajemen Sumber Daya Manusia. Sidoarjo: Zifatma Jawara*

Destika Larasati et al, The Effect of Minimum Wage on Employment Opportunity with Quality of Human Resources as Moderating Variables in Central Java

19. Neumark, D., & Wascher, W. (2006). Minimum Wages and Employment: A Review of Evidence from the New Minimum Wage Research
20. Prenggondani, R., (2016). Pengaruh PDRB, Upah Minimum Dan Jumlah Penduduk Terhadap Tingkat Partisipasi Angkatan Kerja Pada Kabupaten/Kota Di Jawa Barat Tahun 2007-2014 (Doctoral dissertation, Universitas Brawijaya).
21. Pusposari, LF, (2010). Analisis Pengaruh Upah Minimum terhadap Kesempatan Kerja Sektor Industri dengan Panel Data Analysis. *IQTISHODUNA*.
22. Ojebiyi & Amos, AA (2013). Global Journal of Management and Business Research Administration and Management. 13 (5). Version 1.0. Publisher: Global Journals Inc. (USA) Online ISSN: 2249-4588 & Print ISSN: 0975-5853
23. Rama, M. (2001). Konsekuensi Penggandaan Upah Minimum: Studi Kasus Indonesia. Tinjauan Hubungan Industrial dan Ketenagakerjaan. 54. pp 864-881. DOI: 10.1177/001979390105400407
24. Russell, C & Bobko, P. (1992). *The Journal of applied psychology*: Moderated Regression Analysis and Likert Scales, Too Coarse for Comfort. 77. pp 336-42. 10.1037//0021-9010.77.3.336
25. Sari, L., Putro, TS and Sarsi, W., (2014). Pengaruh tingkat upah dan pertumbuhan ekonomi terhadap tingkat partisipasi angkatan kerja di Provinsi Riau (Doctoral dissertation, Riau University).
26. Septiani, A., 2019. Analisis Pengaruh Pertumbuhan Ekonomi, Kualitas Sumber Daya Manusia, Upah, Pertumbuhan Penduduk, dan Struktur Umur Penduduk Terhadap Kesempatan Kerja di Provinsi Lampung dalam Perspektif Ekonomi Islam Tahun 2010-2017 (Doctoral Dissertation, Uin Raden Intan Lampung).
27. Setiaji, B & Sudarsono. (2004). *Economic Journal of Emerging Markets*: Pengaruh Diferensiasi Upah Antar Propinsi Terhadap Kesempatan Kerja. 9 (2)
28. Sholeh, M. (2007). *Jurnal Ekonomi & Pendidikan*: Permintaan dan Penawaran Tenaga Kerja Serta Upah, Teori Serta Beberapa Potretnya di Indonesia. 4 (1). pp 62-75
29. Sugiyono. (2012). *Metode Penelitian Kuantitatif, Kualitatif dan R&B*. Bandung: Alfabeta
30. Sugiyono. (2017). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung : Alfabeta
31. Suryahadi, A & Sumarto, S. (2003). *Asian Economic Journal*: Poverty and Vulnerability in Indonesia Before and After the Economic Crisis. 17. pp 45-64. <https://doi.org/10.1111/1351-3958.00161>
32. Suryahadi, A., Widyanti, W., Perwira, D., & Sumarto, S. (2003). Minimum wage policy and its impact on employment in the urban formal sector. *Bulletin of Indonesian Economic Studies*. 39. pp 29-50. 10.1080/00074910302007
33. Syaputra, A., (2020). Analisis Pengaruh Upah, Pendidikan, PDRB dan Jumlah Penduduk Terhadap Tingkat Partisipasi Angkatan Kerja di Sumatera Utara.
34. Vera, SR, (2019). Pengaruh Pdrb, Upah Minimum, Angka Melek Huruf Dan Rata-Rata Lama Sekolah Terhadap Tingkat Partisipasi Angkatan Kerja Perempuan Kabupaten/Kota Di Provinsi Banten Periode 2010-2015 (Doctoral Dissertation, Universitas Sultan Ageng Tirtayasa)