THE EFFECT OF GDRP, MINIMUM WAGE, OPEN UNEMPLOYMENT RATE, HDI ON EAST JAVA LABOR ABSORPTION 2017-2022

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ABSTRACT

The research aims to determine the effect of GRDP, District/City Minimum Wage (UMK), Open Unemployment Rate (TPT), Human Development Index (IPM), on Labor Absorption in East Java Province in 2017-2021. The dependent variable data is employment, while UMK, TPT, HDI are independent variables sourced from the Central Bureau of Statistics of East Java Province. This study uses panel data, namely 38 district/city sectors in East Java. The estimation used is the Fixed Effect Model with analysis used to find the effect of several dependent variables on the independent variable. The results of the study show that partially GRDP has a negative and insignificant effect on employment in East Java Province, the Open Unemployment Rate (TPT) has a negative and significant effect on employment absorption in East Java Province, UMK has a negative and insignificant effect on employment working in East Java Province. Meanwhile, the HDI has a positive and significant effect on employment in East Java Province.

Keywords : Labor absorption, GRDP, District/City Minimum Wage (UMK), Open Unemployment Rate (TPT), Human Development Index (IPM).

INTRODUCTION

The building process provides a vital support for the construction activity of the work force. Labor is essential for economic growth because its role includes one of the production factors affecting the output of a region (Indriani, 2016). Indirect economic growth impacts increased public welfare, but it can take place through other anatomic pathways in the work force. Economic growth will affect community welfare if it is able to create adequate amounts of employment and quality in order to absorb additional labor forces that enter the job market each year (Afrigesti, 2018). It is also viewed not only as part of the creation of a separate output but also as how the quality of the labor interacts with other production factors to create an added value (productivity). The more productive the work force will be, the more value added will be generated in the future. Moreover, the work force is also important in the business activities of a certain region.

During the same period the economy will also experience changes as development takes place. Similarly, the percentage of people working in various sectors of the economy will suffer decline and change. It is not without the development of human resources and the absorption of labor. But it is not that easy to implement labor, but it is employment problems that generally occur in developing countries that are employment opportunities. This is a problem because of increasing population growth in individual areas such as east Java. (Prihatini et al., 2020).

The gross domestic product (PDRB) is one of the government's concerns, which the gross regional domestic product (PDRB) has an added value on goods and services generated from various individual production units or sectors over a period of time. PDRB can also affect the number of work forces working under the assumption that the PDRB value increases, the amount of value in outputor sales in the entire economic unit in the region will increase. Research conducted by (Hartono et al., 2018) states that PDRB variables have a positive

relationship with regression coefficient value of 0.682 while the study shows that PDRB has a significant 0.001 effect on the absorption of labor that shows a value smaller than $\alpha < 0.001 < 0.005$.

The labor situation in Indonesia is the same as that in East Java Province. With the labor force in East Java Province in 2021 it reached 22.32 million people or about 70% increase by 0.25% compared to August 2020 conditions. The Open Unemployment Rate (TPT) in 2021 was 5.74% up 0.57% compared to the conditions in August 2020. However, the Open Unemployment Rate (TPT) in East Java Province in August 2021 was much lower than the National Unemployment Rate (TPT) in August 2021 by 6.49% (Source: East Java Bappeda).

One of the efforts that the government will make to solve the employment problem is to improve the wage system through the minimum wage policy. In a study (Pertiwi & Setyowati, 2022) stated that the minimum wage has a negative effect on the poverty level where the minimum wage of 1 rupiah will be followed by a decrease in the labor rate, the more the working population level decreases. The implementation of the minimum wage policy is a business that can increase workers' per capita wages so that the average wage level of labor will increase or increase. Regarding the relationship between the minimum wage variable and the open unemployment variable, the minimum wage variable has a regression coefficient of -1.819222, meaning that if the minimum wage rises by 1 percent, then the open unemployment rate falls by 0.018192 percent, and if the minimum wage falls by 1 percent, then the unemployment rate falls by 1 percent.Open will go up by 0.018192 percent. In his research, he showed that increasing the wage level would cause the labor supply to increase so that the unemployment rate would decrease (Christianto, 2018)

Furthermore, the Human Development Index (IPM) has 4 components such as good economy, health, education to be achieved, and community consumption to a number of basic needs that are seen according to per capita expenditure. Research conducted by (Pangesti & Prawoto, 2018) stated that with a significance of 1 percent or 0.01, IPM had a negative effect on trade sector labor absorption and a coefficient of -0.034. Therefore, it can be concluded that if there is an increase in IPM by 1 point, it will have an effect on the decrease in the absorption of labor in the trade sector by 0.0034. The Human Development Index (IPM) has a negative relationship and has an insignificant effect on the absorption of industrial sector labor in East Java Province (Ismail, 2020). It is said that governments will succeed if they are able to create and enhance employment and reduce the number of unemployment by creating new jobs and will affect the demands of labor. But it may be realized that job opportunities do not always measure up if a absorbed workforce results in more than one job. Based on the above problem and the difference in studies, researchers are obsessed with research using the title influence on PDRB rates, open unemployment rates (TPT), the district/city minimum wage (UMK), the human development index (IPM) to the absorption of labor in east Java province of 2017-2021.

METHODS

This study was conducted to determine the effect of PDRB analysis, open unemployment rate (TPT), district/city minimum wage (UMK), human development index (IPM) on labor absorption. This study used a quantitative approach. The data used in this study are panel data with 38 regencies/cities in East Java Province in 2017-2021. The data analysis used in this study was panel data regression analysis. Panel data is data that combines time series and cross section data. The model selection and test that will be used in this study are Common Effect Models (CEM), Fixed Effect Models (FEM), Random Effect Models (REM), with the test being the Chow Test and the Hausman Test. Hereby the approach to be used in parameter estimation. Here is the model of the estimation equation in this study:

$$logPTK_{it} = \beta_0 + \beta_1\ logPDRB_{it} + \beta_2\ TPT_{it} + \beta_3\ logUMK_{it} + \beta_4\ IPM_{it} + \varepsilon_{it}$$

Description :

PTK	= Absorption of labor
PDRB	= Gross regional domestic product (billion)
TPT	= Unemployment rate open (percent)
UMK	= Minimum wage of district/city (rupiah)
IPM	= Human development index (percent)
ε	= Error Term
β_0	= Constants
$\beta_1\beta_2\beta_3\beta_4$	= Independent Variable Regression Coefficients
i	= Cross section (38 district/city sector of east java Province)
t	= Time series data (The year 2017-2021)

RESULTS AND DISCUSSION
RESULT
Data analysis
Based on regression results by using eviews software 10 can be known about the fixed effect model (FEM) with the chow test and hausman test as follows:

Test chow
Tests on the study provided the goal of selecting the best model between the common effect models and the models models on a hypothetical basis:

Table 1. Regression test chow

Redundant Fixed Effects Tests
Equation: MODEL_FEM
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	1039.067309	(37,148)	0.0000
Cross-section Chi-square	1057.089059	37	0.0000

Source: back up eviews 10

Based on the results of the Chow Test with Redundant Test, a Chi-square cross-section value of 1057.089059 with a probability of $0.0000 < 0.05\%$ which means that H_0 is rejected H_1 is accepted, so the exact model used is the Fixed Effect Model.

Hausman Test
The test to be used to select the best model between Random Effect Models (REM) and Fixed Effect Models (FEM) is based on the following hypothesis:

Table 2. Hausman Test Regression Results

Correlated Random Effects - Hausman Test
Equation: MODEL_REM
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	37.813068	4	0.0000

Based on the Table above, we obtain a random cross-section distribution of 37.813068 with a Chi-square probability of 0.0000 < 0.05%, hence the correct model is to use the Fixed Effect Models (FEM). Thus, based on Hausman's test, the right model to analyze labor absorption in East Java is the Fixed Effect model rather than Random Effect.

Estimation Results of Fixed Effect Model

Based on the results of the tests conducted on the Chow Test and the Hausmant Test above, the best model used in this study is the regression of the Fixed Effect model.

Table 3. Fixed Effect Model Test Results

R-squared	0.998378
Prob(F-statistic)	0.000000

Source: back up eviews 10

According to Table 3, the output obtained from the results of the F-statistic probability value of 0.000000 <(0.005). The decision of H_0 was rejected and H1 accepted. Based on two model tests it was seen that Uji Chow chose the Fixed Effect Model (FEM). So it can be concluded that the estimated model to be used in this study is the Fixed Effect Model (FEM).

The above regression results show that the R^2 coefficient value of the Fixed Effect Model shows an obtained value of 0.999258 which means that 99.92% of the labor absorption dependent variables are described in PDRB, TPT, UMK, IPM independent variables. While the rest 0.08% is explained by other variables outside the model. The Statistics F test is used to find out or see if the variables used together will affect the dependent variables or not. Based on the above results we obtain an F-statistic of 4859,373 with an F-statistic probability of 0.000000 < 5%, which means that H0 is denied acceptance of H_1. Independent variables, namely PDRB, TPT, UMK, and IPM, simultaneously have a significant effect on the dependent variable, namely labor absorption.

The t test is a test done to test each independent variable on the individual dependent variable to see if independent variables affect the dependent variable. In this test it can be done by comparing results from t calculations with table t, but it is also done by comparing certain probabilities. When t counts chart, H_0 is accepted and H_1 is rejected. It means that independent variables significantly do not affect the dependent variables. But instead, if t count > t tables, then H_0 is denied H_1 accepted. It means that independent variables significantly affect the dependent variable. According to data from the variable data, PDRB's impact on the task of PBBB was a result of a probability of $0.7851 > \alpha = 0.10\%$ would mean to accept H_0 and decline to the H_1, it would not be significant and would have a negative impact on the task force in east Java in 2017-2021.

From the data on the influence variable The open unemployment rate (TPT) on labor absorption was obtained with a probability of $0.0093 < \alpha\ 0.10\%$ which means rejecting H_0 and accepting H_1, a significant and negatively influential result on labor absorption in East Java in 2017-2021. The influence variable of the Regency/City Minimum Wage (UMK) on labor absorption is obtained with a probability of $0.5544 > \alpha\ 0.10\%$ which means accepting H_0 and rejecting H_1, so the results are insignificant and negatively affected the labor absorption in East Java in 2017-2021. The data on the influence variable of IPM on labor absorption was obtained with a probability of $0.0000 < \alpha\ 0.10\%$ which means rejecting H_0 and receiving H_1, so the results were significant and had a positive effect on labor absorption in East Java in 2017-2021.

DISCUSSION

According to the researchers' thinking (E. Putri et al., 2022) states that PDRB is insignificant and has a negative impact on the absorption of labor. This is in accordance with research (Patriansyah, 2018), which states that, as far as PDRB is concerned, it does not affect

or interfere with the absorption of any absorbed labor force will have no effect or permanence. The study also coincides with (Aisyah & Pratiwi, 2020), stating that PDRB is partially negative related and does not significantly affect the absorption of labor at surakarta in 2008-2017. So the increase in PDRB in East Java Province will not be affected or fixed. E-views' results show that there is no negative relationship between PDRB growth and labor absorption. This can be due to the fact that PDRB is not only produced from working population but other factors such as the state of the world economy, political situation in Indonesia, etc. It can show the productivity of its own labor when the productivity level is low, which is the shortage of goods and services, which can lead to inflation and cause economic downturn. With the development and improvement of the economic sector, it will encourage the opening of new jobs.

The open unemployment rate (TPT) has a negative and significant coefficient for East Java Province's 2017-2021, statistically explaining that when the open unemployment rate (TPT) decreases by 1 percent, then the labor absorption will decrease as well as vice versa. According to research (Utami & Masjkuri, 2018) stated that the open unemployment rate in Central Java showed a negative effect on the absorption of labor. This is the same as the study (Fauzhiah, 2019) that simultaneous labor absorption of unemployment rate can be seen in Facul is greater than Ftabel and significance value is 0.03 percent less than confidence level value of 0.05.

As the study (F. W. A. Pratama & Setyowati, 2022) stated that where the unemployment rate of the population negatively affects the absorption of labor, this is because many companies will be easier to obtain labor centers where the more labor is absorbed it will have an impact on economic development. From the individual effect coefficients of each district/city, where if it is positive, it means that if all consta variables have an average TPT value, it will be higher than other regions, while if it is negative, the average TPT value will be lower than other regions. High unemployment will also lead to political turmoil, economic growth and economic development.

From the above data processing it can be seen that the Regency/City Minimum Wage (UMK) variable has a negative and insignificant effect on the absorption of labor in East Java Province. Contrary to the hypothesis, the minimum wage has a positive effect on labor absorption. It means that the decrease in the minimum wage will decrease the amount of labor absorption and so on, the increase in the minimum wage will increase the labor absorption. This study is in line with (Rusniati et al., 2018) stating that the minimum wage variable does not have a significant effect and is marked negatively by labor absorption. Based on the results of his research, the higher the minimum wage level leads to a decrease/low unemployment rate. This study is also in line with (N. A. Putri & Soelistyo, 2018) stated that the minimum wage variable negatively affects labor absorption in the wrong Gerbangketasus region, meaning that if wages fall by 1 percent it can result in a decrease in labor absorption. The negative influence of UMK on the absorption of labor in East Java Province is supported by the fact that East Java has relatively few labor production factors. With the number of business units that have no effect on the absorption of labor force, this is related to an industrial condition in East Java which is labor-intensive, resulting in the absorption of labor force not affected by many or at least the existence of a separate business unit. Where the reality is that with a limited number of business units has been able to absorb a relatively large amount of labor.

Based on the data processing results above the human development index variable (IPM) has a significant positive effect on the absorption of labor, meaning that if there is a 1 percent increase in IPM, it will increase the absorption of labor in East Java Regency/Kota Province. Research is in line with (Hafiz & Haryatiningsih, 2021) and (Ramdani et al., 2021) stated that the human development index (IPM) had a significant effect on the absorption of labor in Central Java Province from 2014 to 2019. This study is also in line with (Y. M. Pratama et al., 2022) that IPM has a significant effect on the absorption of labor, where every increase in IPM is 1 percent, it will absorb labor. The theory that explains the Human Development Index (IPM)

according to Todaro in (Mahroji, 2019) explains that by increasing human capital development (human capital) will be able to increase human resources (SDM) literacy shown by increasing one's knowledge and skills so that it will encourage improve the development of human resources.without the productivity of his work. The relationship between the absorption of labor and human development should represent the four main components according to (Feriyanto, 2014), the first is productivity in which people must be able to increase their productivity and participate fully in the process of earning income and working jobs. Both equities, the public must have access to fair opportunities. Third continuity, askes to get opportunities must be ensured not only for the current generation but for the next generation. Fourth empowerment, development must be done by the people and not for them.

CONCLUSION

Based on the results of the analysis and discussion, the author draws conclusions about the Influence of GDP, Open Unemployment, UMK, and IPM on the Absorption of East Java Labor in 2017-2021. The conclusion of this problem is that the best model selection test using the Chow test can be seen that the selected model is the Fixed Effect Model (FEM), with this testing the selected model selection Hausman test being the Fixed Effect Models (FEM). Thus the selected and appropriate estimates are used in this study, namely Fixed Effect Models (FEM). Independent variables, namely PDRB, TPT, UMK, and IPM, simultaneously have a significant effect on the dependent variable, namely labor absorption. PDRB has a negative and insignificant effect on the absorption of labor in East Java Province. The Open Unemployment Rate (TPT) has a negative and significant effect on the absorption of labor in East Java Province. Regency/city UMK had a negative effect and did not significantly affect the absorption of labor and IPM had a positive effect on the absorption of labor in East Java Province.

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