



Analysis of Several Factors Affecting Labor Force Absorption in East Java Province for the Years 2017 - 2022

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Abstract: Evaluating the government's success in economic development is essential to assess how effectively the government can address unemployment and enhance job opportunities. To ensure that the workforce is optimally absorbed, it must be accompanied by the creation of new and abundant job opportunities. Labor issues are a common concern in developing countries like Indonesia, which has a large population. A significant population size leads to a substantial labor force, resulting in a high number of job seekers and unemployed individuals, which in turn leads to relatively low incomes. This research aims to analyze several factors influencing labor force absorption in East Java from 2017 to 2022. This research method utilizes secondary data, which consists of a 6-year panel data from 2017 to 2022. The analytical method employed in this research is multiple linear regression. The results of this research indicate that the minimum wage and economic growth do not have a significant impact on labor force absorption in East Java Province. On the other hand, the average years of schooling have a considerable influence on labor force absorption in East Java Province. This research serves as valuable input for determining the direction and future development strategies and can be used as a reference for predicting the labor force conditions in East Java. The imbalance between the large labor force and available job opportunities in East Java highlights the need for the government to focus more on labor force absorption in the province. These three factors can serve as a guide for the government in addressing labor force issues, aiming to optimize labor force absorption and consequently boost economic growth in East Java Province.

Keywords: Labor Force Absorption; Minimum Wage; Average Education; Economic Growth

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INTRODUCTION

Evaluating the government's success in economic development is crucial in assessing how effectively the government can address unemployment and enhance job opportunities. To ensure that the workforce is optimally absorbed, it must be accompanied by the creation of new and abundant job opportunities. Labor issues are inevitably intertwined with developing countries like Indonesia, which has a large population. The high population figure leads to a sizable labor force, resulting in a substantial number of job seekers and unemployed individuals, thus leading to relatively low incomes Atiyatna et al., (2016). One of the indicators of economic development is the economic growth of a country, which can be measured by the difference in domestic product between a specific year and the following year. Fundamentally, economic development refers to the development of a region or what is commonly referred to as the concept of regional development, which depicts the planned economy by the state in planning regional development. Increased welfare of the population becomes the primary goal in economic development through the increase of national income. This increase is expected to create more job opportunities in line with the progress of Indonesia's economic development. This is expected to boost economic

growth, especially in East Java Suindyah D, (2009). The following is a comparison of the population and labor force participation rate for the years 2017-2022:

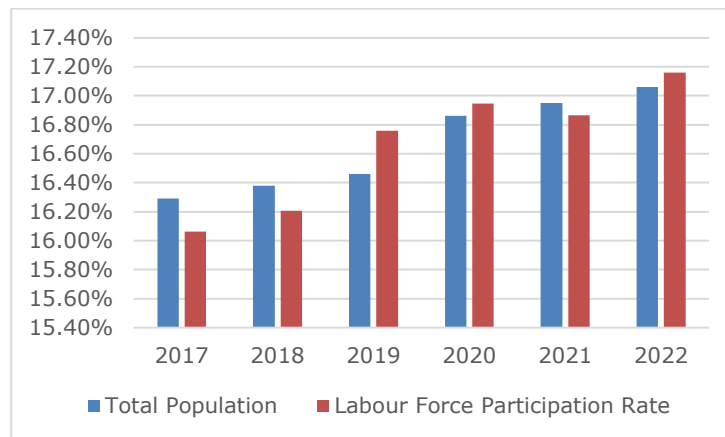


Figure 1. Comparison of Population and Labor Force Participation Rate in East Java Province Years 2017 – 2022
Source: Central Bureau of Statistics (data processed).

The diagram above illustrates the fluctuations in the labor force conditions in East Java Province from 2017 to 2022. The population in East Java is higher than the labor force participation rate. For instance, in 2022, it can be observed that the labor force participation rate is greater than the population in East Java. In 2022, the labor force participation rate increased by 3% compared to 2021, while the population decreased, reflecting the government's efforts to improve the economy in East Java. The increase in labor force participation is due to the continuous population growth and is also part of the government's initiatives to revive the economy after the Covid-19 pandemic. In 2022, the East Java Provincial Government implemented economic sector improvements by relaxing the restrictions of the Community Activities Restriction Enforcement (PPKM) in response to the accelerated vaccination against Covid-19 and the slowing down of Covid-19 spread. This contributed to the improvement of economic activities. In 2022, the business activities in East Java Province showed an increase in labor force absorption compared to the previous year (Mufida et al., 2021).

In East Java, labor force absorption has increased compared to the previous year, resulting in an expansion of the labor force in East Java. If this increased labor force can be effectively absorbed, it will have a positive impact on the region, leading to a demographic bonus. However, if the labor force cannot be absorbed adequately, it will lead to a rise in unemployment, thereby causing poverty and an increase in criminal activities.

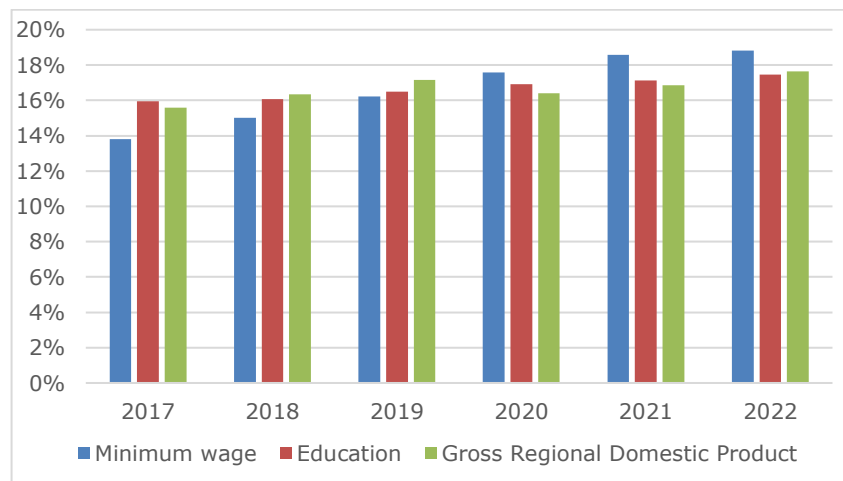


Figure 2. Minimum Wage, Average Education, and Constant Price GDP in East Java Province Years 2017 – 2022
Source: Central Bureau of Statistics (data processed).

Figure 2 reveals that from 2017 to 2022, the minimum wage in East Java Province increased annually. In 2018, the minimum wage in East Java Province increased by 8.7% compared to 2017. The highest minimum wage during the period from 2017 to 2022 was in 2022, amounting to Rp 1,891,567.00, while the lowest was in 2017, at Rp 1,388,000.00. These adjustments are made based on the varying needs of different communities in each region and the considerations of the government in setting the minimum wage Atiyatna et al., (2016).

Increasing the minimum wage can have an impact on the purchasing power of individuals, which can lead to increased motivation and productivity. However, for companies that view wages paid to employees as something

that should align with the government-set minimum wage, an increase in the minimum wage may lead to a reduction in the number of employees utilized. According to Atiyatna et al., (2016) this would decrease the labor market in East Java Province. Conversely, workers receiving higher wages tend to enhance their productivity. Raising the minimum wage for workers can increase their consumption, which in turn can boost motivation and improve labor productivity.

Based on Figure 2, in East Java Province, the average years of schooling have shown improvement. From the chart, it can be observed that the highest value for the average years of schooling reached 19%, while the lowest was 14% in the year 2015. This indicates that education in East Java has been progressively improving over the years. The majority of graduates in East Java are from Senior High School (SMA). Education plays a crucial role in labor force absorption, where individuals with higher levels of education tend to possess more skills and have better employment opportunities Hartanto & Masjkuri, (2017). Highly educated individuals are more likely to have versatile talents or skills, thereby increasing employment opportunities and addressing labor force absorption issues in East Java Province Hartanto & Masjkuri, (2017). The average level of education reflects the highest level of formal education attained by the population in a given region. To raise the average length of education, the central government has implemented a 12-year compulsory education rule, encompassing basic education through senior high school Makna, (2016)

According to Susilo et al., (2023) the economic growth in the Java island is not without reason, as Java serves as the center for industry, business, and trade in Indonesia. As observed in Figure 2, the Gross Domestic Product (GDP) experienced fluctuations between 2017 and 2023, with a notable economic downturn in the year 2020. This economic decline in that year was a result of the COVID-19 pandemic. The large labor force not being adequately absorbed led to a high unemployment rate. Therefore, it can be generally concluded that labor absorption in East Java has not reached its maximum potential (Mufida et al., 2021). Currently, job growth is often associated with economic growth. Economic growth is frequently accompanied by a reduction in unemployment. A high rate of economic growth in a region will decrease the unemployment rate and increase labor force participation. An important indicator for evaluating economic outcomes is economic growth. An analysis of the economic development outcomes in a region or country can be observed through its economic growth Pratiwi, (2023).

According to Herlina, (2016) the workforce is one of the important supporting factors in successful economic development. Due to its significance, the current workforce potential should ideally be used optimally. Social phenomena in various fields, such as the availability of job opportunities, vary from year to year but the chances of outcome employment remain very low. This necessitates government attention in carefully considering how to adapt the current workforce to secure employment. The theory of labor supply and demand serves as a conceptual framework for understanding the interaction between supply (the available workforce) and demand (the number of job vacancies) in the labor market Borjas, (2013). Labor supply refers to the number of workers willing and able to work at a specific wage level. Factors influencing labor supply include education and professional skills, individual job preferences, and demographic factors such as population and birth rates. Labor demand, on the other hand, signifies the number of job opportunities available in the economy at a specific wage rate. Several factors that can influence labor demand include economic growth, technological changes, government policies, and industry needs Aditiya & Wildana, (2023). Labor demand is influenced by wages. High wages offered by companies can lead to a decrease in the number of workers employed, while conversely, lower wages can result in a higher number of employed workers.

The employment theory according to Lewis posits that laborers who are dismissed represent an opportunity rather than a problem. An excess of labor in one sector increases output growth and the supply of labor in other sectors. On the other hand, a surplus of labor is essentially a capital for income accumulation, assuming that the movement of labor from the subsistence sector to the modern capitalist sector proceeds smoothly, and such movement never occurs excessively Bawuno et al., (2015).

According to Peraturan Pemerintah Republik Indonesia Nomor 8 Tahun 1981 Tentang Perlindungan Upah, wage is defined as something received and expressed in the form of money or valued in terms of money for work or services that have been performed or provided as compensation to company employees, as determined by contract terms or laws and paid based on their work. An increase in the minimum wage above the equilibrium level is expected to reduce employment opportunities. However, the impact of the minimum wage increase will lead to a reduction in employment opportunities, affecting labor absorption Pratomo, (2016).

The theory of minimum wage according to Keynes, where wages are related to changes in the population. The population size is a strategic factor used to explain different phenomena. Therefore, the prevailing wage levels are determined by the operation of supply and demand. The classical starting point perspective is from the economic supply side, which has recently regained popularity Susanti, (2019). The level of wage rates is largely determined by the availability of jobs, as mentioned earlier, with the primary source of employment being the population. As the population increases, the workforce also grows, leading to a decrease in wage levels. The theory of normal wages, proposed by David Ricardo, states that wages are considered fair when the amount paid aligns with the cost of living for the workers and their families, adjusted for the company's ability to provide it. On the other hand, companies depend on production levels and sales results, and a decrease in production will reduce the wages offered by the company. Increased competition also has an impact on lowering wages Sa'adah & Ardyan, (2016). The iron law of wages, according to Ferdinand Lassalle, asserts that employers keep wages as low as possible to maximize profits. This wage system undoubtedly places workers in a more vulnerable position, as they are paid low wages to meet their minimum living needs (Pangastuti, 2015).

Education is one of the means to prepare a skilled workforce, and this is crucial for the economic growth of a nation. Education has the capacity to prepare students to become potential workers, making them more willing to undergo training in the workplace. This, in turn, enhances the level of energy productivity, thereby directly increasing national income (Widiyansyah, (2017)). The increase in an individual's income is influenced, in part, by their level of education, which enhances their productivity. Consequently, this increase in income also has an impact on the national income of the country, thereby improving the income and living standards of the lower-income population. Low levels of education result in fewer businesses entering the market. The low level of education among workers is disadvantageous for the workers themselves as there is a reduced likelihood of them being accepted for employment. On average, education is seen as a formal achievement that urban communities should attain. A high average length of education signifies that the educational attainment levels are also high. The average length of education refers to the yearly average number of years a population spends completing formal education. To improve the average length of education, the government designs programs that mandate a maximum of 12 years of research or basic education in secondary schools. The education system serves as a benchmark for the quality and skills of the workforce in their employment endeavors (Makna, 2016).

According to the modern approach, the theory of human capital has a broader definition because it now includes factors related to health, not just traditional education or skills (Susilo et al., 2023b). This theory assumes that education contributes to increased productivity and skills. The acceleration of economic growth in Asian countries has driven higher production levels through technology and industry, thereby pressuring businesses to engage a well-educated and skilled workforce. This high-quality workforce is obtained through quality education (Widiyansyah, 2017).

According to Solow, the classical economic growth theory states that the factors that determine economic growth are capital goods and labor. This theory explains that the level of technology is constant (Sadiyah, 2020). The technological factor in the Solow-Swam theory states that technology can be used efficiently by all countries and the benefits of capital accumulation and the quantity of labor decrease. This theory has several advantages, such as the economy tends towards long-term balance, it can be used more effectively to explain income distribution problems and can explain the elements of technological progress contained therein (Amalia et al., 2016)

The increasing labor force size from 2017 to 2022 is believed to be influenced by the minimum wage level, average years of schooling, and economic growth. The decrease in the labor force in East Java Province is attributed to a decline in productivity, which is suspected to be linked to low educational levels that hinder the absorption of information. The objective of this research is to analyze several factors that affect labor force absorption in East Java from 2017 to 2022 using panel data. The factors in this research include the minimum wage, average years of schooling, and economic growth. The results of this research indicate that the minimum wage and economic growth do not have an impact on labor force absorption in East Java Province. However, the average years of schooling have a significant influence on labor force absorption in East Java Province. This research is valuable for guiding future development directions and strategies and can be considered as a reference for predicting labor force conditions in East Java.

Several studies on labor force absorption continue to be conducted to obtain empirical results. The results of previous research conducted by Mufida et al., (2021) indicated that the minimum wage does not have an impact on labor force, meaning that an increase in wages may not necessarily lead to increased labor force absorption. This differs from the outcomes of a research conducted by Hartono et al., (2018) which showed that the minimum wage does have an effect on labor force absorption. Based on several previous studies, this research is conducted with the title "Analysis of Factors Affecting Labor Force Absorption in East Java from 2017 to 2020" by applying panel data regression analysis because it analyzes the relationships between variables and includes more than two variables.

METHODOLOGY

The type of research carried out in this research is quantitative research because the data used consists of numerical values. Quantitative research is an analytical method that requires data calculations to prove research questions (Rahayu, 2020). This research was conducted in East Java Province using secondary data from the Central Statistics Agency (BPS) covering 38 districts/cities from 2017 to 2020. The sample size for this study was 228 samples which is a subset of the population.

In this research, the dependent variable used is the Labor Force Participation Rate (Y), and the independent variables are Minimum Wage (X1), Education (X2), and Economic Growth (X3). Based on the results obtained, conclusions can be drawn regarding which variables have a significant role in workforce absorption. The analytical tool used in this research is Panel Data Regression, according to Arum & Haris, (2019) Panel data combines cross-sectional and time series data to assess or measure the impact of minimum wages, education and economic growth on workforce absorption. in East Java. The data analysis technique used in this research is panel data analysis. The software used for data processing is EVIEWS 10.

In this research, an econometric model is employed as follows:

$$Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + e$$

Description :

Y_{it} : Labor Force Quantity
A : Constant
β₁, β₂, β₃ : Regression Coefficients
I : Cross Section
T : Time Series
X₁ : Minimum Wage
X₂ : Average Education
X₃ : Economic Growth
E : Error Term

RESULTS

In this research, secondary data consisting of panel data. In panel data research which combines *time series* and *cross section* data. This research consists of *cross section* data, namely 38 districts/cities of East Jawa Province with 6 year *time series* data from 2017-2022. The total number of observations in this study was 228 observations. The data was obtained from the Central Statistics Agency (BPS) of East Java Province. This research employs one dependent variable, which is the labor force participation rate, and three independent variables, namely Minimum Wage (*X₁*), Average Education (*X₂*), and Economic Growth (*X₃*).

Table 1. Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	12.382245	(37,187)	0.0000
Cross-section Chi-square	282.346870	37	0.0000

Based on the output, the obtained probability value (F-Statistic) is 0.000000, which is smaller than the significance level (α) of 0.05. Therefore, H_0 (the null hypothesis) is rejected, indicating that the Fixed Effect Model (FEM) is more appropriate than the Common Effect Model (CEM).

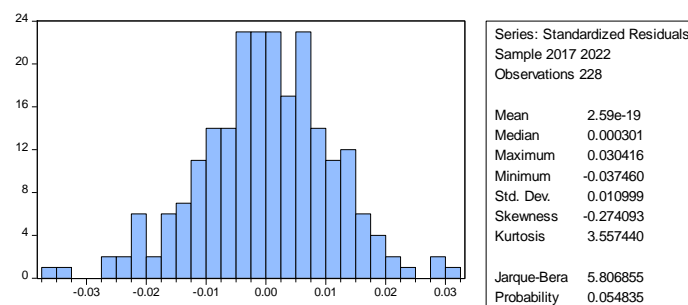
Table 2. Hausman Test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	20.345759	3	0.0001

Based on the output, the obtained probability value (Chi-square statistic) is 0.0001, which is smaller than the significance level (α) of 0.05. Therefore, H_0 (the null hypothesis) is accepted, indicating that the Fixed Effect Model (FEM) is more appropriate than the Random Effect Model (REM). Based on the results of the panel data regression model selection, including the Chow Test and Hausman Test, the best model for this research is determined to be the Fixed Effect Model (FEM).

Classical Assumption Test

Table 3. Normality Test



Based on the output of the graph, it is observed that the Jarque-Bera probability value is 0.054835, which is greater than the significance level (α) of 0.05. Therefore, H_0 (the null hypothesis) is accepted, indicating that the residual data in the regression model follows a normal distribution.

Table 4. Multicollinearity Test

	X1	X2	X3
X1	1.000000	0.269971	0.386057
X2	0.269971	1.000000	0.644063
X3	0.386057	0.644063	1.000000

Based on the output, the results indicate that the correlation values among the independent variables are < 0.85. Therefore, Ho (the null hypothesis) is accepted, suggesting that there is no multicollinearity among the independent variables in the regression model.

Table 5. Heteroskedasticity Test

Variable	Coefficient	Prob.
C	0.084810	0.0040
X1	-0.002124	0.3279
X2	-0.004485	0.4027
X3	-0.002822	0.1034

Based on the output, the probability values of each independent variable are greater than the significance level (α) of 5% or 0.05. Therefore, Ho (the null hypothesis) is accepted, indicating that there is no heteroskedasticity issue in the regression model.

Table 6. Autocollinearity Test

R-squared	0.743632	Mean dependent var	1.845877
Adjusted R-squared	0.688794	S.D. dependent var	0.021724
S.E. of regression	0.012119	Akaike info criterion	-5.826723
Sum squared resid	0.027463	Schwarz criterion	-5.210042
Log likelihood	705.2464	Hannan-Quinn criter.	-5.577911
F-statistic	13.56049	Durbin-Watson stat	1.877145
Prob(F-statistic)	0.000000		

The regression results obtained a D-W test value of 1.877145, with $k = 3$, $n = 228$, and a significance level of 5%. Therefore, $dL = 1.7664$, $dU = 1.80154$, and $(4 - dU)$ is equal to 2.19846. According to the decision rule for the autocorrelation test, which states that $dU < DW < 4 - dU$, it can be concluded that the regression analysis results do not exhibit autocorrelation.

Table 7. Fixed Effect Model Test

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.673959	0.195117	8.579251	0.0000
X1	-0.000705	0.002854	-0.247000	0.8052
X2	0.114346	0.026301	4.347647	0.0000
X3	-0.005007	0.020277	-0.246925	0.8052

Panel Data Regression Analysis

$$Y = 1,673959 + (-0,000705)X_{1it} + 0.114346X_{2it} + (-0,005007)X_{3it} + e$$

The meaning of the regression coefficients is as follows:

$$\alpha = 1,673959$$

Meaning, if Wage (X1), Average Length of Schooling (X3), and Economic Growth (X2) are all equal to zero, then Labor Force Participation (Y) is equal to 1.673959

$$\beta_1 = -0,000705$$

Meaning, if the wage (X1) increases by one Indonesian Rupiah, the labor force (Y) decreases by 0.000705 individuals, assuming constant variables.

$$\beta_2 = 0,114346$$

Meaning, if the average length of schooling (X3) decreases by one percent, the labor force (Y) increases by 0.114346 individuals.

$$\beta_3 = -0,005007$$

Meaning, if the Economic Growth (X2) increases by one year, the labor force (Y) decreases by -0.005007 individuals, assuming other variables remain constant

Partial t-test.

X1 = 0.8052 > 0,5 = Has no influence on Y

X2 = 0.0000 < 0.5 = Has an influence on Y

X3 = 0.8052 > 0.5 = Does not have an influence on Y

The results of the analysis :

1. Testing the influence of minimum wage (X1) on labor force absorption (Y)

The data processing results yielded a probability value of 0.8052, which is greater than 0.05. Therefore, Ho (the null hypothesis) is accepted, indicating that the Minimum Wage (X1) does not have a partial influence on labor force absorption (Y).

2. Testing the influence of the average length of schooling (x2) on labor force absorption (Y).

The data processing results yielded a probability value of 0.0000, which is less than 0.05. Therefore, Ho (the null hypothesis) is rejected, indicating that the average length of schooling (X1) has a partial influence on labor force absorption (Y).

3. Testing the influence of education (X3) on labor force absorption (Y).

The data processing results yielded a probability value of 0.8052, which is greater than 0.05. Therefore, Ho (the null hypothesis) is accepted, indicating that economic growth (X1) does not have a partial influence on labor force absorption (Y).

The F-test (simultaneous)

The F-test can be observed from the results of the simultaneous regression significance test. The result indicates that the F-statistic value is 13.56049 with a significance value of 0.0000, which is less than 0.05. Based on these results, the hypothesis states that Minimum wage, Average years of schooling, and GDP simultaneously influence the number of labor force, and thus the hypothesis is proven to be significant.

The results of R-squared

In the Fixed Effect estimation model, the R-squared value is 0.743632, indicating that the influence of the independent variables, minimum wage (X1), average years of schooling (X2), and GDP (X3), on labor force participation (Y) is approximately 74.36%. This means that minimum wage (X1), average years of schooling (X2), and GDP have a combined influence on the labor force (Y) of approximately 74.36%, while the remaining 25.64% is influenced by other variables not included in the model.

DISCUSSION

The Impact of Minimum Wage on Labor Absorption

In this study, the best fixed effect model (FEM) was used. The results of this model show that the minimum wage (X1) has no effect and is not significant on labor absorption in East Java Province in 2017 - 2022. This means that if the minimum wage increases, this will not be followed by an increase in labor absorption. In accordance with current conditions where there is a shift in the use of machines as a tool to produce goods/services, this condition occurs because companies minimize operational costs to train their workers. Maulana et al., (2022)) The results of this research are not in accordance with the hypothesis where the wage hypothesis minimum has

a significant effect on labor absorption.

The results of this research support the iron wage theory which is the real wage in the long term. Minimum wages tend to be used to encourage workers' lives. Iron wage theory where entrepreneurs and workers will experience losses if wages rise. An increase in wages can reduce demand for labor so that it will increase unemployment while entrepreneurs will face difficulties due to increases in production costs Devi Lestyasari, (2013). Supported by research on labor demand theory, where if the level of labor wages decreases, labor demand will increase. Conversely, if wages increase, the demand for labor will decrease Vidiyasari, (2016)

The results of this research are supported by research by Pratiwi, (2023) which shows that the minimum wage variable has a negative and insignificant effect on the labor absorption variable. Increasing the average minimum wage can reduce labor absorption. This increase can burden the company's operational costs, so entrepreneurs try to become more efficient by reducing the workforce. This decision making must be reconsidered regarding the world of work, the workforce and its impact on the economy. Other research is research conducted by Yanda et al., (2022) which states that the minimum wage has no effect on labor absorption. This is because if wages increase it will increase the company's operational costs which will result in the company having to reduce the workforce employed. According to Buchari, (2016) states that the minimum wage has no influence on labor, where wages will decrease along with increasing demand for labor.

The Influence of the Average Level of Education on Labor Force Absorption

Based on the best fixed effect model (FEM), it can be seen that average education (X2) has a significant and influential effect on labor absorption in East Java Province in 2017 - 2022. This means that if average education increases, this will be followed by an increase employment. This finding is relevant in current conditions, a person's higher education can increase the income earned so that sacrifice is required in obtaining a good education Vidiyasari, (2016). The regression results in this study explain that the problems that occur are in accordance with the research hypothesis.

The results of this research support the Human Capital theory where a person can increase his income through increasing his education Kholifaturohmah et al.,(2022) A higher level of education will make it easier for a person to absorb information so that a person's quality will increase. A high level of education will influence economic development because the higher a person's level of education, the higher the labor productivity which will increase state income Roring et al., (2020)

Research from Mufida et al., (2021) and (Buchari, 2016) supports the results of this research where the success of self-development can be known from students' opportunities to obtain decent education in terms of quality and quantity. Education is an important point in labor absorption, where with education the workforce has more experience in absorbing information more quickly. The high level of education of the workforce can increase the quality and quantity of output produced. The results of this research are supported by research by Maulana et al., (2022) which states that the average length of schooling has a positive and significant effect on the level of labor force participation on the island of Java in 2011-2020. This finding is reinforced by Ikhsan, (2016) that average education has an effect on the level of labor force participation, meaning that the level of education a person has taken will have a high influence on the job they get.

The Impact of Economic Growth on Workforce Absorption

Based on the fixed effect model (FEM), it can be seen that economic growth (X3) has no effect and is not significant on labor absorption in East Java Province in 2017 - 2022. This means that if economic growth increases, this is not followed by an increase in labor absorption. . This research explains that these findings are not in accordance with the hypothesis that if economic growth increases, labor absorption will increase. In today's industrial life, where the transition from traditional industry to modern industry is starting, many companies are starting to carry out some work using machines. The use of these machines is considered efficient in increasing productivity Prayoga, (2023)

The results of this research support the Solow model of growth theory, which explains that technological advances that optimize labor at a certain level tend to reduce the number of efficient workers. In this case, population or labor force growth, investment is suitable to compensate for the decline in capital due to decreased use of labor, population growth and technological developments (Prayoga, 2023). This research also supports neoclassical theory where according to Todaro (2006) in Ginting, (2020) economic growth involves the development of production factors, including capital, labor and technology. These two theories support the research results where economic growth has no effect on labor absorption, this is if human resources do not have good quality which is then replaced by the emergence of modern industry with machines. These machines can replace labor, where machines can minimize costs incurred for employee wages and work becomes more efficient.

Research from Adi, (2018) states that economic growth does not have a significant effect on labor absorption. This is because economic growth does not really have an effect on demand for labor, sometimes economic growth even has an effect on decreasing labor, poor quality economic growth will not have an effect on labor absorption. The results of this research support previous research by Sokian & Amir, (2020) which shows that economic growth has no effect on labor absorption. Economic growth comes from three factors, namely quality, quantity and increase in workforce so that companies recruit more workers from outside the region with high quality education. Research by Rahmah & Juliannisa, (2022) strengthens the results of research that GRDP has no effect on labor absorption because if economic growth increases but does not coincide with an increase in employment opportunities, not only that, this condition can also occur if economic growth decreases so it will have an impact on labor absorption.

The results of testing three variables, namely minimum wage, average education level, and population growth, indicate that concurrently, all independent variables have an impact on the dependent variable, which is the labor force participation rate in East Java Province. This outcome is consistent with the research by Atiyatna et al., (2016) which asserts that minimum wage, economic growth, and education collectively influence workforce absorption in South Sumatra Province. Another research by Rahmah & Juliannisa, (2022) found that education level, minimum wage, and Gross Regional Domestic Product (PDRB) collectively influence workforce absorption in West Java Province.

CONCLUSION

In East Java Province, it can be seen that the minimum wage and economic growth factors have no effect and are not significant on labor absorption, which is not in accordance with the hypothesis. In this study, minimum wages and economic growth do not have much of an effect on labor absorption, but with an increased or higher minimum wage, it is hoped that it will increase work morale so that productivity will increase. Economic growth does not have much of an effect on labor absorption in East Java Province, this is because many companies are starting to switch to modern industry which uses more machines than human labor, not only that, this condition is also caused by the existing human resources in East Java Province. does not have good quality. To improve the quality of human resources, it is necessary to hold special training to hone their creativity and innovation. So that training will have an impact on increasing the number of workers who have good quality, thereby increasing productivity. In contrast to the average length of schooling factor, it has a positive and significant influence on labor absorption, which shows that it is in accordance with the hypothesis. The average education of a person is very important for the absorption of labor, where the presence of workers who have high education will have an impact on the company, where these workers can increase the company's production so that the company is able to absorb more workers so that its production can run effectively and efficient. However, the minimum wage, average years of schooling and economic growth simultaneously or together have a good and large impact on the dependent variable, namely labor absorption.

The number of workforce in East Java is not proportional to the job opportunities available in the region. This research aims to encourage the government to prioritize workforce absorption in East Java Province. These three factors can serve as a reference for the government in addressing labor-related issues, ensuring optimal workforce absorption, and consequently fostering economic growth in East Java Province. The government of East Java Province can enhance employment opportunities by collaborating with foreign companies as well as domestic ones from Indonesia. The workforce should also be able to cooperate with the government by participating in various training programs to improve their skills beyond their educational qualifications. For further research on labor force absorption, researchers may consider adding additional variables and extending the research period to optimize research outcomes.

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