

Achievements of Economic Progress the Industry Sector and Employment Challenges in Kabupaten Gresik

Putri Wulan Ramadan^{1*}, Ririt Iriani Sri Setiawati²

ABSTRACT

^{1,2},Departement of Economic Development, Faculty of Economics and Business, National Development University "Veteran" East Java

Article Information

History of article: Received February 2024 Approved March 2024 Published March 2024

Gresik as an industrial area is spread based on the projection of the East Java Industrial Growth Center Master Plan. The growth of the industrial sector in Gresik as an economic opportunity is followed by wage progress in 2017-2021. With this, the economic projection in Gresik is very large which leads to escalation. However, there are employment challenges, namely the high unemployment rate in Gresik. So this study finds out how the growth of the manufacturing sector, labor force, and minimum wage affect the open unemployment rate. The research method uses a quantitative approach in classical assumption testing, model testing, multiple linear regression analysis, and hypothesis testing. The result of this study is that the growth of the manufacturing sector does not have a significant effect on the unemployment rate because the industrial scheme in Gresik is capital-intensive. Then the growth of the labor force has no significant effect on the unemployment rate because the unemployment factor is also seen from education. The growth of minimum wage has a significant and negative effect on the unemployment rate which reflects that wage can increase labor demand in Gresik. This research provides recommendations to the government on regional development policies to be able to create a multiplier effect for the economic sector and promise employment. The limitations of this study refer to the independent variables of the study so that future researchers can add several variables such as the level of education, inflation, and economic growth to create an update on the continuity of research issues that are in line.

Keywords: Industrial Development, Labor Force, Wages, Unemployment *JEL Classification Code:* E24, F43, F66, J64, J81, L16

© 2024 MediaTrend

Author correspondence: E-mail: wulanputri6785@gmail.com

DOI: http://dx.doi.org/10.21107/mediatrend.v19i1.25001 2460-7649 © 2024 MediaTrend. All rights reserved.

INTRODUCTION

Every regional economic development is intended to be able to provide a strong stimulus in the development of economic activity in the region (Tumangkeng, 2018). Then these results will realize a form of escalation of economic activity that has implications for job creation. Thus, people's income can increase significantly so that economic growth can grow on a positive trend. Economic growth is the growth and development of economic activity in the final achievement to be able to encourage to increase in community output and realize prosperity and welfare levels (Irawaty & Masloman, 2018). The indicator for measuring economic success for the prosperity of a region is the Gross Regional Domestic Product (Romhadhoni et al., 2019). Based on the results of research by Abdullah R. (2019) describe that developing countries have the belief that the industrial sector is the leading sector in encouraging the development of other sectors. So, the industrial sector has an important role in the development of economic activity. East Java Province has an improving economic trend, where the data from the Central Bureau of Statistics of East Java Province is a miniature of the national economy, which is supported by the similarity of the economic structure supported by the contribution of the manufacturing sector. The result is that in 2017-2019 economic growth in East Java has reached above the average of 5%. Then experienced fluctuations in 2020 due to the COVID-19 pandemic to -2.39%. (Central Bureau of Statistics, East Java Province 2021).

Based on research results by Putra, (2016), the achievement of Gross Regional Domestic Product (GRDP) in East Java obtained the second highest position in Java Island, namely 23.97% The economic pattern in East Java Province is improving as a result of the implementation of government policies. With promising industrial opportunities, the government sets the development of industrialization in supporting economic achievement with significant progress. The success of the economic sector in East Java is largely supported by the success of industrial development, this is shown in the contribution of the manufacturing sector to the Gross Regional Domestic Product per capita in East Java Province. The economic phenomenon in East Java Province on economic development on the increasing role of industry is in line with the Classical economic theory by Thomas Robert Malthus. The assumption of this theory states that the dominance



Source : Central Bureau of Statistics, East Java Province 2021 Figure 1. Economic Growth of East Java Province in 2017-2021

of the industrial and agricultural sectors is the key to economic development through a form of balanced growth (Priyono & Zainuddin Ismail, 2017).

Based on research by Nur (2021) describes the economy in East Java is dominated by several leading sectors. Analysis of regional economic opportunities in the research concluded that the processing industry sector in East Java is the main support for GRDP and is followed by the wholesale and retail trade sector and motorcycle repair, followed by the agriculture, forestry, and fisheries sectors. The development of this sector is a high contribution to the economy in East Java every year.

Based on research by Utami (2020) describes that the distribution of industry in East Java Province is a position of rapid growth that dominates Java Island. The factors underlying this refer to physical and social completeness, labor capabilities to the centralization of the government system supported by a large market potential. The analysis shows that industry has a high influence on labor absorption. When industrial development increases, it creates an increase in labor absorption. Because labor is the main factor in production input. With this, the industry has a high opportunity for regional economic sustainability for its contribution related to employment.

Furthermore, the government has set priorities for industrial development in support of economic growth. Through industrial development in East Java Province, it is divided into its coverage areas, one of which is Kabupaten Gresik. Based on research (Ristiani & Muljaningsih, 2022) describes that economic activity reflected by the results of the Gross Regional Domestic Product in Gresik, becomes an accumulation of progress due to fluctuations in the economic sector, one of which is the manufacturing sector. The industry is an economic icon in Kabupaten Gresik. The results of the research analysis show that the dominance of the industrial sector promises the economy even though some fluctuations have occurred, such as in 2020. The economic journey in Kabupaten Gresik has similarities with East Java Province. In the same years 2017-2019, an economic increase occurred in East Java Province and the same thing happened in Kabupaten Gresik. Then in 2020 when the COVID-19 pandemic occurred, the Gross Regional Domestic Product both in East Java Province and other regions also contracted. The following data is the



Source : Gresik Statistics Agency, 2021 Figure 2. Economic Growth of East Java Province in 2017-2021

development of economic activity over the past 5 years.

Kabupaten Gresik has been designated as a large part of the main industrial area in East Java. This is based on data on the elaboration of the East Java Industrial Growth Center Area Master Plan. That in 2035 until the development of the journey years later, the establishment of an industrial area has become important to maintain the results of economic growth in Kabupaten Gresik. Published data explains that the area expansion in the context of industrial development of 6,622 Ha. The expansion of land for industrial estates also shows an increase, which means that the government gas arranged policies in industrial progress for the economy in Kabupaten Gresik.

Based on research by Sarmadi,S. & Leksono, E.B. (2018) the industrial estate in Kabupaten Gresik has great opportunities for community economic activity. The projected expansion of industrial land illustrates the situation that in the future there will be a very significant increase in industrialization. The results of the analysis in this research show that industrial opportunities are very large, supported by the geographical location of the region. Furthermore, the trade route that passes between cities is also a supporting point for the growth and development of industry as an aspect of economic support in Kabupaten Gresik. The processing industry sector in Kabupaten Gresik is a major contributor to Gross Regional Domestic Product during the 2017-2021 period. The results of research by Ristanti, H (2022) explain that

industry is an economic base in Kabupaten Gresik. The analysis model using Location Quentiont analysis produces an interpretation that the specialization of the manufacturing sector is much greater than at the East Java Province level. With this, the industry does have a great opportunity to become an economic base sector to support and create a multiplier effect for the development of other economic sectors.

The contribution and role of the manufacturing sector as a leading sector in increasing other economic sectors in Jambi (Muhtamil, 2017). The industrial sector in the Jambi Province study explains its strategic position in the development of investment that leads to employment. The research model using panel data analysis shows a positive and significant influence when the proportion of industry on increasing labor. As well as the same influence and directly proportional between investment and employment. Interpretation concluded that the industry promises the economy in Jambi Province. Based on research Sari. S.A (2023) it is understood that industry has a multiplier effect on economic development towards increasingly significant growth. The multiplier effect means that the industry can provide an increase in the development of other sectors such as agriculture to the trade sector. Regional economic opportunities are a crucial point for the government to be able to be supported by several policies to maintain economic stability in the region. With the increasing number of industries, it is expected to be able to create employment, this is based on the factor of using labor as the main re-

Table 1.Projected Area of Industrial Designation in Gresik					
Industrial Designation Area (ha)	Year 2020-2025 (ha)	Year 2025- 2035(ha)			
	5463	6622			

Source : East Java Industrial Growth Center (WPPI) Masterplan 2015

quirement in the production process (Anjani & Fitryani, 2022). The analysis concludes that the number of industries has a positive and significant effect on labor absorption. Then the absorption of labor is certainly related to the minimum wage. Besides that, the wage system in Kabupaten Gresik does not show any problems, the minimum wage is increasing in the same year as industrial progress.

The development of the processing industry sector in Kabupaten Gresik shows its progress in economic progress. The industry has an average growth with a very good trend. It is shown that the decline that occurred was very minimal, even in 2020 when the COVID-19 pandemic occurred, the manufacturing sector in Kabupaten Gresik did not experience a very large contraction when compared to other sectors, in a significant percentage decrease. This illustrates the existence of the industrial sector in Kabupaten Gresik. This research is supported by the results of studies and research that have been carried out by Cahyani & Muljaningsih (2022) the existence of the processing industry sector in Kabupaten Gresik shows the truth of the existence of a form of economic progress, but it is followed by labor problems which are reflected in the large unemployment rate.

Furthermore, the phenomenon of this research problem is also in line with the study conducted by Diniyah & Fisabilillah (2023) that unemployment is caused by the wage system in the economic sector and the problem of the high labor force, followed by the problem of low-quality human resources with uneven infrastructure development. The labor gap problem is explained in microeconomics by Mankiw (2014) as a form of wage rigidity problem. That is the point where there is no balance in the development of wages in the labor supply and thus a gap will be created.

The progress of the economy in the manufacturing sector and the development of wages that increased significantly are presented in the following figure 3.

Industrial development reflects an important role in the economy of Kabupaten Gresik. With an average trend that is improving and even a decline in 2020 is only minimal, the existence of the processing industry sector as an economic base reflects the corresponding field data on a decrease of -0.02% and can increase significantly in 2021. This research is in line with the study conducted by (Mahila.S. 2017) the increase in the minimum wage in each year shows that the Decent Living Needs have increased similarly. Determi-



Source : Gresik Statistics Agency, 2021 Figure 3.

Development of the industrial sector and minimum wage in Gresik 2017-2021

nation of wages adjusted to the needs of life is carried out to achieve the result of equality in the cost of living that must be met. The interpretation of the increasing wage phenomenon is that the government has accelerated the adjustment between the income and living expenses of each community. However, it becomes a challenge when the employment problem in Kabupaten Gresik is still high at 8.00% in 2021, reflecting that the Open Unemployment Rate is still a major problem for economic sustainability.

Unemployment occurs when it is associated with wage rigidity that brings about conditions of increased labor supply. This research is in line with the study conducted by Brügemann (2023) explains that unemployment is created as a result of labor competition in the market. Through the Diamond-Mortensen Pissarides analysis, the interpretation is that market competition has a positive impact on unemployment fluctuations. When unemployment increases, the implication that materializes is the problem of the economy at large. Because unemployment is interpreted as the sustainability of a country's economic direction, either getting worse or getting better. Furthermore, the concept of classical economic theory explains that unemployment occurs because the labor supply is not in line with labor demand (Priyono dan Zainuddin Ismail, 2017). Classical theory assumes that there is a gap when the supply of labor is not proportional to the demand for labor. The development of the labor force in Kabupaten Gresik also shows an increase in 2017-2021, reflecting how the conditions of labor supply are created.

Based on research Mawadah (2018) the increase in the labor force that occurs every year reflects the amount of labor supply. An increase also occurs in the number of unemployed people which reflects the gap in the labor market. The gap is defined when there is a considerable difference when the supply of labor is not proportional to the demand for labor. The implication that materializes is high unemployment when many workers do not have equal opportunities in access to employment. This research is in line with a study by Herman (2020) using panel data regression is explains that an increase in wages creates high labor productivity. However, over time, it will be followed by a condition of decreasing market share and forming social inequality in the community. This is what ultimately causes labor prob-



Source : Gresik Statistics Agency, 2021 Figure 4. Development of the Number of Labor Force and Open Unemployment Rate in Gresik 2017-2021

lems, namely unemployment, which is increasing every year. So, the need for major intervention by government policy in the future can adjust the problem between economic progress and economic challenges in a region.

Based on research Purwasih.H (2017) describes the results of the analysis of the influence of industry on employment. The results show that the growth of the industrial sector has a significant and positive effect on labor absorption. This means that when the industry can experience development and increased growth, the positive effect results in an increase in employment, this will reduce the employment problem, namely unemployment. The role of industry shows a good contribution. In classical theory, industrial growth can be used as a solution to the problem of unemployment which is a threat to the development of a country. Because industry plays a big role in labor absorption. Then based on the results of research by (Zhu, R., Jiang, J., Cong, Y., & Chen, G. 2023) the trend of industrial structure is closely related to the quality of economic development. Where this result leads to an increase in labor productivity which becomes a bridge in the effective allocation of human resources.

Based on research by Zahroh.S.Z (2017) describes the results of the analysis of the positive influence between the labor force and the open unemployment rate. When the increase in the number of labor force continues to increase, it will make the form of unemployment increase. This is because the percentage of the labor force is not fully absorbed in existing jobs. In the end, balance cannot be realized and becomes a form of inequality. This is in accordance with the classical theory that humans have developed much faster than the production of agricultural products that they need, this difference illustrates the form of economic scarcity. The connection forms a labor problem, namely unemployment.

Based on research by Suaib.A.R.A., & Agustina.N (2022) describes the results of the analysis of the positive effect of minimum wage development on employment problems. Where the increase in minimum wages that occurs, every period will create an increase in unemployment. This happens because the labor supply continues to grow significantly. This is in accordance with the substance theory that an increase in wages ultimately has an impact on labor supply. The assumption is that as wages increase, it becomes easier for individuals to fulfill their needs, so the rate of marriage will increase. The implication is that the population increases and there is an increase in the labor force. When the market is unable to provide the appropriate labor demand, the imbalance becomes the main problem with the output of increasing unemployment.

In this study, the author wants to analyze how the continuation of the opportunities of the processing industry sector as an economic base in Kabupaten Gresik in terms of employment issues. The growing industrial sector shows a positive trend and has even become a major pillar of economic growth. However, it is still followed by the problem of unemployment, which shows a significant development every year. The gap is reflected in economic progress through industrialization growth followed by unemployment, the interpretation is why the labor market does not adjust to existing industrial opportunities. The novelty of this research leads to a discussion of what schemes are implemented by industry in Kabupaten Gresik, in reviewing the high unemployment rate. Furthermore, field data shows that the minimum wage in Kabupaten Gresik is very concerning to the government, so with this economic progress, this research is carried out as an update to review economic opportunities and challenges in labor issues. In the future, the contribution of this research can be allocated theoretically and practically to the preparation of policies by the government, in overcoming unemployment to be able to be reduced through various innovations and interventions of local governments.

METHODOLOGY

Thisresearch uses a quantitative approach. According to Sugiyono Guzman & Oktarina, Nina Paper (2018), it makes a description of quantitative research conducted on populations to samples in which there is statistical data analysis on predetermined hypothesis testing. Population is something that represents the totality of what has been studied in a study, so the population in this study is a form of relationship with the time series, namely 2006-2021 in East Java Province which includes Gresik Kabupaten. Then, the sample is part of the population or its representative so in this study, the sample used is the Manufacturing Industry Sector, Total Labor Force, Minimum Wage.

Data collection techniques as a basic activity to collect data according to applicable procedures. So from the population to the sample of this study using secondary data that researchers obtained from various literature by the relevance of research problems. Thus, the data source for this research was obtained from the data grouping unit by the Kabupaten Gresik Statistics Agency, as well as publications from the Kabupaten Gresik Government Office for data from 1994-2023 for all research variables, both X and Y. Data analysis techniques in research with several analyses including:

a) Classical Assumption Test

According to a study conducted by Ghozali (2018) this test is carried out to determine the certainty of the regression model with BLUE (Best Linear Unbiased Estimate) provisions where there are several stages including:

Normality Test

The results given are in the form

of a Plot of Regression Standardized Residual. The normally distributed residual value reflects that the sign of the regression model that is compiled is good, where these results will be seen when the data is normally distributed or not if it is depicted it will spread diagonally.

Multicollinearity Test

Namely, testing is carried out to determine whether the regression model finds a perfect relationship, or close to it, between the independent variables. The independent variable in question is variable X which is determined in the study. The results can be seen based on the Variance Inflation Factor and Tolerance values for each variable.

Heteroscedasticity Test

This test is carried out to determine whether in the regression model, there is an inconvenience in the variance of the residuals from one observation to another. If the variance is different, it is interpreted as heteroscedasticity. With results based on the statistical value of variable X above 0.05 in the Spearman Rank test.

Autocorrelation Test

Conducted to determine whether in the linear regression model, there is a correlation in the error between the confounders of a certain period in the previous period's confounding variables. If the results show a correlation, it can be concluded that an autocorrelation problem is found. A good regression model with an indication requires avoiding autocorrelation problems. With the results of the suitability of the Durbin-Watson Test value.

b) Model Test

The Coefficient of Determination, according to a study by Ghozali (2018) is a value of how much the percentage of the Y variable relationship can be explained by the X variable. Simultaneous Test (F Test), according to a study by Ghozali (2018) that this test is carried out to provide evidence of whether all x variables are simultaneously able to influence the y variable.

c) Multiple Linear Regression Analysis

According to a study by Ghozali (2018) to determine how the direction and magnitude of the influence of variable x on y. The formulation is written as follows:

where

Y is open unemployment rate, β_0 is constant, X_1 is growth of manufacturing industry sector, X_2 is growth of total labor force, X_3 is minimum wage growth, β_1 , β_2 , β_3 is regression coefficient e_i is confounding variables

d) Hypothesis Test (t-Test)

According to a study by Ghozali (2018), proves whether variable x is individually able to influence variable y.

RESULTS AND DISCUSSION

The Classical Assumption Test results have met the BLUE (Best Linear Unbiased Estimate) standard with the following results: Normality Test, with the results of the Plot of Regression it can be seen that the distribution of plot points is close to the diagonal line, thus in this study, it has a normal distribution. The results of data analysis are depicted in the regression plot based on the distribution of data points that are not found away from the diagonal line. Thus it is concluded that the overall data in this study is normally distributed. This requirement is a determinant that regression analysis will create good values.

Multicollinearity Test, the results of the analysis indicate that there are no symptoms of multicollinearity, listed in the following table 2. The results of Multicollinearity testing concluded that the value of the independent variables had no VIF> 10 and Tolerance < 0.1, so this in this study, it was concluded that the regression compiled had no symptoms of Multicollinearity.

Autocorrelation test, the results of the analysis obtained in this study did not show symptoms of autocorrelation, listed in the following table 3. Based on the table 3, through the tests carried out, the Durbin-Watson value is 1.482, which this value is in the provisions between -2 and +2 so it is concluded that the research conducted does not have Autocorrelation symptoms (Ghozali, 2018).



131

Achievements of Economic...... MediaTrend 19 (1) 2024 p. 123-138

Tolerance	VIF	Heteroscedasticity Test (Sig.)
0.895	1.118	0.867
0.940	1.064	0.384
0.939	1.065	0.359
	0.895 0.940 0.939	0.895 1.118 0.940 1.064 0.939 1.065

 Table 2.

 Multicollinearity and Heteroscedasticity Test Result

Source : Data processing, 2023

Table 3.					
Autocorrelation, Coefficient Determinatio and F-Test Test Result					

	Value
Durbin-Watson	1.482
R	0.673
R²	0.612
F	3.997
(Siq.)	(0.024)
0 0 1	1 0000

Source : Data processing, 2023

Heteroscedasticity test, the results of the analysis obtained by this study passed heteroscedasticity, listed in the following table 2. Based on the results above, it can be seen that the overall significant value of the independent variable >0.05, so in this study it is free from Heteroscedasticity symptoms.

Model Test, the results of the research model testing analysis are obtained as follows Coefficient of Determination. The value (R^2) (coefficient of determination) of 0.612 indicates that the ability of the independent variable (variable X) to influence the dependent variable (variable Y) is 61.2%, while the remaining 38.8% is influenced by other variables outside the study.

To find out how the overall effect of the independent variable on the dependent variable, with the Simultaneous Test (F Test). From this test, it is concluded that all X variables can influence the Y variable with the results of the sign value below 0.05. Multiple Linear Regression Analysis

$Y = 6.013 - 0.008X_1 + 0.028X_2 - 0.011X_3 + e$

From the linear regression equation model, it is then interpreted:

The constant value (β_0) of 6.013 indicates that if the variables X1 (Growth of Processing Industry Sector), X2 (Growth of Total Labor Force), and X3 (Growth of Minimum Wage) are constant, meaning that if there is no increase and no decrease, the value of variable Y (Open Unemployment Rate) is 6.013%.

The value of regression coefficient (β_1) is 0.016, and the value of (β_1) is positive reflecting a one-way relationship, it is interpreted that if variable X1 (Growth of Processing Industry Sector) increases by one percent (%), the Open Unemployment Rate (Y) will decrease by 0.008%.

The value of the regression coefficient (β_2) is 0.028, and the value of (β_2) is positive, reflecting a one-way relationship, interpreted that if the variable X2 (Growth

in the Total Labor Force) increases by one percent (%), the Open Unemployment Rate (Y) will increase by 0.028%.

The value of the regression coefficient (β_3) is -0.011, and the value of (β_3) is negative, reflecting a different direction relationship, it is interpreted that if variable X3 (Minimum Wage Growth) increases by one percent, then the Open Unemployment Rate (Y) will decrease by 0.011%.

ment prioritizes capital-intensive schemes. Based on a study by (Zilfiyah, 2013) explained that industrial development in Indonesia does not affect labor absorption so the Gross Regional Domestic Product of the processing industry sector in Indonesia is relatively high but cannot be followed by labor absorption. The same results occur in Kabupaten Gresik so industrial development has not been able to answer existing labor problems.

Table 4. T-Test					
Variable	Т	Sig.			
Growth of Manufacturing Industry Sector (X1)	-0.443	0.662			
Growth of Labor Force (X2)	1.566	0.130			
Minimum Wage Growth (X3)	-2.196	0.024			

Source : Data processing, 2023

From the result of the t-test, it is known that the variables of Growth of the Processing Industry Sector and Growth of the Total Labor Force have no significant effect on the Open Unemployment Rate with a Sig result above 0.05. Meanwhile, the Minimum Wage Growth variable has a significant and negative effect on the Open Unemployment Rate with a sig value below 0.05.

Discussion

Effect of Growth of Processing Industry Sector on Open Unemployment Rate

Based on the results of the analysis, it can be understood that the Growth of the Manufacturing Industry Sector does not have a significant effect on the Open Unemployment Rate. This is obtained in the analysis with a probability value of 0.662 with this result greater than the level of 5% or 0.05 (0.662 > 0.05). This reflects that the development of industrial growth has not had a role in labor absorption. The processing industry sector with insignificant results on the unemployment rate is due to the fact that industrial develop-

Industrial development in Kabupaten Gresik has a great opportunity in the optimization of industrial estates, with the projection of the East Java Province Industrial Growth Center Area (WPPI) Master Plan in 2035 on the progress of an area of 6,225 Ha. The industrial estate is divided into Gresik Industrial Estate, Maspion Industrial Estate, and JIIPE Industrial Estate (Java Integrated Industrial Ports and Estate) to become a Special Economic Zone (KEK) in 2021 as a competitive industrial area domestically and internationally. The development of Industry 4.0 in Kabupaten Gresik is coordinated to combine technology with the entire process of producing goods. JIIPEE with an environmentally friendly industry based on data on an area of 2,167 Ha will continue to move innovation. So that the direction and development of the progress of the industrial sector in Kabupaten Gresik is focused on technology and moves capital intensive (Gresik Regional Development Planning, Research and Development Agency, 2021).

The results of a study by (Djunaidi & Alfitri, 2022) explain how labor is threat-

ened in a capital-intensive system. It is explained that the phenomenon of unemployment is created due to a mismatch between the number of jobs and employment opportunities for each labor force. In industrial development, the focus of capital-intensive schemes is unable to provide solutions to labor problems. Thus, industrial progress increases and even becomes a great opportunity for the economy, not showing its ability to reduce unemployment. Because the capital-intensive scheme is a company will want the product as a production output in quantity and quality can have competitiveness. Industry with increasing technological developments will create its existence in market competition.

In Kabupaten Gresik, industrial orientation leads to capital intensive so that the demand for labor is not maximized. The results of studies related to labor issues by (Fatimah & Utomo, 2023) also explain that the processing industry sector does not influence the level of open unemployment in Central Java. The international research literature (Jung & Lim, 2020) has explained that robot-based industrial transformation supports rapid economic development. However, it will not be a relationship in employment issues, because robot-based industries do not provide labor demand in the market.

Effect of Labor Force Growth on Open Unemployment Rate

Based on the result of the analysis, it can be understood that the Growth of Total Force does not significantly influence the Open Unemployment Rate. This is obtained in the analysis with a probability value of 0.130 with this result greater than the level of 5% or 0.05 (0.130 > 0.05). Thus, it means that the number of the labor force does not affect the employment problem, namely unemployment. This reflects that the increase or decrease in the growth rate of the labor force does not necessarily provide fluctuations in the level of open unemployment in Kabupaten Gresik.

The results of the international research literature review by (Seiz et al., 2024) explain that unemployment is influenced by the level of education. This research discusses Education as a Protective factor in High Unemployment in the Spanish Country study. Referring to the macroeconomic theory, the issue of economic problems is unemployment during the Great Recession. It is explained in this study that unemployment is not determined by the size of the labor force, but rather by the education of a mother, with the results of the analysis that a mother who has a higher education will reduce the number of unemployed. The protective effect is also explained in this study that a mother's education will protect the exploitation of human resources.

Maternal education plays a role in maternal health. The effect is that unemployment will not increase because the birth rate can be suppressed to decrease. When this happens, the phenomenon that is composed is the suppression of the labor force rate so as not to create a gap in the labor market. A mother's education will link the correlation of unemployment, as the mother is the first level of education in the family. The mother's studies will provide a form of protection against the threat of extortion from the labor force. Education emphasizes how a person can position what is lacking and what they should do. So in companies that are not legal entities and are not responsible for their workforce, the role of education will lead to how a person can express an attitude not to be further disadvantaged and suppressed welfare.

This is the result of this research, where the growth of the labor force is not the main factor in unemployment. This is because education is also a trigger for the increase or decrease in the level of open unemployment in a region. How the existing education condition relates to labor demand because education is one of the degrees of determining labor qualifications in a company. The skills and abilities possessed by workers can be seen from the level of education they have taken, and the position of workers in a company is also determined by the education they have taken because this concerns how the workforce can complete the workload they take. Because of this, the growth of the labor force is not the main factor in unemployment. This is because education is also a trigger for the increase or decrease in the level of open unemployment in a region. The skills and skills possessed by workers determine how the absorption of labor for a company. With this, the growth of the labor force does not have to be the main determinant of the open unemployment rate in Gresik.

Effect of Minimum Wage Growth on Open Unemployment Rate

Based on the results of the analysis, it can be understood that the Growth of Minimum Wage has a significant effect on the Open Unemployment Rate. This is obtained in the analysis with a probability value of 0.024 with this result greater than the level of 5% or 0.05 (0.024 < 0.05). This influence is reflected in a negative relationship, that when wages increase, it will be a solution to the employment problem, namely unemployment can decrease. The results of this study follow the study of (Rakhmawati & Boedirochminarni, 2018) in explaining that wages can increase labor absorption. Furthermore, increased wages can realize an increasingly progressive order of life in the development of welfare. Thus, the achievement of economic welfare can be maximally realized by supporting the implementation of economic development for a region.

The wage increase described in the MPL (Marginal Product of Labor) theory is related to the employment of a region. Marginal Product of Labor (MPL), is the additional output to be received by the company is the impact of adding one unit of input. In the view and study of classical economic figures, this MPL is considered equal to the real wage received by labor (MPL = W/P) so the amount of MPL is the quantity of wages that will be handed over to workers. This theory is structured on the increase in the marginal output of production factors when the true wage is compensation for the increase in the value of production received by the company from employees. The addition of production factors carried out by the company here has positive implications for the final results it will achieve. And when the company adds production inputs, it will align the demand for labor in the market, thus opening up employment opportunities for a population (Privono dan Zainuddin Ismail, 2017).

The result of this study is that wages in their development are increasing, which will create good implications for employment in Kabupaten Gresik. Increasing wages indicate that the government has harmonized between income and expenditure by the community. The minimum wage is a worker's right and an obligation for every company to fulfill it. When wages increase, it reflects that the company can achieve escalation. There is an increase in sales output for products that have been marketed to the public. Increased wages will provide additional consumption for the community. When consumption increases, purchasing power will increase and in Keynes' economic theory, unemployment will not be a problem when the economic life of the community in terms of purchasing power can be maintained by the government (Priyono dan Zainuddin Ismail, 2017).

Wage growth can reduce unemployment following the literature review on international research by (Jia et al., 2021) which discusses The impact of Wages on the theme of Economics Growth and Unemployment. The explanation leads to the minimum wage policy having a close relationship with the economic growth cycle. Where wage growth will optimize labor policies to social security as an allocation of economic achievements can increase positively. The results of his research explain that our minimum wage model is increasing growth and will increase workers' income so that domestic demand also grows from public consumption. Up to the ability of wages to control the level of unemployment by the government. Thus the allocation of economic development dividends can be maximally achieved and realize the economy is growing.

The results of this study that wages in their development are increasing will create good implications for employment in Kabupaten Gresik. When wages increase, it reflects that the company can achieve escalation. There is an increase in sales output for products that have been marketed to the community. Increased wages will provide additional consumption for the community. Wage growth can reduce unemployment following the literature review with the same results in the discussion of wage and unemployment problems. The meaning of the analysis is understood in the form of increasingly significant developments in the minimum wage policy. Where this policy is issued by the government and has a close relationship with the economic growth cycle. Up to the ability of wages to be used as a control belt to suppress or reduce the unemployment rate by the government. Then the balance between supply and demand for labor in Gresik. The limitation of this writing is that researchers do not analyze other factors in employment problems so that future researchers can make novelty from the continuation of this research by adding other variables such as education, economic growth, and inflation to capital investment.

CONCLUSIONS

The conclusion of this study aims to determine and analyze the effect of economic opportunities and employment

problems in Gresik. This study investigates the effect of the development of the manufacturing sector, labor force, and minimum wage on the open unemployment rate in Gresik with a focus on data for 2007-2021. Based on the results of the study, it can be concluded that the growth of the manufacturing sector and the labor force has no effect on the level of open unemployment in Kabupaten Gresik, while the growth of the minimum wage can have a negative relationship with the level of open unemployment in Kabupaten Gresik. The recommendations for the utilization of the results of this study for the government to be able to regional development policies in relation to wages to stay in line with the expenditure of the basic needs of the community with the aim of being able to increase people's purchasing power. Furthermore, policies by the government must also follow up on economic opportunities in the processing industry sector in order to create a multiplier effect for other sectors. As well as formulating the creation and expansion of employment opportunities that are not centered on capital-intensive but labor-intensive schemes until a form is obtained. The limitations of this research refer to the independent variables used, broad macroeconomic problems can be added to the complexity of research variables, especially those related to employment. So with this, future researchers can add variable updates such as the level of education, and inflation to economic growth on linear issues in this study.

REFERENCE

- Anjani, I., & Fitryani, V. (2022). Pengaruh Jumlah Industri Terhadap Penyerapan Tenaga Kerja Di Kabupaten Sumbawa. *Jurnal Ekonomi & Bisnis*, 10(1), 93–100. https://doi.org/10.58406/jeb.v10i1.734
- Brügemann, B. (2023). Invariance of unemployment and vacancy dynamics with respect to diminishing returns to labor

at the firm level. *Review of Economic Dynamics*, 51, 915–942. https://doi. org/10.1016/j.red.2023.09.002

- Cahyani, F. N., & Muljaningsih, S. (2022). Analisis Pengaruh Jumlah Penduduk, Tingkat Pengangguran Dan Tingkat Pendidikan Terhadap Kemiskinan Di Kabupaten Gresik. Jurnal Ekonomi Pembangunan STIE Muhammadiyah Palopo, 8(1), 1. https://doi. org/10.35906/jep.v8i1.977
- Diniyah, H., & Fisabilillah, L. W. P. (2023). Faktor-Faktor yang Mempengaruhi Tingkat Pengangguran di Indonesia. *Independent: Journal of Economics*, 2(2), 155–168. https://doi.org/10.26740/ independent.v2i2.50992
- Djunaidi, D., & Alfitri, A. (2022). Dilema industri padat modal dan tuntutan tenaga kerja lokal. *JPPI (Jurnal Penelitian Pendidikan Indonesia)*, 8(1), 29. https:// doi.org/10.29210/020221222
- Fatimah, S., & Utomo, Y. P. (2023). Analisis Pengaruh Jumlah Angkatan Kerja, Upah Minimum, Penanaman Modal Dalam Negeri, Proporsi Pdrb Sektor Industri, Proporsi Jurnal Bisnis Dan Manajemen, 3(3), 355–363.
- Ghozali, I. (2018). *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 25*. Badan Penerbit Universitas Diponegoro.
- Gresik, D. I. K. (2013). Perumusan Strategi Peningkatan Perekonomian Daerah Melalui Pengembangan Sektor Ekonomi Potensial dengan Analisis Shift-Share dan SWOT Program Studi Teknik Industri, Universitas Muhammadiyah Gresik. XIII(2), 11–20. https://doi. org/10.30587/matrik.v13i2.668
- Herman, E. (2020). Labour productivity and wages in the Romanian manufacturing sector. *Procedia Manufacturing*, 46, 313–321. https://doi.org/10.1016/j.

promfg.2020.03.046

- Irawaty, & Masloman. (2018). Analisis Pertumbuhan Ekonomi Serta Sektor Yang Potensial Dan Bardaya Saing Di Kabupaten Minahasa Selatan. Analisis Pertumbuhan Ekonomi Serta Sektor Yang Potensial Dan Bardaya Saing di Kabupaten Minahasa Selatan, 18(1), 46–56.
- Jia, Z., Wen, S., & Lin, B. (2021). The effects and reacts of COVID-19 pandemic and international oil price on energy, economy, and environment in China. *Applied Energy*, 302(March). https://doi. org/10.1016/j.apenergy.2021.117612
- Jung, J. H., & Lim, D. G. (2020). Industrial robots, employment growth, and labor cost: A simultaneous equation analysis. *Technological Forecasting and Social Change*, 159(July), 120202. https://doi. org/10.1016/j.techfore.2020.120202
- Mahila, S. (2014). 225590-Kebutuhan-Hidup-Layak-Dan-Pengaruhnya-Te-219Ce6B6. Jurnal Ilmiah Universitas Batanghari Jambi, 14(2), 42–51.
- Mankiw. (2014). *Pengantar Ekonomi Mikro*. Principle of Economics. Salemba Empat. Jakarta.
- Mawadah, S. (2018). Kurva Penawaran Tenaga Kerja Dan Jam Kerja Perempuan. *Sawwa: Jurnal Studi Gender*, 12(3), 357. https://doi.org/10.21580/ sa.v12i3.2084
- Muhtamil, M. (2017). Pengaruh Perkembangan Industri Terhadap Penyerapan Tenaga Kerja di Provinsi Jambi. Jurnal Perspektif Pembiayaan Dan Pembangunan Daerah, 4(3), 199–206. https:// doi.org/10.22437/ppd.v4i3.3642
- Nur, A. (2021). Pertumbuhan Ekonomi Jawa Timur (Analisis Input-Output) Pertumbuhan Ekonomi Jawa Timur. UIN Kiai Haji Achmad Siddiq Jember.

- Priyono dan Zainuddin Ismail. (2017). *Teori Ekonomi*.
- Purwasih, H., & Soesatyo, Y. (2017). Pengaruh Pertumbuhan Sektor Industri Terhadap Penyerapan Tenaga Kerja Di Kabupaten Sidoarjo. *Jurnal Pendidikan Ekonomi*, 5(1), 1–6.
- Putra, D. A. (2016). Analisis Pengaruh Produk Domestik Regional Bruto, Upah Minimum Kota-Kabupaten Dan Indek Pembangunan Manusia Terhadap Tingkat Pengangguran Kabupaten/ Kota Di Jawa Timur. Ekonomi, Jurusan Ilmu Ekonomi, Fakultas Bisnis, D A N Brawijaya, Universitas, 16.
- Rakhmawati, A., & Boedirochminarni, A. (2018). Analisis Tingkat Penyerapan Tenaga Kerja Sektor Industri Di Kabupaten Gresik. *Jurnal Ilmu Ekonomi*, 2, 74–82.
- Ristiani, H., & Muljaningsih, S. (2022). Analisis Potensi Sektor Ekonomi Kabupaten Gresik. *Jurnal Ilmiah Multidisiplin*, 1(4), 816–823.
- Romhadhoni, P., Faizah, D. Z., & Afifah, N. (2019). Pengaruh Produk Domestik Regional Bruto (PDRB) Daerah terhadap Pertumbuhan Ekonomi dan Tingkat Pengangguran Terbuka di Provinsi DKI Jakarta. *Jurnal Matematika Integratif*, 14(2), 113. https://doi.org/10.24198/ jmi.v14.n2.19262.113-120
- Sarmadi, S., & Leksono, E. B. (2018). Identifikasi Prioritas Sektor-Sektor Potensial Guna Merancang Strategi Pengembangan Pembangunan Melalui Analisis Shift-Share dan SWOT. *Matrik: Jurnal Manajemen dan Teknik Industri Produksi*, 8(2), 100-111.
- Seiz, M., Salazar, L., & Eremenko, T. (2024). Perinatal health in Spain during and after the Great Recession: Educational selection into fertility as a protective factor in high unemployment

contexts. *Social Science & Medicine*, 340(August 2023), 116439. https://doi. org/10.1016/j.socscimed.2023.116439

- Suaib, A. R. A., & Agustina, N. (2022). Analisis Penyerapan Tenaga Kerja Terdidik Sektor Industri Pengolahan di Pulau Jawa Tahun 2011-2019. *Seminar Nasional Official Statistics*, 2022(1), 779–788 https://doi.org/10.34123/ semnasoffstat.v2022i1.1162.
- Sugiyono Guzman, K. C., & Oktarina, Nina Paper, W. (2018). BAB III METODE PENELITIAN Metodologi Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif dan R&D, (Bandung: Alfabeta, 2008). *Economic Education Analysis Journal*, 7(1), 335–336.
- Tumangkeng, S. (2018). Analisis Potensi Ekonomi Di Sektor Dan Sub Sektor Pertanian, Kehutanan Dan Perikanan Kota Tomohon. *Jurnal Berkala Ilmiah Efisiensi*, 18(1), 12.
- Utami, B. S. A. (2020). Analisis Penyerapan Tenaga Kerja Pada Sektor Industri Manufaktur (Besar Dan Sedang) Propinsi Jawa Timur. *Journal of Economics Development Issues*, 3(01), 38–49. https://doi.org/10.33005/jedi. v3i01.39
- Zahroh, S. Z. (2017). Analisis Pengaruh PDRB, Angkatan Kerja, dan Upah Minimum Terhadap Pengangguran Di Kota Malang. *Jurnal Ilmiah Mahasiswa FEB*, 5(2).
- Zilfiyah, S. (2013). Sektor Industri Di Indonesia (Periode Tahun 2004-2010) Jurnal Ilmiah Disusun Oleh :Mahasiswa FEB,1(2)