THE EFFECT OF PROVINCIAL MINIMUM WAGE, OPEN UNEMPLOYMENT RATE, AND AVERAGE YEARS OF SCHOOLING ON LABOR FORCE PARTICIPATION RATE IN EAST JAVA PROVINCE

Amelya Romawati[1]
Universitas Pembangunan Nasional "Veteran" Jawa Timur, Surabaya, Indonesia
21011010060@student.upnjatim.ac.id

Ririt Iriani Sri Setiawati[2]*
Universitas Pembangunan Nasional "Veteran" Jawa Timur, Surabaya, Indonesia
ririt.iriani.ep@upnjatim.ac.id*

Abstract

This research is motivated by human resources as a factor in economic development. Population productivity is measured through the labor force participation rate (LFPR). East Java Province is ranked second in LFPR in Java Island along with the fourth rank for the level of completion of high school/vocational high school education among provinces in Java Island. This study highlights education which is one of the factors in the LFPR benchmark in addition to minimum wages and open unemployment rates. This analysis was conducted using the classical assumption test, multiple linear regression analysis, t-test and F-test. The results of the analysis produced a provincial minimum wage variable with a negative and significant effect, the open unemployment rate with a negative and insignificant effect, while the average length of schooling had a positive and significant effect.

Keywords: Provincial Minimum Wage, Open Unemployment Rate, Average Years School, Labor Force Participation Rate

INTRODUCTION

Economic development in Indonesia is currently still facing problems in realizing stable economic growth. Stable and sustainable economic growth is the main goal in the economic policy of a country including Indonesia (Setiawati & Imamah, 2024). One of the issues faced in economic development is the problem of employment.

The development of the population shows that it has an impact on increasing the number of working-age people. This large proportion of the productive-age population is a great potential for economic development, but also a challenge if it is not matched by adequate job creation. One important indicator to measure population participation in economic activities is the labor force participation rate (LFPR), which describes the percentage of the working-age population that is economically active. The LFPR plays an important role in determining the continuity and progress of a region.

As one of the provinces with the largest population in Indonesia, East Java has a population of 41.23 million people in 2023 (BPS Provinsi Jawa Timur, 2024). This population density makes East Java Province a region rich in human resources, while at the same time facing great challenges in creating sufficient employment opportunities to absorb the growing labor force.

Figure 1
Labor Force Participation Rate in Java Island Province in 2023

Source: Indonesia Central Bureau of Statistics, 2024 (data processed)

As the province with the largest population in Java, East Java Province in the data graph above also shows that East Java Province is second in the labor force participation rate of 72.56% for 2023 after the Special Region of Yogyakarta Province which has a LFPR of 74.08%. The labor force participation rate in East Java Province shows that the productive-age population in the region is high, which has the potential to increase the labor force participation rate. This condition shows that with a large population, especially a population of productive age, the higher the labor force. In addition, the lower the education level of a country's population, the lower the labor force participation, because currently the level of education is one of the requirements to enter the workforce (Disnaker Kabupaten Buleleng, 2019).

In East Java Province, the level of education, especially at the high school/vocational school level, is ranked fourth among the provinces in Java. This condition shows that the quality of education in East Java Province needs to be a concern for the government of East

Java Province, because the quality of education can determine the decision of individuals to participate in economic activities. The labor force participation rate describes the ratio of the number of people in the labor force who are actively working or looking for work to the total population in the working age range (Ningrum et al., 2022).

The labor force participation rate in East Java Province in 2019 was 69.61%. In 2020 it increased to 70.33%, in 2021 it decreased by 70%, for 2022 it increased again to 71.23%. Then in 2023 it has a labor force participation rate of 72.56%, which shows that this year has increased from the previous year, then in 2023 it increased to 72.56%. From these data, it shows that the labor force participation rate in East Java Province has fluctuated relatively in recent years. The labor force participation rate in an area can be influenced by factors that exist in the area, both in demographic, social, and economic factors (Badan Pusat Statistik, 2023). Therefore, the labor force participation rate can be influenced by several factors such as minimum wage, open unemployment rate, and average years of schooling.

One of the factors that can affect the level of labor force participation is wages, because wages are a determining factor for labor productivity in producing products and services in a company, including those with high education and skills. The high demand and supply in the labor market is strongly influenced by the wage factor set (Pradnyaswari et al., 2021). High wage supply results in people being encouraged to look for work. The structure of available wages strongly influences the level of labor force participation with higher wages tending to attract individuals with good qualifications and skills. In other words, competitive wages can attract more individuals to participate in the workforce. In addition, high wages also increase motivation and job satisfaction so that when workers feel that wages are equal to the efforts made, they tend to try harder to produce products and services. The available wage structure greatly affects LFPR with higher wages tending to attract individuals with good qualifications and skills.

In addition to the minimum wage, the labor force participation rate is also influenced by the open unemployment rate because a high unemployment rate reflects a mismatch between the skills possessed by the labor force and the needs of the labor market (Marliyani, 2024). If the unemployment rate is low, it means that more job opportunities are available which can encourage individuals to participate in the labor market. Employment issues such as poverty are complex problems, partly due to the large number of graduates who do not meet the labor market criteria expected by formal institutions and private companies. Many graduates enter the labor market without having relevant skills and knowledge, so they do not meet industry needs. Although the supply of human resources is widely available in the labor market, if the graduates do not meet the criteria needed by the company, the poverty rate will remain high.

Although the supply of human resources is abundant in the labor market, if the graduates do not match the criteria with the needs of the company, the unemployment rate will remain high. Therefore, there is a need for collaboration between educational institutions and the business world to form graduates who are in accordance with company qualifications (Junaidi & Rahayu, 2023). Through the level of education taken, it can result in a person playing an active role in economic activities as a producer or labor force. Human capital theory states that education is an investment to increase the productivity of human resources. A high level of education plays an important role in determining individual performance, because the knowledge gained will produce skills and training that are prepared for the future

(Khojin et al., 2020). Therefore, an individual with a high level of education or average years of schooling can increase the region's labor force participation rate.

REVIEW OF LITERATURE

Labor Force Participation Rate

The labor force participation rate (LFPR) is an indicator used to measure the number of people of working age who are active in economic activities (Badan Pusat Statistik, 2024). The LFPR is also defined by Statistics Indonesia as the percentage of the total labor force population to the total productive-age population aged 15-65 years. The LFPR describes the proportion of the working-age population that is actively engaged in economic activity or working as well as the population that is looking for work. In addition, the LFPR can be expressed as the existing workforce or the number of workers according to certain age groups, gender, and education levels in villages and cities. According to the International Labor Organization (ILO), the labor force participation rate is the number of people in the labor force as a percentage of the total labor force and the total population of working age.

Provincial Minimum Wage

According to the classical economic view, wages are the price paid for the use of production factors in the form of labor. So that the price must meet the needs of life and can be a guarantee of a decent life. Wages have a major influence on labor issues. This is due to the desire of individuals to get a decent wage to meet the needs of life. Based on Law No.13 of 2003 concerning Manpower and Government Regulation No. 15 of 2018 concerning Minimum Wage, minimum wage is a minimum standard used by companies or industry players to provide wages to laborers or workers in a business environment or work environment. The government sets the minimum wage with the main objective of ensuring that workers/laborers get a fair and decent wage, so that workers can meet their daily needs properly (Wibowo, 2023).

Relationship between Provincial Minimum Wage and Labor Force Participation Rate

Alfred Marshall's neoclassical theory in the book entitled Principles of Economics (1890) states that wage levels are influenced by the demand and supply of labor. When wages increase, labor costs for companies also increase. When the minimum wage increases, the labor needed by companies will decrease (Susilowati & Wahyuni, 2019). This can reduce the demand for labor by companies, because they tend to adjust the use of production inputs by reducing the workforce or switching to more efficient technology and machines. As a result, job opportunities become more limited so that the LFPR can fall when some of the working-age population loses motivation or access to the labor market.

Open Unemployment Rate

Open unemployment, according to the Central Bureau of Statistics (BPS), is the condition of someone who is not working and is looking for work. Meanwhile, the open unemployment rate is the percentage of the number of open unemployed compared to the total labor force. Open unemployment is a condition where individuals do not have a job and are trying to find one. This type of unemployment arises when the increase in job vacancies is not proportional to the increase in the number of workers. As a result, more and more people are unable to find work. In the long run, they do not have a job, so they are considered to be both real and part-time unemployed, which makes them openly unemployed.

Relationship between Open Unemployment Rate and Labor Force Participation Rate

Open unemployment rate and labor force participation rate have a close relationship with each other. According to Keynes' theory (1936), open unemployment is often caused by a lack of aggregate demand. When demand is high, the unemployment rate tends to be low, which indicates that more individuals can be absorbed into the labor market, thus increasing labor force participation. However, a low open unemployment rate can also show a reverse relationship, causing the labor force participation rate to fall, because it is influenced by individuals who decide to no longer apply for jobs due to the belief that job opportunities do not exist or do not believe that they will succeed in getting a job, which is usually called a discouraged worker (McConnell et al., 1999). So this will potentially reduce LFPR.

Average Years of Schooling

Education is one of the main objectives of development, where education plays a key role in building a country's ability to adopt modern technology and develop its capacity which is essential for achieving sustainable growth and development (Arifin, 2023). The quality of a population's education can be seen through the average years of schooling. With the average length of schooling, it shows the higher level of formal education that has been taken by people in a region. If the average length of schooling is high, then the level of education that has been taken is also high. Long education is usually associated with increased individual skills and knowledge.

The Relationship between Average Years of Schooling and Labor Force Participation Rate

The level of education, as measured by average years of schooling, is closely related to the rise and fall of the labor force participation rate in society. The level of education has become a screening device for companies, which tend to prioritize those with higher education to fill available job vacancies. Because those with higher education are considered to have more expertise, initiative, motivation and have the knowledge needed in the world of work (Julianto & Utari, 2019). This will make it easier for someone with a higher education to get a job and ultimately affect the rise and fall of the LFPR.

RESEARCH METHOD

Research Design

The research was conducted using a quantitative approach that includes cause-and-effect thinking, variable reduction, hypotheses, and measurement through observation and theory testing, with research strategies such as experiments and surveys that require statistical data.

Data Collection Techniques

The research data collection technique used documentation. Documentation is a technique for collecting data and information in the form of books, archives, documents, and images containing reports and information to support the research process. The documentation used in this study includes reports and statistical data from the East Java Provincial Statistics Agency (BPS) for the period 2009–2023, or a 10-year period.

Measurement of Variables

In this study, the dependent variable is the Labor Force Participation Rate (LFPR) or as Y which is defined as a percentage to measure the working age population participating in

economic activities. The variable data uses TPAK data in East Java Province in 2009 - 2023 which is expressed in percent (%). The independent variable is the provincial minimum wage (X1) expressed in rupiah (Rp) then the independent variable is the open unemployment rate (X2) with a measurement comparing the number of unemployed with the number of the workforce, this variable is expressed in percent (%). The independent variable is the average length of schooling using years as the unit.

Data Analysis Technique

This research uses quantitative data analysis to systematically address the research problem using numerical data and statistical programs. Therefore, quantitative research is used by researchers to find answers to research problems related to numbers and mathematical and statistical programs.

Hypothesis Testing

a. The Provincial Minimum Wage is suspected to influence the Labor Force Participation Rate in East Java Province.

b. The Open Unemployment Rate is suspected to influence the Labor Force Participation Rate in East Java Province.

c. The Average Years of Schooling is suspected to influence the Labor Force Participation Rate in East Java Province.

RESULTS AND DISCUSSION

Classical Assumption Test
Normality Test

Figure 1
Normality Test Results (P-Plot)
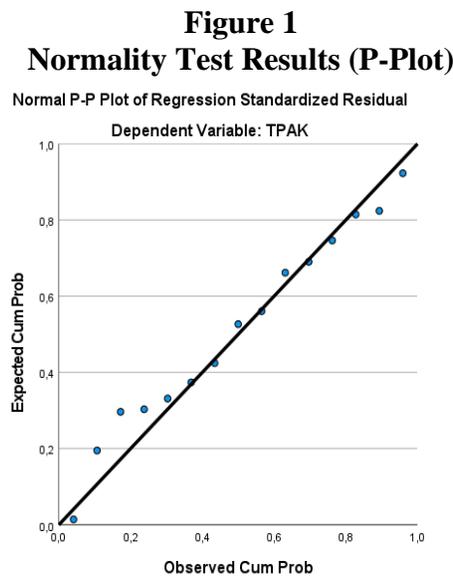
Source: SPSS 27 Output

In the picture above, it can be seen that the plotting data or points follow the direction of the diagonal line. Based on the basis of decision making, the normality test with probability-plot shows a normally distributed regression model.

Table 1
Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
UMP	,135	15	,200*	,937	15	,517
TPT	,216	15	,200*	,867	15	,092
RLS	,167	15	,200*	,936	15	,515
TPAK	,131	15	,200*	,990	15	,997

Source: SPSS 27 Output

In addition, based on testing using Kolmogorov Smirnov and Shapiro Wilk, the results obtained were data that was normally distributed with a significance value > 0.05.

Autocorrelation Test

Table 2
Autocorrelation Test Run Test Results

Runs Test

Asymp. Sig. (2-tailed)	0,603

Source: SPSS 27 Output

Based on the Run test results above, the Asymp. Sig. (2-tailed) of 0.603, which means that this value is > the significance value of 0.05. Therefore, based on the basis of decision making, it is concluded that the regression model does not have autocorrelation symptoms. Autocorrelation testing can also be done using the Durbin Watson test, if it is in the doubtful area then a run test is carried out.

Multicollinearity Test

Table 3
Multicollinearity Test Result

Model	Collinearity Statistics	
Variable	Tolerance	VIF
UMP (X_1)	0,256	3,906
TPT (X_2)	0,754	1,326
RLS (X_3)	0,221	4,527

Source: SPSS 27 Output

In the multicollinearity test results, the independent variables, namely the provincial minimum wage, the open unemployment rate, and the average length of schooling have tolerance values ≥ 0.10 and VIF values ≤ 10.00 with the provincial minimum wage variable obtaining a tolerance value of 0.256 and a VIF value of 3.906. The open unemployment rate variable obtained a tolerance value of 0.754 and a VIF value of 1.326 and the average length of schooling variable obtained a tolerance value of 0.221 and a VIF value of 4.527. Therefore, based on the test results, the regression model does not have multicollinearity symptoms.

Heteroscedasticity Test

Table 4
Heteroscedasticity Test Results

| Model | Unstandardized Coefficients | | Standardized Coefficients | | |
	B	Std. Error	Beta	t	Sig.
(Constant)	1,031	12,036		,086	,933
UMP (X_1)	,000	,002	-,092	-,156	,879
TPT (X_2)	-,517	1,628	-,109	-,318	,757
RLS (X_3)	,488	5,509	,056	,089	,931

Source: SPSS 27 Output

In the heteroscedasticity Glejser test results, the significance value of each independent variable shows a value ≥ 0.05, namely the provincial minimum wage variable of 0.879, then the open unemployment rate variable of 0.757 and the average length of schooling variable of 0.931. Based on these results, it shows that all independent variables have a sig value. ≥ 0.05, which means that the regression model does not occur heteroscedasticity.

Multiple Linear Regression Analysis

Table 5
Multiple Linear Regression Analysis

Model	Unstandardized Coefficient B
(*Constant*)	68,891
UMP (X_1)	-2,021
TPT (X_2)	-0,153
RLS (X_3)	4,004

Source: SPSS 27 Output

The test results obtained multiple linear regression equations as follows:

$$\text{TPAK} = 68{,}891 - 2{,}021\text{UMP} - 0{,}153\text{TPT} + 4{,}004\text{RLS} + e_i$$

Based on the regression equation above, the research results can be interpreted as follows:

$β_0$ = The constant value of 68.891 which has a positive value, indicates that the influence is in the same direction between the independent variable and the dependent variable. This shows that if the independent variables of Provincial Minimum Wage (X1), Open Unemployment Rate (X2), and Average Years of Schooling (X3) are constant or do not change, then the labor force participation rate increases by 68.891%.

$β_1$ = The regression coefficient of the provincial mimimum wage variable shows a negative value of -2.021, which means that if the variable increases by one rupiah, the labor force participation rate decreases by -2.021%, assuming that the other variables, namely the open unemployment rate and the average length of schooling, are constant.

β_2 = The regression coefficient of the open unemployment rate variable shows a negative value of -0.153, which means that if the variable increases by one percent, the labor force participation rate decreases by -0.153%, assuming that the other variables, namely the provincial minimum wage variable and the average length of schooling, are constant.

β_3 = The regression coefficient of the average years of schooling variable shows a positive value of 4.004, which means that if the variable increases by one year, the labor force participation rate increases by 4.004%, assuming that the other variables, namely the provincial minimum wage variable and the open unemployment rate, are constant.

Hypothesis Test

Coefficient of Determination

Table 6
Coefficient of Determination Result (R^2)

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,830	0,689	0,605	0,681

Source: SPSS 27 Output

In the results of the table above, it shows that the coefficient of determination obtained from the R Square value is 0.689, which means that the independent variable provincial minimum wage (X1), open unemployment rate (X2), and average length of schooling (X3) affect 68.9% of the labor force participation rate variable (Y). Meanwhile, 31.1% is influenced by other variables that are not included in the regression model or not in the study.

F Test

Table 7
F Test Result

	Model	df	F count	F table	Sig.	Prob.
1	Regression	3	8,142	3,59	0,004	0,05
	Residual	11				
	Total	14				

Source: SPSS 27 Output

In the results of the table above, it shows that the calculated F value is 8.142 and the significance value is 0.004, which means that the significance value is < 0.05. While the F table value with degree of freedom (df1) is 3 which is the number of independent variables then df2 is 11 (n-k-1), resulting in an F table of 3.59. So it is known that the calculated F value is 8.142 > F table 3.59. Which means that the independent variables together have a significant effect on the dependent variable.

T Test

Table 8
T Test Result

Model	t count	t table	Sig.	Prob.

Minimum Wage (X₁)	-25,751	2,201	0,000	0,05
Open Uneployment Rate (X₂)	-2,091	2,201	0,061	0,05
Averages Years of Schooling (X₃)	30,011	2,201	0,000	0,05

Source: SPSS 27 Output

The t-test has the aim of knowing whether or not there is a significant effect of each independent variable on the dependent variable. The effect is seen with the criteria if tcount> ttable, and with the results of a significant value < α = 5% (0.05) it can be said that the independent variable partially affects the dependent variable.

Effect of Provincial Minimum Wage (X1) on Labor Force Participation Rate (Y)

Based on the test results, the minimum wage variable (X1) displays a tcount of -25.751, which in absolute terms is much greater than the ttable of 2.201, and a significant figure of 0.003 <0.05 significant level. This condition illustrates that partially, the provincial minimum wage has a significant effect on LFPR in East Java Province during the period 2009-2023. In the test results, the minimum wage variable shows a negative relationship with the LFPR. In other words, an increase in the minimum wage has a decreasing impact on LFPR in East Java Province.

Through the test results, the t-count value has a negative correlation sign, which indicates that a decrease in the minimum wage is actually followed by an increase in the labor force participation rate in East Java Province. The decline in the provincial minimum wage in East Java caused many residents in East Java to choose to continue looking for work so that the TPAK in East Java Province continued to rise. This is based on the income effect, where when wages decline, the purchasing power of individuals decreases. In order to maintain living standards or meet basic needs, individuals feel compelled to work harder or longer, or even for those who have not previously worked (e.g. housewives or students), they may feel the need to enter the labor market to make ends meet.

This condition is also supported by the situation in East Java Province, which shows that the lowest MSE is in Sampang Regency with a level of Rp2,114,335 in 2023. By looking at these conditions, people in the Sampang area tend to switch or migrate to other regencies or regions (both in the East Java Province) that offer more attractive/higher MSEs, so that the TPAK in the area of origin can stagnate or fall. However, the TPAK in East Java Province continues to rise due to the fixed destination of labor migration in the East Java Province area. In the end, this condition causes the provincial minimum wage in East Java to continue to rise with fluctuating TPAK but the test results show a negative relationship direction. These results are not in line with Alfred Marshall's wage theory which emphasizes that the number of workers employed by the company is affected by the wage level which results in labor demand.

The results of this study support the findings of (Wahyuningtias, 2019) entitled "Analysis of Factors Affecting the Labor Force Participation Rate in Java Island" obtained the results of the minimum wage variable negatively affecting the LFPR in Java Island. This is because when wages rise, it will increase one-party income (income effect) which will reduce the LFPR rate.

Effect of Open Unemployment Rate (X2) on Labor Force Participation Rate (Y)

Through the test results conducted, the t-test results indicate that the open unemployment rate partially has no influence on the LFPR in East Java Province in 2009-2023. In the research results, it is shown by the value with a tcount of -2.091 which is smaller than the ttable of 2.201, and a significance value of 0.061 which is greater than the 0.05 significance level. This indicates that the open unemployment rate variable negatively and insignificantly affects the LFPR in East Java Province. This means that when the open unemployment rate increases, the LFPR tends to decrease due to the presence of individuals feeling unable to obtain employment opportunities.

The findings of this test are in line with the discourage worker theory presented by (McConnell et al., 1999) that individuals who experience difficulties in obtaining employment may feel hopeless and choose to no longer look for work. This finding is also in line with research belonging to (Sutranggono et al., 2023) entitled "The Effect of Health, and Unemployment on the Labor Force Participation Rate (LFPR) of East Java for the Period 2018-2022" that an increase in the number of unemployed can cause a decrease in the labor force participation rate, which leads to a decrease in economic productivity. So that in this study shows the findings that the reverse direction relationship of the open unemployment rate to the LFPR shows that when the unemployment rate tends to rise, the LFPR will decrease as a result of job seekers who feel hopeless then choose to stop getting a job and withdraw from the labor force.

Effect of Average Years of Schooling (X3) on Labor Force Participation Rate (Y)

Based on the partial test results in the study, it is found that the average years of schooling variable (X3) has a tcount value of $30.011 > t_{table}$ of 2.201 and a significance value of $0.000 < 0.05$ significance level. Thus, H_0 is rejected and H_1 is accepted, which means that the average years of schooling variable partially has a positive and significant effect on the labor force participation rate (LFPR) in East Java Province in 2009-2023.

This result is in line with the human capital theory proposed by Becker (1964), that education is a form of investment that increases individual skills and productivity. The higher the average years of schooling, the greater the opportunity for a person to obtain employment, both in the formal and informal sectors, because they are considered more competent and ready to face the demands of the labor market. An increased average year of schooling also reflects an increase in the quality of human resources, which in turn encourages people of working age to be more active in economic activities.

The increase is in line with local government efforts to improve access to education, including scholarship assistance programs and the construction of educational access facilities that better support the quality of education. This condition is supported by the *TisTas* (*Gratis Berkualitas*) education program by the East Java Provincial Government, which imposes free tuition fees for SMA/SMK starting in 2019 to reduce school dropout rates (BPS Provinsi Jawa Timur, 2024). With the increase in average years of schooling, individuals with higher education tend to be better prepared to enter the labor market, both formal and informal sectors.

CONCLUSION

Based on the research results, the minimum wage variable has a negative and significant influence on the labor force participation rate in East Java Province. The local government of East Java Province needs to implement a balanced minimum wage policy, taking into account the ability of the business sector and decent living needs and not income inequality in each region in the Regency / City in East Java Province. Then the open unemployment rate variable has a negative and insignificant effect on the Labor Force Participation Rate in East Java Province while the average years of schooling variable has a positive and significant effect. get a better chance to complete their education. This contributes to improved skills and knowledge, making them better prepared to enter the labor market. Support for education programs such as *TisTas* (*Gratis Berkualitas*) also needs to be continued and expanded so that all levels of society, especially the underprivileged population, can obtain equal educational opportunities. For researchers who will continue the research, they should be able to conduct research with a wider scope of objects or regions and add variables from other factors that can affect the labor force participation rate. That way, it is hoped that further research can make a more significant contribution to the development of science and practice in the field.

REFERENCES

Arifin, A. S. (2023). Human Capital Investment: Meningkatkan Daya Saing Global Melalui Investasi Pendidikan. *Jurnal Education And Development*, *11*(2), 174–179. https://doi.org/10.37081/ed.v11i2.4672

Badan Pusat Statistik. (2023). *Laporan Eksekutif Keadaan Angkatan Kerja Provinsi Jawa Timur 2022*.

Badan Pusat Statistik. (2024). *Laporan Eksekutif Keadaan Angkatan Kerja Provinsi Jawa Timur 2023*.

BPS Provinsi Jawa Timur. (2024). *Provinsi Jawa Timur Dalam Angka 2024*.

Disnaker Kabupaten Buleleng. (2019). *Pengertian Angkatan dan Tenaga Kerja*. Dinas Tenaga Kerja Kabupaten Buleleng. https://disnaker.bulelengkab.go.id/informasi/detail/artikel/pengertian-angkatan-dan-tenaga-kerja-34#:~:text=Semakin%20besar%20jumlah%20penduduk%20yang,syarat%20untuk%20memasuki%20dunia%20kerja.

Julianto, D., & Utari, P. A. (2019). Analisa Pengaruh Tingkat Pendidikan Terhadap Pendapatan Individu Di Sumatera Barat. *IKRAITH EKONOMIKA*.

Junaidi, & Rahayu, N. (2023). Manfaat Kolaborasi antara Sekolah dengan Dunia Usaha Dunia Industri (DUDI) Berbasis Kurikulum Merdeka Belajar bagi Siswa dan Guru di SD. *Jurnal Serambi Mekkah*, *4*, 374–385. https://ojs.serambimekkah.ac.id/semnas/article/view/7150

Khojin, N., Utami, S. N., & Syaifulloh, D. M. (2020). Pengaruh Tingkat Pendidikan Terhadap Produktivitas Kerja Pembutik Bawang Di Sub Terminal Agribisnis Larangan. *Syntax Idea*, *2*(5), 98–105.

Marliyani, R. A. (2024). *Pengaruh Laju Pertumbuhan Ekonomi, BI Rate, Penanaman Modal Asing dan Angkatan Kerja Terhadap Tingkat Pengangguran Terbuka di Indonesia*

Tahun 2005-2022 [Universitas Siliwangi]. http://repositori.unsil.ac.id/id/eprint/12332

McConnell, S.L. Brue, & D.A. Macpherson. (1999). *Contemporary Labor Economics* (Printed in Singapore). MacGraw-Hill Companies.

Ningrum, A. M., Lisa, A., & Desmawan, D. (2022). Analisis Faktor-Faktor Yang Mempengaruhi Tingkat Partisipasi Angkatan Kerja Di Provinsi DKI Jakarta. *Profit: Jurnal Manajemen, Bisnis Dan Akuntansi*, *1*(4), 10–22.

Pradnyaswari, N. M. W., Darsana, I. B., & Setiawina, N. D. (2021). Pengaruh Upah dan Modal Manusia Terhadap Tingkat Partisipasi Angkatan Kerja dan Distribusi Pendapatan Kabupaten/Kota Di Provinsi Bali. *E-Jurnal EP Unud*, *10*(4), 1596–1623.

Rahmi, J., & Riyanto. (2022). Dampak Upah Minimum Terhadap Produktivitas Tenaga Kerja: Studi Kasus Industri Manufaktur Indonesia. *Jurnal Ekonomi & Kebijakan Publik*, *13*(1), 1–12.

Setiawati, R. I. S., & Imamah, F. (2024). Government Strategy in Addressing the Impact of Economic Growth and Energy Consumption on Environmental Degradation. *Journal of Accounting and Strategic Finance*, *6*(2), 343–363. https://doi.org/10.33005/jasf.v6i2.495

Simanjuntak, P. (1985). *Pengantar Ekonomi Sumber Daya Manusia*. Penerbit FEUI.

Susilowati, L., & Wahyuni, D. (2019). Pengaruh Upah Minimum Terhadap Penyerapan Tenaga Kerja Bidang Industri Di Indonesia. *Equilibrium: Jurnal Ekonomi-Manajemen-Akuntansi*, *15*, 222–230.

Sutranggono, D., Eko Sujianto, A., Nur Safitri, E., Indah Prastiwi, N., Ayumazah, T., & Yulia Isnaini, V. (2023). Pengaruh Kesehatan, Dan Pengangguran Terhadap Tingkat Partisipasi Angkatan Kerja (TPAK) Jawa Timur Periode 2018-2022. *JEAMI (Jurnal Ekonomi, Akuntansi Dan Manajemen Indonesia)*, 24. www.bps.go.id

Wahyuningtias, R. (2019). Analisis Faktor yang Mempengaruhi Tingkat Partisipasi Angkatan Kerja di Pulau Jawa. *Jurnal Ilmiah Universitas Brawijaya*.

Wibowo, A. (2023). *Standarisasi Upah Minimum*. Yayasan Prima Agus Teknik.