International Journal of Economic Literature (INJOLE) e-ISSN: 3026-0221
Vol. 2 No. 11 August 2025, page., 1433-1449

ANALYSIS OF FACTORS AFFECTING FEMALE UNEMPLOYMENT IN REGENCIES/CITIES IN BALI PROVINCE

Ni Luh Komang Santhi Purnama Sari, Putu Ayu Pramitha Purwanti
Faculty of Economics and Business, Udayana University
e-mail : santhipurnama6@gmail.com
*Correspondinging Author: Ni Luh Komang Santhi Purnama Sari

Abstract: Female unemployment is a critical issue in the context of economic and social development in Bali Province, especially due to the significant role of women in the informal and tourism sectors. This study aims to analyze the effects of education, age, regional minimum wage, and inflation on female unemployment rates in the nine regencies/cities of Bali Province during the 2014–2023 period. The method used is panel data regression analysis, employing the Common Effect Model (CEM) selected based on Chow and Lagrange Multiplier test results. The findings show that, simultaneously, all four independent variables significantly influence female unemployment. Partially, education and age have a negative and significant effect, the regional minimum wage has a positive and significant effect, and inflation has a positive but not significant effect. These results indicate that increasing age and controlling inflation can reduce female unemployment, while wage policies must be carefully evaluated to avoid hindering female labor absorption. This research is expected to provide valuable input for local governments in formulating more inclusive and gender-responsive employment policies in Bali.
Keywords: Female Unemployment, Education, Age, Regional Minimum Wage, Inflation

INTRODUCTION

Unemployment is still an economic problem that has a broad impact on people's welfare. This phenomenon not only affects individuals, but also economic and social development in the region. Based on 2023 unemployment data from BPS, the Open Unemployment Rate (TPT) in Bali Province in February 2023 was 3.73%, down 1.11 percentage points compared to February 2022.

Female unemployment is one of the important issues in employment that reflects the social and economic dynamics of a region. In Bali, the trend of female unemployment has undergone various changes influenced by internal and external factors. As a province with an economy dominated by the tourism sector, dependence on this industry also affects the stability of the female workforce. When the tourism sector grows rapidly, job opportunities for women increase, especially in the service, hospitality, culinary, and creative industries. Conversely, when there is an economic slowdown or global crisis, women tend to be more vulnerable to losing their jobs than men.

Social and demographic changes have also influenced the trend of female unemployment in Bali. Although women's education levels have increased, there are not always jobs that match their qualifications, creating a skills gap with industry needs. Married women also face challenges in balancing domestic and professional roles, which can hinder their participation in the workforce. In addition, digital transformation is opening up new opportunities, but gaps in access and technology skills remain barriers for some women, especially those who previously worked in conventional sectors.

Due to the recovery of economic activities, everyone, including women, is trying to enter the labor market, but not all women are entering the labor market, so they are classified in the unemployed group.(Bali Province Employment Statistics 2022). In the context of sustainable development, female unemployment is an important issue related to the Sustainable Development Goals (SDGs). Specifically, this issue is related to Goal 5 (Gender Equality) and Goal 8 (Decent Work and Economic Growth). The high rate of female unemployment not only hinders the achievement of gender equality but also reduces the potential for regional economic growth, because female workers are not optimally absorbed in the labor market.

The results of Saskara and Kaluge's (2009) research on the Analysis of Factors Affecting Female Unemployment show that the increase in unemployment, especially among women, is a phenomenon that cannot be denied and efforts need to be made to improve it. Many efforts have been made to improve the position and role of women so far. On the other hand, the entry of women into the labor market shows a change in the division of roles based on gender.

Basically, unemployment rates are caused by many factors. The main reason is that job seekers have low abilities and skills that do not meet the standards required by the labor market, or their educational background does not match the job offer. In addition, there are still many potential workers who are not absorbed in the business world due to low production capacity and targeting certain industries that are considered easier (Yulinda et al., 2021). Women cannot be separated from social and cultural norms that still shape women's work patterns and participation in the economy. Women face discrimination in the workplace, both in the form of wage gaps, limited access to strategic positions, and stigma against women who work in certain sectors. The development of technology and digitalization offers new opportunities for women, but access to digital skills is still uneven. This shows that the challenges of female unemployment are not only economic, but also related to social aspects and employment policies that are not yet fully inclusive.

Low levels of education are one of the factors that affect the quality of the workforce. Low levels of education cause the workforce to have minimal knowledge. Of the 2.62 million Balinese who work, only 17.51% are highly educated, either diploma

or university. Where Bali is known as a warehouse of quality human resources with a gross participation rate (APK) entering college above 40 percent.

According to Sziraczki & Reerink (2004: 30), even though entering the workforce at a very young age, it is unlikely to earn a high income because of the low level of education of the younger generation. The high number of youth unemployment is likely due to young job seekers having difficulty in accessing profitable jobs and repeatedly facing unemployment problems. In contrast, older people, especially those who are married, generally have to work, and many even work longer hours (Simanjuntak, 2001: 48). Age affects work experience, productivity, and employer preferences for workers. In the productive age group (25-54 years), unemployment tends to be lower because they usually have sufficient work experience and are at the peak of productivity. At older ages (55+ years), the unemployment rate can increase due to declining productivity, age discrimination, or changes in job preferences. There are still unemployed people aged 25-29 years and over, most likely because there are groups of adults who depend on children, pensions, and rent. High unemployment rates hinder a country's optimal economic growth and increase the risk of social unrest (Boediono, 2016); Astuti, 2023).

The wage rate plays a significant role in creating a country's high unemployment rate. Since the wage rate paid affects employee satisfaction, this action can cause large fluctuations in the unemployment rate. Wages affect the attractiveness of a job and the balance between labor supply and demand. Low wages can reduce the motivation of job seekers to take a particular job, thereby increasing the unemployment rate, especially in the informal sector. Minimum wage policies can reduce unemployment if they provide incentives for workers to work. However, if the minimum wage is too high, companies can reduce the number of workers they recruit, thereby increasing unemployment. Women often receive lower wages than men, which can reduce their incentive to enter the formal labor market. The minimum wage is estimated to have a significant impact on the unemployment situation. The allocation of the minimum wage rate affects the phenomenon of the unemployment rate. The implementation of the minimum wage by reducing the demand for labor. Simply put, the higher the minimum wage, the higher the unemployment rate (Pasuria & Triwahyuningtyas, 2022). In addition, the minimum wage standard can reduce labor absorption in each field of work and has the potential to increase unemployment (Mankiw, 2006). Raising the minimum wage above the market rate can create an imbalance between the demand and supply of labor. This increase causes many employers to reduce staff and the unemployment rate to increase.

Inflation also plays a role in influencing female unemployment. Increases in the price of goods and services can reduce people's purchasing power, which ultimately has an impact on the business world and job availability. The Phillips curve illustrates the correlation between unemployment and inflation based on the assumption that

inflation illustrates that aggregate demand has increased. According to demand theory, an increase in aggregate demand will cause prices to rise as well. With the high increase in the price of goods, it will cause producers to want to profit from the increase in prices, so that production capacity will be increased, in increasing production capacity producers will also increase the use of labor. As a result, there is an increase in demand for labor, so that inflation will affect the unemployment rate (Elang Satri, 2020). Inflation is an economic phenomenon characterized by an increase in the price of goods and services in general in an economy during a certain period. Bali, as one of the provinces in Indonesia that is famous for its tourism sector, has unique economic dynamics. The tourism sector in Bali is not only the main source of income, but also plays an important role in creating jobs, especially for women. However, high inflation can have a significant impact on unemployment, especially among women. The higher the inflation rate, the higher the price of goods and services. Inflation has a negative impact if its value exceeds ten percent (Sukirno, 2012).

Women in Bali often face structural barriers to accessing suitable employment opportunities. Factors such as low levels of education and heavy household responsibilities often limit women's employment opportunities. In the formal sector, women tend to have lower employment opportunities than men, while in the informal sector women are often trapped in low-wage jobs and dangerous working conditions. In addition, disparities in access to economic resources, including education and skills, further exacerbate the situation of women's unemployment. Although various programs and initiatives have been implemented to strengthen women's rights and reduce unemployment rates, fundamental structural and social challenges to optimizing women's participation in the labor market remain major obstacles.

Female unemployment not only impacts the household economy but also overall economic growth. Women's inability to find decent work has a negative impact on family income, children's welfare and social stability. High unemployment rates hinder a country's optimal economic growth and increase the risk of social unrest (Boediono, 2016; Astuti, 2023). Therefore, it is important to have a comprehensive understanding of the dynamics of female unemployment in Bali in order to formulate more effective policies. This study aims to identify the factors that influence female unemployment in Bali Province, analyze its impact and evaluate the efforts of the government and related institutions in addressing the problem. Therefore, the results of this study are expected to help develop more targeted strategies to reduce unemployment and improve the welfare of women in Bali as a whole.

METHOD

This study employs a quantitative explanatory approach to analyze the influence of education, age, regional minimum wage, and inflation on female unemployment in Bali Province. The research was conducted in nine regencies/cities across Bali, selected due to their unique tourism-based economic characteristics that affect women's participation in the labor market. The data used includes 90 observations from the years 2014 to 2023, allowing for the capture of long-term dynamics and providing a comprehensive picture of the female unemployment phenomenon (Sugiyono, 2014; Sugiyono, 2018).

The variables in this study consist of a dependent variable—female unemployment—and independent variables, including education, age, regional minimum wage, and inflation. Data were collected using a non-participant observation method and sourced from secondary sources such as the Bali Provincial Statistics Agency (BPS) and relevant literature. Variable measurements were based on clear and measurable indicators, such as average years of schooling, productive age, annual minimum wage values, and yearly inflation rates, all processed as panel data (Sugiyono, 2018; Basuki, 2021).

Data analysis was conducted using panel data regression with three estimation models: the common effect model, fixed effect model, and random effect model. The best-fitting model was selected through the Chow test, Hausman test, and Lagrange Multiplier test. Additionally, classical assumption tests (normality, multicollinearity, autocorrelation, and heteroskedasticity) were applied to ensure the validity of the regression model. t-tests and F-tests were used to examine partial and simultaneous effects among the variables, supported by coefficient of determination (R^2) analysis to measure the model's explanatory power regarding variations in female unemployment (Ghozali, 2016; Widarjono, 2007; Baltagi, 2005).

RESULTS AND DISCUSSION

Hypothesis Testing Results

Panel Data Model Selection

1) Chow Test

Table 1. Chow Test Results

Variables	Coefficient	Std. Error	t-Statistics	P-Value	(95% Conf. Interval)	
x1	-0.9232778	0.7657632	-1.21	0.232	-2.448107	0.6015516
x2	-0.169729	0.0843323	-2.01	0.048	0.3376561	0.0018019
x3	0.0806607	0.0186019	4.34	0.000	0.0436195	0.1177019
x4	0.1156118	0.0642385	1.80	0.076	0.0123033	0.243527
_cons	6.820822	5.093646	1.34	0.184	-3.321924	16.96357

sigma_u	1.2772943
sigma_e	1.1079044
rho	0.57066074
F Test that all u_i=0 : F(8, 77) = 0.48	Prob > F = 0.8668

Source: Data Processing Output, 2025

Information:

Y = Female Unemployment (percent)

X1 = Education (percent)

X2 = Age (years)

X3 = Regional Minimum Wage (million)

X4 = Inflation (percent)

Based on Table 1, the p-value is obtained = 0.8668 (greater than 5%). If the probability value (Prob > F) from the Chow test is smaller than 0.05, then H_0 is rejected, which means that the Fixed Effect model is more appropriate to use. Conversely, if the Prob > F value is greater than 0.05, then the Common Effect model is considered sufficient and more efficient to use. Thus, the selected model is the Command Effect Model.

2) LM Test

Table 2. Lagrange Multiplier (LM) Test Results

Estimated results :

	Variables	sd = sqrt(Var)
y	1.891118	1.375179
e	1.227452	1.107904
u	0	0
Test : Var(u) = 0		
	chibar2(01)	0.00
	Prob > Chibar2	1,000

Source: Data Processing Output, 2025

Based on Table 2, the p-value is 1,000 (greater than 5%). If the probability value <0.05 then H_0 is rejected, then using a random effect model. If the probability value >0.05 then H_0 is accepted, then using a common effect model. Thus, the selected model is the Command Effect Model. Based on the results of the Chow Test and LM Test, the best model in this study is the Command Effect Model.

Panel Data Regression Analysis Command Effect Model

Table 3. Results of Panel Data Regression Analysis

Source	SS	df	MS	Number of obs = 90		
Model	69.0817834	4	17.2704	F (4, 85) = 14.79		
Residual	99.227703	85	1.16738	Prob > F = 0.0000		
Total	168.309486	89	1.89112	R-squared = 0.4104		
				Adj R-squared = 0.3827		
				Root MSE = 1.0805		
Variables	Coefficient	Std. Error	t-Statistics	P-Value	(95% Conf. Interval)	
x1	-0.1692008	0.0763083	-2.22	0.029	0.3209222	0.0174794
x2	-0.1562114	0.0783479	-1.99	0.049	0.3119879	0.0004349
x3	0.0608981	0.0101114	6.02	0.000	0.0407939	0.0810023
x4	0.0898981	0.0591435	1.52	0.132	0.0276949	0.2074912
_cons	1.849442	0.6304979	2.93	0.004	0.5958437	3.103041

Source: Data Processing Output, 2025

Y=1.849442 - 0.1692008 X1 – 0.1562114

(0.004) (0.029) (0.049) (0.000) (0.132)

(0.630) (0.076) (0.078) (0.010) (0.059)

F_{count}= 14.84

R^2= 0.3827

Information:

Y = Female Unemployment (years)

X1 = Education (years)

X2 = Age (years)

X3 = Regional Minimum Wage (year)

X4 = Inflation (percent)

ε = error term

Classical Assumption Test

1) Multicollinearity Test

Table 4. Multicollinearity Test Results

Variables	VIF	1/VIF
x3	3.76	0.265694
x2	3.01	0.332246
x1	1.37	0.731862
x4	1.21	0.829747
Mean VIF	2.34	

Source: Data Processing Output, 2025

Based on Table 4, the VIF value of X1 is 1.37, X2 is 3.01, X3 is 3.76, X4 is 1.21. The four variables have VIF values that are smaller than 10. This means that the regression model and the three independent variables in this study do not contain symptoms of multicollinearity.

2) Heteroscedasticity Test

Table 5. Results of Heteroscedasticity Test with the Breusch-Pagan Method

Breush-Pagan/Cook-Weisberg test for heteroskedasticity
Ho : Constant variance
Variables : fitted values of x1
chi2 (1) = 0.00
Prob > chi2 = 0.9603

Source: Data Processing Output, 2025

Based on Table 5, the probability value is greater than 0.05, indicating that the Breusch-Pagan test results show no symptoms of heteroscedasticity in the model.

Simultaneous Influence of Education, Age, Regional Minimum Wage, and Inflation on Female Unemployment

The F-test was conducted to assess the feasibility of the multiple linear regression model as an analytical tool to examine the joint effect of the independent variables on the dependent variable. The simultaneous significance of the model was tested using the F-statistic.

The results show that the calculated F-value is 14.84, which is greater than the critical F-value of 2.48. Additionally, the probability value is 0.000, which is less than 0.05. This indicates that the null hypothesis (H_0) is rejected, meaning that education, age, regional minimum wage (RMW), and inflation simultaneously have a significant effect on female unemployment in the regencies/cities of Bali Province.

The R-squared value from Table 3 is 0.3827, which means that approximately 38.27% of the variation in female unemployment can be explained by the independent variables (education, age, RMW, and inflation), while the remaining 61.73% (100% – adjusted R^2) is explained by other variables not included in this model.

Partial Influence of Education, Age, Regional Minimum Wage, and Inflation on Female Unemployment

The partial test (t-test) is a regression analysis technique used to determine the individual effect of each independent variable on the dependent variable, assuming

other variables are held constant. This test is essential for evaluating whether each independent variable has a statistically significant effect on the dependent variable in the regression model. The t-test was conducted with a 95% confidence level ($\alpha = 0.05$), and degrees of freedom df = (n – k) = (90 – 5), yielding a critical t-value of 1.99. The t-test was based on the best-fit model previously selected. The partial effects of the independent variables on the dependent variable are as follows:

a) Education (X_1): The beta coefficient for education is -0.16. This implies that a one year increase in education is associated with a decrease in female unemployment by 0.16 units, and vice versa. The t-test result shows a t-statistic of 0.16 < t-table 1.99, with a significance value of 0.028 < 0.05. Therefore, H_0 is rejected and H_a is accepted, indicating that education has a significant effect on female unemployment in the regencies/cities of Bali Province.

b) Age (X_2): The beta coefficient for age is -0.15. This indicates that a one-year increase in age reduces female unemployment by 0.15 units. The t-test shows a t-statistic of 0.15 < t-table 1.99 and a significance value of 0.049 < 0.05. Thus, H_0 is rejected and H_a is accepted, meaning that age has a significant effect on female unemployment in the regencies/cities of Bali Province.

c) Regional Minimum Wage (X_3): The beta coefficient for the regional minimum wage is 0.06. This means that a one-year increase in the RMW is associated with an increase in female unemployment of 0.06 units. The t-test yields a t-statistic of 0.06 < t-table 1.99 and a significance value of 0.000 < 0.05. Therefore, H_0 is rejected and H_a is accepted, indicating that the regional minimum wage has a significant effect on female unemployment in the regencies/cities of Bali Province.

d) Inflation (X_4): The beta coefficient for inflation is 0.08. This suggests that a 1% increase in inflation leads to a 0.08% increase in female unemployment. However, the t-test result shows a t-statistic of 0.08 < t-table 1.99 and a significance value of 0.132 > 0.05. Thus, H_0 is accepted and H_a is rejected, meaning that inflation does not have a statistically significant effect on female unemployment in the regencies/cities of Bali Province.

Discussion

Partial Effect of Education on Female Unemployment in Regencies/Cities of Bali Province

The test results indicate that education has a negative and significant effect on female unemployment in the regencies/cities of Bali Province. This finding suggests that the level of education significantly influences the female unemployment rate. The

higher the level of education attained by women, the greater their opportunities to obtain employment or create self-employment. This may be due to increased skills, knowledge, access to information, and wider professional networks gained through education. Furthermore, higher education also opens access to the formal sector, which tends to be more stable and has recruitment criteria based on academic qualifications.

These findings align with Human Capital Theory, which views education as an investment in human resources to enhance productivity, skills, and knowledge. With higher education, women have better abilities, which increase their competitiveness in the labor market. This result directly supports previous studies that found education significantly reduces female unemployment.

This research is consistent with the findings of Ari Pieter Runturambi et al. (2024), which revealed that education level and economic growth have a partially negative and significant effect, while population size has a positive but insignificant effect on the open unemployment rate in Manado City. Similarly, research by Ira Dwi Radila et al. (2021), using a quantitative approach and multiple linear regression (OLS) through SPSS, found that economic growth (GRDP) and education negatively and significantly affect unemployment, while poverty does not have a significant effect.

Partial Effect of Age on Female Unemployment in Regencies/Cities of Bali Province (2014–2023)

The results show that age has a negative and significant effect on female unemployment. This indicates that as women grow older, the likelihood of being unemployed tends to decrease. With age, women generally gain more work experience, develop broader social networks, and acquire refined skills, increasing their chances of remaining in the labor market.

Women in more mature productive age groups have often passed through transitional phases such as education, marriage, or early childcare, allowing them to focus more on stable employment. In contrast, younger women are often still exploring career identities, lack experience, and are more vulnerable to structural or frictional unemployment. In Bali, cultural factors and domestic responsibilities also play a role, with older women perceived as being better able to manage dual roles in work and household.

This finding supports the concept of age as explained by Iswantoro and Anastasia (2013), which states that age influences physical condition and a person's ability to engage in activities, including work. Within the productive age range (15–60

years), individuals, including women, are considered to have ideal working capacity. The older the individual within this range, the more likely they are to achieve better income and job stability, depending on their occupation (Cahyono, 1998).

This is consistent with research by Laksmitha Dewi and Dewi (2023), who used multiple linear regression with a sample of 90 female informal sector workers. Their results showed that age has a negative and significant effect on income, indicating lower unemployment among older women. Similar results were found by Hasbianur (2024), who reported that the number of individuals in the productive age group had a negative and significant effect on open unemployment in West Java Province from 2012 to 2021.

Partial Effect of Regional Minimum Wage on Female Unemployment in Regencies/Cities of Bali Province (2014–2023)

The findings indicate that the regional minimum wage (RMW) has a positive and significant effect on female unemployment. This implies that the higher the RMW set, the more likely female unemployment will increase. This may occur because rising labor costs compel companies to reduce their workforce or delay hiring—especially for groups perceived as having lower productivity or higher risks, such as women. Agustina et al. (2023) confirmed that minimum wages positively and significantly affect national unemployment.

These results are consistent with Labor Demand Theory, which states that when wages rise, labor demand tends to decrease unless accompanied by increased productivity. In this case, RMW hikes may push companies to reduce their workforce, thereby increasing unemployment, especially among women.
This aligns with findings by Dian Ayu Lestari et al. (2023), whose partial test results showed that the labor force had a positive influence and education had a negative but insignificant effect on open unemployment in East Java. Conversely, RMW had a positive and significant effect, indicating that higher minimum wages tend to raise unemployment levels. Similarly, research by Muhammad Abdi et al. (2024) revealed that the number of poor people had a positive and significant effect, the Human Development Index had a negative and significant effect, while RMW also had a positive and significant effect indicating that increasing minimum wages led companies to reduce their workforce.

Partial Effect of Inflation on Female Unemployment in Regencies/Cities of Bali Province (2014–2023)

The analysis results show that inflation has a positive but insignificant effect on female unemployment in Bali. This result contradicts the theoretical framework and previous studies. Although there is a tendency for rising inflation to be followed by an increase in female unemployment, the influence is not statistically significant.

This finding contrasts with the Phillips Curve Theory, which suggests a negative relationship between inflation and unemployment in the short term. According to this theory, rising inflation typically lowers unemployment as increased demand for goods and services encourages companies to expand production and hire more labor.

Supporting this study, Endang et al. (2023) concluded that inflation had a positive but insignificant effect on open unemployment in East Java. Likewise, Putri Sari M.J. Silaban et al. (2020) found that while GRDP had a negative and significant effect on open unemployment in North Sumatra Province, inflation had a positive but insignificant effect, implying that inflation does not substantially affect unemployment.

CONCLUSION

1. Education, age, regional minimum wage (RMW), and inflation have a simultaneous and significant effect on female unemployment in the regencies/cities of Bali Province.
2. Education and age have a negative and significant effect on female unemployment in the regencies/cities of Bali Province.
3. The regional minimum wage (RMW) has a positive and significant effect on female unemployment in the regencies/cities of Bali Province.
4. Inflation has a positive but insignificant effect on female unemployment in the regencies/cities of Bali Province.

REFERENCES

Abdi, M., Zai, B., Siregar, F. A., & Sihombing, R. (2024). Pengaruh jumlah penduduk miskin, IPM dan UMR terhadap TPT di Provinsi Sumatera Utara periode 2011–2020. Jurnal Ilmiah Ekonomi dan Manajemen, 2(12), 205–216. https://doi.org/10.61722/jiem.v2i12.3090

Adhitya Wardhana, B. K. (2021). Determinan Tingkat Pengangguran Antar Provinsi Di Indonesia. E-Jurnal Ekonomi Dan Bisnis Universitas Udayana , 241-250.

Adyaksa, F. F. (2020). Analisis Faktor-Faktor Yang Mempengaruhi Pengangguran Terdidik di Indonesia Tahun 2018. Jurnal Ilmiah, 3-10.

Agustina, C. D., Putri, L. S., & Hasanah, U. (2023). Unemployment in Indonesia: An Analysis of the Role of Minimum Wage and Economic Growth. Jurnal Ekonomi Pembangunan, 24(2), 145–158.

Aini, A. N. (2023). Analisis Pengaruh Inflasi, Investasi, dan PDB Terhadap Tingkat Pengangguran di Indonesia Periode 1991-2021 (Doctoral dissertation, Universitas Islam Indonesia).

Alamsyah, I. F., Esra, R., Awalia, S., & Nohe, D. A. (2022). Analisis regresi data panel untuk mengetahui faktor yang memengaruhi jumlah penduduk miskin di Kalimantan Timur. Prosiding Seminar Nasional Matematika, Statistika, Dan Aplikasinya, 254–266.

Anak Agung Istri Diah Nindyaswari, M. H. (2024). Analysis Of Decisions Of Decisions Of Unemployed Female Workers In The Informal Sector In Denpasar City. Economics, Commerce, and Management, 178-212.

Apriandi, A., & Arindi, D. N. (2023). Analisis pengaruh jumlah penduduk, penduduk usia sekolah, dan pertumbuhan ekonomi terhadap pengangguran di Provinsi Sumatera Utara. Jurnal Simki Economic, 6(1), 100–109. https://jiped.org/index.php/JSE

Ari Pieter Runturambi, Tri Oldy Rotinsulu, Audie O. Niode. (2024). Pengaruh Tingkat Pendidikan, Jumlah Penduduk dan Pertumbuhan Ekonomi terhadap Tingkat Pengangguran Terbuka di Kota Manado periode 2011-2022. Jurnal Berkala Ilmiah Efisiensi. Volume 24 No. 2

Aryanti, S., Hartati, H., Destriana, D., Victorian, A. R., Setiyo, E., Nanda, F. A., & Motik, D. (2023). Assistance using mobile learning applications to improve skills physical education teacher in the 4.0 era. Jurnal Maenpo: Jurnal Pendidikan Jasmani Kesehatan Dan Rekreasi, 13(2), 188.

Astuti, I. P. (2023). Determinan Pengangguran di Indonesia: Studi Kasus Data IFLS. Ekonomi Pembangunan, 1-11.

Badan Pusat Statistik Provinsi Bali. (2024). Kondisi umum ketenagakerjaan Provinsi Bali menurut jenis kelamin, 1995–2024. Diakses pada 16 Januari 2025, https://bali.bps.go.id/id/statistics-table/1/NDQjMQ==/kondisi-umum-ketenagakerjaan-provinsi-bali-menurut-jenis-kelamin-1995-2023.html

Becker, G. S. (1964). Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education. University of Chicago Press.

Baltagi, B. H. (2008). Econometric Analysis Of Panel Data. John Wiley & Sons Ltd., Chichester.

Birgitta, Claribel and Nurman Setiawan Fadjar,, SE, M.Sc (2021) Analisis Pengaruh Tpak, Pengangguran, Upah Bersih, Dan Pendidikan Terhadap Penyerapan Tenaga Kerja Sektor Informal Di Indonesia Tahun 2015–2020. Sarjana thesis, Universitas Brawijaya.

Basuki, A. T. (2021). Analisis data panel dalam penelitian ekonomi dan bisnis (dilengkapi dengan penggunaan EViews). Yogyakarta: Katalog Dalam Terbitan (KDT)

Cahyono, S. A. (1998). Karakteristik Sosial Ekonomi yang Mempengaruhi Pendapatan Rumah Tangga Penyadap Getah Pinus di Desa Somagede, Kebumen, Jawa Tengah. Jurnal UGM.

Damayanti, R.M. (2023). Analisis Faktor-Faktor Yang Mempengaruhi Lama Waktu Memperoleh Pekerjaan Di Indonesia. Journal of Development Economic and Social

Studies. Volume 02, Number 2, Pages 453-462. Universitas Brawijaya. http://dx.doi.org/10.21776/jdess.2023.02.2.20

Dewi, A. K., Septiani, R. E., Rahmah, S., Aini, S. S. Q., & Dewantara, G. F. (2025). Pengaruh Pendidikan Perempuan terhadap Kemiskinan di Indonesia: The Impact of Women's Education on Poverty in Indonesia. Economic and Education Journal (Ecoducation), 7(1), 137-148.

Dewi, M. A. L., & Dewi, N. P. M. (2023). Pengaruh umur, pendidikan dan jumlah tanggungan keluarga terhadap pendapatan pekerja perempuan sektor informal di Kota Denpasar. E-Jurnal Ekonomi Pembangunan Universitas Udayana.

Dinda Amalia Faramadina, N. S. (2022). Analisis Faktor – Faktor Yang Mempengaruhi Pengangguran Terdidik Lulusan Perguruan Tinggi Jawa Timur. Contemporary Studies In Economic, Finance And Banking, 557-570.

E. Arli, Y. N. (2023). The Effect of Maritime Tourism on the World Female Unemployment Rate:A Study on the Cruise Sector. Maritime Research, 25-35.

Endang, E., Astuti, H., Ulandari, S. A., & Agustin, W. (2023). Pengaruh Inflasi dan Pertumbuhan Ekonomi Terhadap Tingkat Pengangguran Terbuka di Provinsi Jawa Timur. Jurnal Mirai Management, 8(3).

Faktor-Faktor, A., Mempengaruhi, Y., Perempuan, P., Ayu, I., Saskara, N., & Kaluge, D. (n.d.). Analisis Faktor-Faktor yang Mempengaruhi Perempuan Ayu dan Kaluge.

Frida Yulinda, Z. H. (2020). Tingkat Pengangguran Terbuka Perempuan Di Kabupaten Subang. Administrasi Publik, 57-66.

Ghozali, Imam. 2016. Aplikasi Analisis Multivariate dengan Program IBM SPSS 23 (Edisi 8). Cetakan ke VIII, Semarang: BP Universitas Diponegoro. Semarang.

Gregory, Mankiw, dkk. 2008. Pengantar Ekonomi Makro. Jakarta: Salemba Empat.

Idris, H. A. (2016). Pengantar ekonomi sumber daya manusia. Deepublish.

Imanto, R., Panorama, M., & Sumantri, R. (2020). Pengaruh Pengangguran dan Kemiskinan terhadap Pertumbuhan Ekonomi di Provinsi Sumatera Selatan. Al-Infaq: Jurnal Ekonomi Islam, 11(2), 118-139.

Iswantoro, C., & Anastasia, N. (2013). Hubungan Demografi, Anggota Keluarga dan Situasi dalam Pengambilan Keputusan Pendanaan Pembelian Rumah Tinggal Surabaya. Jurnal Finesta, 1(2), 124-129.

Kadek Desy Puspita Dewi, N. D. (2023). Analisis Faktor-Faktor Yang Mempengaruhi Pertumbuhan Ekonomi Dan Tingkat Pengangguran Terbuka Di Indonesia . E-Jurnal Ekonomi Dan Bisnis Universitas Udayana , 1427-1442.

Kurniawan, A. W. (2012) 'Aplikasi Sistem Pendukung Keputusan Penentuan Harga Pokok Penjualan HPP Dengan Metode Average', Techno.com, 11, pp. 12–17.

Kodrat, D. S. (2007). Analisis Akumulasi Modal Manusia Dengan Tingkat Partisipasi Angkatan Kerja Dan Tingkat Partisipasi Sekolah Untuk Peningkatan Daya Saing Daerah Studi Kasus Di Propinsi Jawa Timur. EKUITAS (Jurnal Ekonomi Dan Keuangan), 11(3), 293– 320

Lestari, D. A., & Anam, M. S. (2023). Pengaruh Angkatan Kerja, Upah Minimum Regional, Dan Pendidikan Terhadap Tingkat Pengangguran Terbuka Provinsi Jawa Timur. JPEP (Jurnal Progres Ekonomi Pembangunan), 8(1), 1-11.

Majid, F., & Retno Handayani, H. (2012). Faktor-Faktor Yang Mempengaruhi Keputusan Perempuan Berstatus Menikah Untuk Bekerja (Studi Kasus Kota

Semarang). Diponegoro Journal Of Economics, 1(1), 242-250. https://doi.org/10.14710/djoe.410
Makarti, P. P., & Karim, A. (2021). Perbandingan metode ordinary least square (OLS) dan metode regresi robust pada hasil produksi padi di Kabupaten Indramayu. Seminar Nasional Pendidikan, Sains dan Teknologi Fakultas Matematika dan Ilmu Pengetahuan Alam Universitas Muhammadiyah Semarang, 219-223
Marliana, L. (2022). Analisis pengaruh indeks pembangunan manusia, pertumbuhan ekonomi dan upah minimum terhadap tingkat pengangguran terbuka di Indonesia. Ekonomis: Journal of Economics and Business, 6(1), 87-91.
Meyvi Rine Mirah, Paulus Kindangen, Ita Pingkan F. Rorong (2020) Pengaruh Tingkat Pertisipasi Angkatan Kerja Terhadap Pertumbuhan Ekonomi dan Kemiskinan di Provinsi 86 Sulawesi Utara. Jurnal Pembanguan Ekonomi dan Keuangan Daerah. Vol.21 No.1 (2020).
Mouren, V., Lapian, A. L. C. P., & Tumangkeng, S. Y. L. (2022). Pengaruh tingkat pendidikan, pertumbuhan ekonomi, dan jumlah penduduk terhadap pengangguran di Kabupaten Toraja Utara. Jurnal Berkala Ilmiah Efisiensi, 22(5), Universitas Sam Ratulangi.
Mulyadi, S. (2014). Ekonomi Sumber Daya Manusia Dalam Perspektif Pembangunan. Jakarta: Raja Grafindo Persada.
Napitupulu, B., Damanik, J. F., & Sitompul, R. (2021). Pengujian asumsi klasik pada model regresi linear: Uji multikolinieritas dan heteroskedastisitas. Unpam Open Journal of Business & Technology, 5(2), 115–130.
Notoatmodjo, S. (2003). Pengembangan Sumber Daya Manusia. PT Rineka Cipta.
Noviatamara, A., Ardina, T., & Amalia, N. (2019). Analisis Pengaruh Pertumbuhan Ekonomi dan Tingkat Pengangguran Terbuka di Daerah Istimewa Yogyakarta. Jurnal REP (Riset Ekonomi Pembangunan), 4(1), 53-60.
Novriesco Aichiro Halomoan, P. A. (2023). Peran Perempuan Terhadap Tingkat Pengangguran Di Kabupaten/Kota Provinsi Bali. E-Jurnal Ekonomi Pembangunan Universitas Udayana, 717-724.
Nurafny Indrawati, Lidiae Lidiae, & Alexandra Hukom. (2024). Pengangguran Usia Muda dan Terdidik di Kalimantan Tengah. Jurnal Inovasi Ekonomi Syariah Dan Akuntansi, 1(3), 11–22.
Ochsen, C. (2020). Dynamik der Arbeitslosenquote unter Berücksichtigung formaler Qualifikation und Alter. Zukünftige Arbeitswelten: Facetten guter Arbeit, beruflicher Qualifizierung und sozialer Sicherung, 97-116.
Prakoso, E. S. (2021). Analisis pengaruh tingkat pendidikan, upah minimum, inflasi dan investasi terhadap tingkat pengangguran di indonesia periode 2010-2019 (Doctoral dissertation, Universitas Brawijaya).
Pasuria, S., & Triwahyuningtyas, N. (2022). Pengaruh angkatan kerja, pendidikan, upah minimum, dan produk domestik bruto terhadap pengangguran di Indonesia. SIBATIK JOURNAL: Jurnal Ilmiah Bidang Sosial, Ekonomi, Budaya, Teknologi, dan Pendidikan, 1(6), 795–808. https://doi.org/10.54443/sibatik.v1i6.94
Prawoto, N. (2019). Pengantar Ekonomi Makro. Depok: PT Raja Grafindo Persada.
Putong, Iskandar. 2013. Economics: Pengantar Mikro dan Makro. Edisi Kelima. Jakarta: Mitra Wacana Media

Putri, A. D., & Setiawina, D. (2013). Pengaruh umur, pendidikan, pekerjaan terhadap pendapatan rumah tangga miskin di Desa Bebandem. E-Jurnal Ekonomi Pembangunan Universitas Udayana, 2(4), 44604.

Radila, I. D., Priana, W., & Wahed, M. (2021). Analisis pengaruh pertumbuhan ekonomi, pendidikan, dan kemiskinan terhadap pengangguran di Provinsi Bali. Jurnal Syntax Admiration, 2(6), Sosial Teknik.

Rahmawati, Y., Izzati, R. N., & Luthfiyyah, F. N. (2024). Pengaruh Tingkat Partisipasi Angkatan Kerja, Indeks Pembangunan Manusia, dan Upah Minimum terhadap Pengangguran di Banten. Independent: Journal of Economics, 4(3), 49-59.

Romy Rizki Hasbianur, (2024) Pengaruh Upah Minimum Provinsi dan Jumlah Penduduk Usia Produktif terhadap Tingkat Pengangguran Terbuka di Provisi Jawa Barat 2012 – 2021. Bachelor thesis, S1 Ekonomi Syariah IAIN Syekh Nurjati.

Sadono Sukirno, Ekonomi Pembangunan: Proses, Masalah, dan Dasar Kebijakan, (Jakarta: Prenada Media Group, 2006), hal. 328

Salsabila, S. I., Nabila, S., Rianti, R. A., Priyoga, D., & Sujianto, A. E. (2024). Pengaruh upah minimum dan tingkat partisipasi angkatan kerja terhadap tingkat pengangguran terbuka di Jawa Timur periode 2018-2022. Journal of Administrative and Social Science, 5(1), 92-107

Setiawan, D. R. (2024). Implementasi regresi panel dalam analisis pengaruh partisipasi wanita di Indonesia terhadap pengangguran pasca pandemi COVID-19. Jurnal Bayesian: Jurnal Ilmiah Statistika dan Ekonometrika, 4(1), 6-19

Shaari, Shahidan, Mohd Ermawati Hussain, Mohd Suberi bin Ab. Halim (2012). The Impact of Foreign Investmen on The Unemployment Rate and Economic Growth in Malaysia, Journal of Applied Sciences Reaserch, vol. 8

Sidabutar, M. A. R., & Putri, N. T. (2024). Pengaruh Pendidikan, Ump, Inflasi, Dan Investasi Terhadap Tingkat Pengangguran Di Indonesia. Jurnal Cita Ekonomika, 18(2), 76-85.

Silaban, P. S. M., Sembiring, I. P. S. B., & Sitepu, V. A. B. (2020). Analisis Pengaruh PDRB dan Inflasi terhadap Pengangguran Terbuka di Sumatera Utara Periode 2003-2019. Jurnal Ilmiah Ekonomi Global Masa Kini, 11(2), 127-132.

Silaban, P. S. M., & Siagian, S. J. (2021). Pengaruh Inflasi Dan Investasi Terhadap Tingkat Pengangguran Terbuka Di Indonesia Tahun 2002-2019. Jurnal Niagawan, 10(2).

Simanjuntak, P. J. (2001). Pengantar Ekonomi Sumber Daya Manusia. Jakarta: Lembaga Penerbit Universitas Indonesia.

Simanjuntak, Payaman J. 2005, Ekonomi Sumber Daya Manusia. Jakarta: Fakultas Ekonomi Universitas Indonesia.

Sugiyono. (2007). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta.

Sugiyono. (2017). Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Bandung: Alfabeta.

Sugiyono. (2018). Metode Penelitian Kuantitatif, Kualitatif dan R&D. Alfabeta.

Sukirno, Sadono. 2008. Makro Ekonomi Modern. Jakarta: PT. Raja Grafindo Pestada.

Sukirno, S. (2006). Makro Ekonomi Teori Pengantar, PT. Raja Grafindo, Jakarta.

Sukirno, S. (2010). Ekonomi Pembangunan: Proses, Masalah, dan Dasar Kebijakan. Jakarta: Kencana.
Sukiro, Sadono. (2013). Makroekonomi Teori Pengantar. PT Raja Grafindo Persada.
Sukirno, S. (2016). Makroekonomi Teori Pengantar, Edisi Ketiga. Jakarta: PT Raja Grafindo Persada.
Swarsih, C., Junaidi, J., & Rosmeli, R. (2020). Pengaruh umur, pendidikan, upah, keterampilan, dan jenis kelamin terhadap lama mencari kerja bagi pekerja terdidik di Kota Jambi. e-Jurnal Ekonomi Sumberdaya dan Lingkungan, 9(1), 1-12.
Sziraczki, G. & Reerink, A. (2004). Transisi Dari Sekolah Menuju Dunia Kerja di Indonesia. Jakarta: ILO.
Todaro, M. P. dan S. S. C. (2003). Pembangunan Ekonomi di Dunia Ketiga. Erlangga.
Widarjono, A. (2007). Ekonometrika Teori Dan Aplikasi Untuk Ekonomi Dan Bisnis. Ekonisia Fe Uii.
Yulinda, F., Hirawan, Z., & Ma'ruf, K. (2021). Tingkat Pengangguran Terbuka Perempuan Di Kabupaten Subang. Jurnal Administrasi Publik, 12(1).
Yildirim, Z. (2014). The Unemployment Rate and Labor Force Participation Rate Nexus for Female: Evidence from Turkey. Economics and Finance, 139-146.
Zeb, M. S. (2018). Determinant of Economic Stability through Female Unemployment: Evidence from Pakistan. Financial Management and Economics, 46-52.