

Unemployment In The Two Decades Of Post-Reform (Study Cases in the West Java Province, 2002 – 2022)

Harri Ramdhani^{a*}, Rohadin^b

^{a*} Central Bureau of Statistics Cirebon
Regency, Indonesia, harri@bps.go.id

^b 17 Agustus 1945 University, Cirebon, Indonesia, rohadin17845@gmail.com

Editor-in-Chief: Yudhi Mahmud



Publisher: Universitas Wiralodra

To cite this article:

Ramdhani, H., Rohadin, R. (2025). Unemployment In The Two Decades Of Post-Reform (Study Cases in the West Java Province , 2002 – 2022). *Gema Wiralodra*, 16(1), 43 – 54.

To link to this article:

<https://gemawiralodra.unwir.ac.id/index.php/gemawiralodra/issue/view/34>

Published by:

Universitas Wiralodra

Jln. Ir. H. Juanda Km 3 Indramayu, West Java, Indonesia

Unemployment In The Two Decades Of Post-Reform (Study Cases in the West Java Province , 2002 – 2022)

Harri Ramdhani^{a*}, Rohadin^b

^{a*} Central Bureau of Statistics Cirebon Regency, Indonesia, harri@bps.go.id

^b 17 Agustus 1945 University, Cirebon, Indonesia, rohadin17845@gmail.com

*Correspondence: harri@bps.go.id ; ramdhaniharri02@gmail.com

Abstract

Objective study This is For analyze factors that influence the Open Unemployment Rate in West Java in term long (for 20 years) namely post reform until moment this . While background behind study This is For to reveal phenomenon unemployment educated , namely phenomenon height level unemployment that is not caused by the level low education . Phenomenon This show level unemployment the more tall precisely when level education the more high . Research done with method analysis quantitative that is with analysis regression multiple . In simultaneous (F test), variable free researched that is Regional Minimum Wage (UMR), Rate Growth Economy (LPE), Number of Workforce (AK) and Average Length of Schooling (RLS) have an influence to variable bound (Open Unemployment Rate /TPT). However in a way partial (T-test), only There is two influential variables in a way significant to the Open Unemployment Rate (TPT), namely Number of Workforce (AK) and Average Length of Schooling (RLS). Variables Number of Workforce own Beta coefficient is negative which means the more high Labor Force (AK) then the more low Open Unemployment Rate (TPT). On the other hand , the Average Years of Schooling (RLS) variable shows number positive which means the more tall The Average Length of Schooling (RLS) figure then the Open Unemployment Rate (TPT) continues to rise. Research results This to reveal phenomenon unemployment educated people that occur in Indonesia.

Keywords: Open Unemployment Rate (TPT), Regional Minimum Wage (UMR), Growth Rate Growth Economy (LPE), Number of Workforce (AK), Average Length of Schooling (RLS).

1. Introduction

Already a quarter century or two twenty five years more of this country experience a the event that is called with Reformation 98. According to Dictionary Big Indonesian Dictionary (KBBI), reform is change in a way drastic For repair (field social , political , or religious) in a public or country. According to Sugono , 2008, reform is change in a way drastic For improvements in a public or country. (Sudarsih, 2018) In general line big , reform can interpreted as update . Since reform until moment this , many changes that occurred in Indonesia, including in structure and pattern absorption power Work . (Asmara, 2023) Study This aiming For know factors what is it significant influence level unemployment in West Java during two decade post reform until moment This .

Since the reform era (early year 2000) to moment this , unemployment become problems that are not visit found the solution . In the era of the new order new , government enforce policy congested work For absorb power work to suppress number unemployment . (Rahmawati, 2022) However along the walk time , pattern project congested work start abandoned Because economy demand implementation implementation system capital intensive . In literacy , in matter absorption power work , pattern congested work contradictory with capital intensive . capital intensive work is a scale activity production Where amount factor production power Work more big compared to factor capital production , whereas capital intensive is a activity production Where amount factor more capital production big compared to factor production power Work .(Purba, 2020) System promising capital intensive growth

economy This it is said make height level unemployment , is it true? so ? Then What That unemployment ? According to Sadoon Sukirno (1994), unemployment is a the circumstances in which a person belongs in force Work want to get work but Not yet can get it . While According to book Macroeconomics Theory , Problems and Policies , Muana Ngana (2001), unemployment is as a condition Where someone who is included in category force Work No own work and in active currently look for work .(Prakoso, 2020)

There are many factors that can become reason the occurrence unemployment , including is at least field available work , inequality distribution field work in urban and rural areas , lack of the expertise of the seekers work , the difficulty get information vacancy work , and lack of training For increase soft skills the seekers Work . (Sejati, 2020) Besides factor cause , there are also influencing factors or determinant from level unemployment . Some theory about factors that influence level unemployment stated by experts . Among them is Theory Classic , Theory Keynesian , Theory Monetarist , Theory Structural , Theory Friction , Theory Cycle Business , and the Natural Rate of Unemployment Theory . (Basmar & Sugeng, 2020)

Theory Classic drip focus on the lack of request will power work , in other words, offers factor production power Work more big compared to with his request . Theory Keynesian almost The same with Theory Classic that is related market demand will power work , but request here is request in a way aggregate and government must increase expenditure to meet demand aggregate increased . The monetarist theory is more focus on factors inflation . Theory Structural to put forward that lack of skill power Work impact on the demand for labor market work . Theory Friction speak about transition between old job and job new . Theory Cycle Business say that unemployment happen Because fluctuation the economy that occurs in a way natural . While the latter is The natural rate of unemployment theory says that unemployment happen Because existence difference between minimum wage and level productivity . According to theory This is the solution offered is with increase productivity power work so that the minimum wage can be achieved improved without add unemployment . (Khodijah Ishak, 2018)

There are four variable free to enter to in the regression model and it is estimated influential on the Open Unemployment Rate (TPT). Variable First that is Regional/ Provincial Minimum Wage (UMR). Dimensions variable This is representation policy government in accommodate and bridge interest entrepreneurs and workers . (utomo, 2013).

Variables second that is Rate Growth Economy (LPE). Variables This own dimensions development economy in term time period research . Economic development Alone can interpreted as a multidimensional process involving changes big in structure social , attitude society and institutions national , such as as it is acceleration growth economy , reduction inequality and eradication poverty absolute (Todaro, 1988). (Lubis, 2017) Variables third that is Number of Labor Force (AK). Variable This dimensional very labor close the relation with problem unemployment That alone . The more many workforce , then request will field work is also increasing high . A very thing important according to power market theory Work is with high number of labor force so must balanced with provision field It's also a lot of effort not to happen unemployment . (Anshori & Suparta, 2018) Variables fourth or final is Average Number of Years of Schooling (RLS). Variable This dimensional education . Why education affect the level unemployment ? Education is A Components that Make Up Human Capital (HR) theory . According to Becker (Atmanti , 2005) human capital is that man No just source Power However is capital that produces returns and any expenses incurred in frame develop the quality and quantity of the capital is activity investment . Assumptions base human capital theory is that somebody can look for work and improve income through improvement education . Level of (Suaidah & Cahyono, 2013)community education can seen from Average Length of Schooling (RLS). (Johar, Suharno, & Istiqomah, 2022). Dimension education in

unemployment This will reveal one of a phenomenon in society called Unemployment Educated . (Pratomo, 2017)

Writer lift a number of variables that are empirical can measured and estimated influential to level unemployment in West Java during period time two decade (2002 – 2022). Variables the is Regional/ Provincial Minimum Wage , Rate Growth Economy , Number of Workforce and Average Length of Schooling . Secondary data related with variables the writer download from website official BPS both BPS RI/ central and the BPS of West Java Province . In period time research , case unemployment in West Java is experiencing decline (data attached) . This is Because a number of sector field business in West Java absorbs power Work with Enough well , among others sector industry and trade . With he did study this , writer want to know factors that determine the Open Unemployment Rate in term long that is during two decade post reform , from 2002 to 2022 in West Java Province.

2. Method

Methods used in study This is analysis quantitative with using time series data . While For types and methods data collection , research This using downloaded secondary data from official website of BPS both BPS Province West Java and BPS RI. This data in the form of serial data time (time series) owned by BPS in publication Province West Java in Figures and other relevant BPS publications with study .

Variables TPT bound is percentage amount unemployment to amount force work . BPS uses formula as following For calculate TPT:

$$\text{TPT} = \text{Total Unemployment} \times 100\% / \text{Total Labor Force}$$

High TPT show that there is Lots force work that is not absorbed in the labor market . For example : TPT is 6 percent , meaning from 100 inhabitants 15 years old to above available For produce goods and services (force) work) as many as 6 people are unemployment . Benefits from TPT calculation is can indicates the magnitude percentage force work included in unemployment .

Table 1.
List of Variables

| Code | Variable Name | Unit | Data source |
|-----------|-----------------------------|---------|---------------------------------|
| Variables | | | |
| TPT | Open Unemployment Rate | Percent | BPS Province West Java / BPS RI |
| UMP | Provincial Minimum Wage | Rupiah | BPS Province West Java / BPS RI |
| LPE | Rate Growth Economy | Percent | BPS Province West Java / BPS RI |
| AK | Workforce | Person | BPS Province West Java / BPS RI |
| RLS | Average Length of Schooling | Year | BPS Province West Java / BPS RI |

Variables free First, Provincial Minimum Wage is a minimum standards used by workers or perpetrator industry For give wages to its workers as determined by the governor. provincial minimum wage or this UMP valid throughout district / city in One province. This means that the value wages The same in One province .

Minimum Wage Formula in PP Number 51 of 2023 which includes 3 variables that is Inflation, Growth Economy , and Index Certain (symbolized in form α). Index Certain as meant determined by the Regional Wage Council with consider level absorption power work and average/median wages . Another thing that becomes consideration is relevant factors with

condition employment . Formula Calculation of UMP according to with Minister of Manpower Regulation Number 18 of 2022 is as following:

$$UM(t+1) = UM(t) + (UM \text{ Value Adjustment} \times UM(t))$$

| | |
|---------------------|---------------------------------------------|
| UM (t+1) | : The Minimum Wage that will calculated |
| UM(t) | : Minimum Annual Wage Walking |
| UM Grade Adjustment | : Inflation + (PE x α) |
| PE | : Growth Economy |
| α | : Contribution power Work to growth economy |

Variables free Second , Rate Growth Economy (LPE), is a indicator economy macro that describes how much Far success development a area in period time certain . Rate Number Growth Economy released by the Central Statistics Agency , with formula calculation as following :

$$R(t-1, t) = (PDRB_t - PDRB_{t-1}) / PDRB_{t-1} \times 100\%$$

Where R = level growth economy in unit percent (%); PDRB_t = Product Gross Regional Domestic (income) national real) in year t; PDB_{t-1} = Product Gross Regional Domestic (income) national real) in the year previously .

Variables free Third , the number of workers is resident age work (15 years) or more) who work , or have a job However temporary No working and unemployed . While those who are not including force Work is resident age work (15 years and more) who are still school , take care of House ladder or carry out activity other besides activity personal . Formula The number of the workforce calculated by BPS is as following :

$$\text{Labor Force} = \text{Working} + \text{Temporarily Not Working} + \text{Not Working/Unemployed}$$

Variables free fourth , Average Years of Schooling , is Average Years of Schooling (RLS) is defined as amount years used by the population in undergo formal education . Coverage The population calculated by RLS is resident 25 years old to above . RLS is calculated For 25 years old to on with assumptions on age 25 years education process Already ended . RLS calculation at age 25 years to above also follows the international standards used by UNDP . The formula RLS calculation by BPS is as following :

$$RLS = \frac{1}{n} \times \sum_{i=1}^n x_i$$

where : RLS = Average Length of Schooling Resident Age 25 years to on
 x_i : school years resident to -I who is 25 years old
N= Total resident 25 years old to on .

Of the four variable free and one variable bound said , the author use analysis regression multiple For know influence variable free to variable bound . Regression multiple give coefficient that can used For measure impact relatively every variable independent to variable dependent , good in form the magnitude influence and also direction (positive or negative). Regression double also more easy interpreted the result .

Form the equations are arranged is as following :

$$TPT = \beta_0 + \beta_1 UMP + \beta_2 LPE + \beta_3 AK + \beta_4 RLS + \varepsilon$$

Where

TPT = Open Unemployment Rate

UMP = Provincial Minimum Wage

LPE = Rate Growth Economy

AK = Labor Force

RLS = Average Length of Schooling

ε = Variable Disturbance

β_0 = Elemen Constant

$\beta_{1,2,3,4}$ = Coefficient Regression

For to obtain high validity from interpretation in the regression model used , the author perform a test of the model econometrics . As base analysis regression , especially formerly assumption test is carried out classic before statistical tests were conducted to results processed regression . Test assumptions classic aims to ensure that the estimates obtained with method *Ordinary Least Square* (OLS) complies Best Linear Unbiased Estimator (BLUE) requirements . Assumption test classic done in study This are Normality Test , Multicollinearity Test , Heteroscedasticity Test and Autocorrelation Test .

Normality Test aiming For know whether the residuals are studied normally distributed or no . Normality Test can done with the Kolmogorov-Smirnov test. The curve standardized residual value it is said spread normally when mark *asymptotic* . *Sig. (2 tailed)* more from alpha. (Suliyanto, 2005)

Multicollinearity Test done For avoid existence relatedness between endogenous and exogenous variables in equation . Multicollinearity Test can done with see mark from the Variance Inflation Factor (FIV) of each variable free to variable bound . If FIV value not more of 5, then the model does not there is multicollinearity . (Suliyanto, 2005)

Heteroscedasticity Test is one of the important tests in the classical linear regression model . This test is For know whether disturbance U_1 that appears nature homoscedastic , namely all disturbances that arise the have same variance . (Gujarati, 2003) Methods used For test happen or whether or not problem heteroscedasticity is Park Gleyser method . With method this , if the probability > the alpha value (0.05), then can ensure the model is not contain element heteroscedasticity . Symptoms heteroscedasticity This seen from number coefficient regression from each variable free to mark absolute residual (e). (Suliyanto, 2005)

Autocorrelation Test is a test for see correlation between member series observations compiled according to order time with symbol as following :

$$E(U_i U_j) = 0, i \neq j$$

For test whether results from study This there is serial correlation between member (*disturbance terms*), then used *Durbin Watson Statistics* (DW). The statistical formula is as following :

$$DW = 2 (1-p)$$

If p value = 0 then DW statistical value = 2 which means that No there is serial correlation between *disturbance terms*. And if p value = +1 will generate statistical DW as big as 4, this means there is positive serial correlation in a way perfect between *disturbance terms* . And if p value = -1 will produce DW value of 4 with perfect negative serial correlation between *disturbance terms* . (Arif, 1993)

Temporary for testing statistics F Test, T Test and Coefficient Test were conducted Determination (R^2). The F test is used For measure significance influence variable free with variable bound in a way together . The level of confidence used is 95%. (Supranto, 2005)

F value calculation obtained with formula :

$$F = \frac{R^2 / k}{(1 - R^2) / (N - k - 1)}$$

Information :

F = Calculated F value

n = The amount Observation

k = Amount Observed variables including intercept

Hypothesis : $H_0: \beta_1 = \beta_2 = \beta_3 = \beta_4 = 0$, meaning No There is influence from all over variable free

to variable bound .

$H_1: \beta_1 = \beta_2 = \beta_3 = \beta_4 \neq 0$, meaning there is influence from variable free to variable bound .

Whereas For test influence variable free in a way partial to variable bound used t test with level 95% confidence ($\alpha = 0.05$). The (Supranto, 2005) calculated t value got with formula :

$$t_{obs} = \frac{b_j}{sb_j}$$

Information :

t_{obs} = Size t_{count} coefficient regression partial

b_j = Coefficient regression independent variable

Sb_j = Error standard coefficient from b_j

Hypothesis :

$H_0: b_j = 0$, meaning variable independent No own influence to variable dependent

$H_1: b_j \neq 0$, meaning variable independent own influence to variable dependent

For criteria the test is as following :

H_0 is accepted and H_1 is rejected, if

$t_{obs} < t_{table}$ or $-t_{obs} > -t_{table}$

H_0 is rejected and H_1 is accepted, if

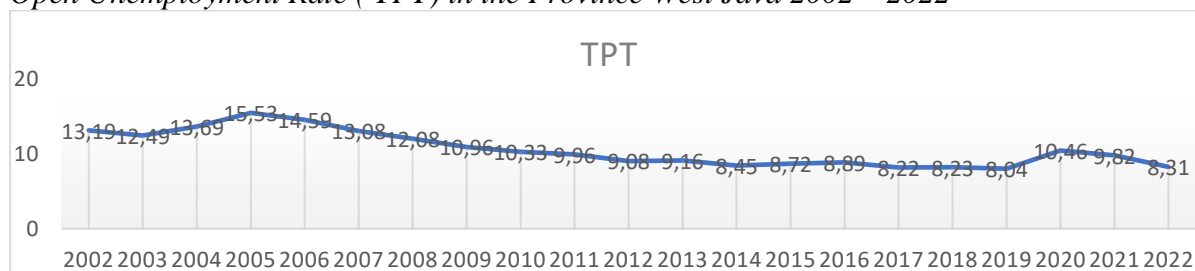
$t_{obs} > t_{table}$ or $-t_{obs} < -t_{table}$

3. Results and Discussion

Description General Research Results

Following This is description general regarding the Open Unemployment Rate (TPT), Provincial Minimum Wage (UMP), Growth Rate Growth Economy (LPE), number of Workforce (AK) and Average Length of Schooling (RLS) during two decades (2002 – 2022) in the Province West Java .

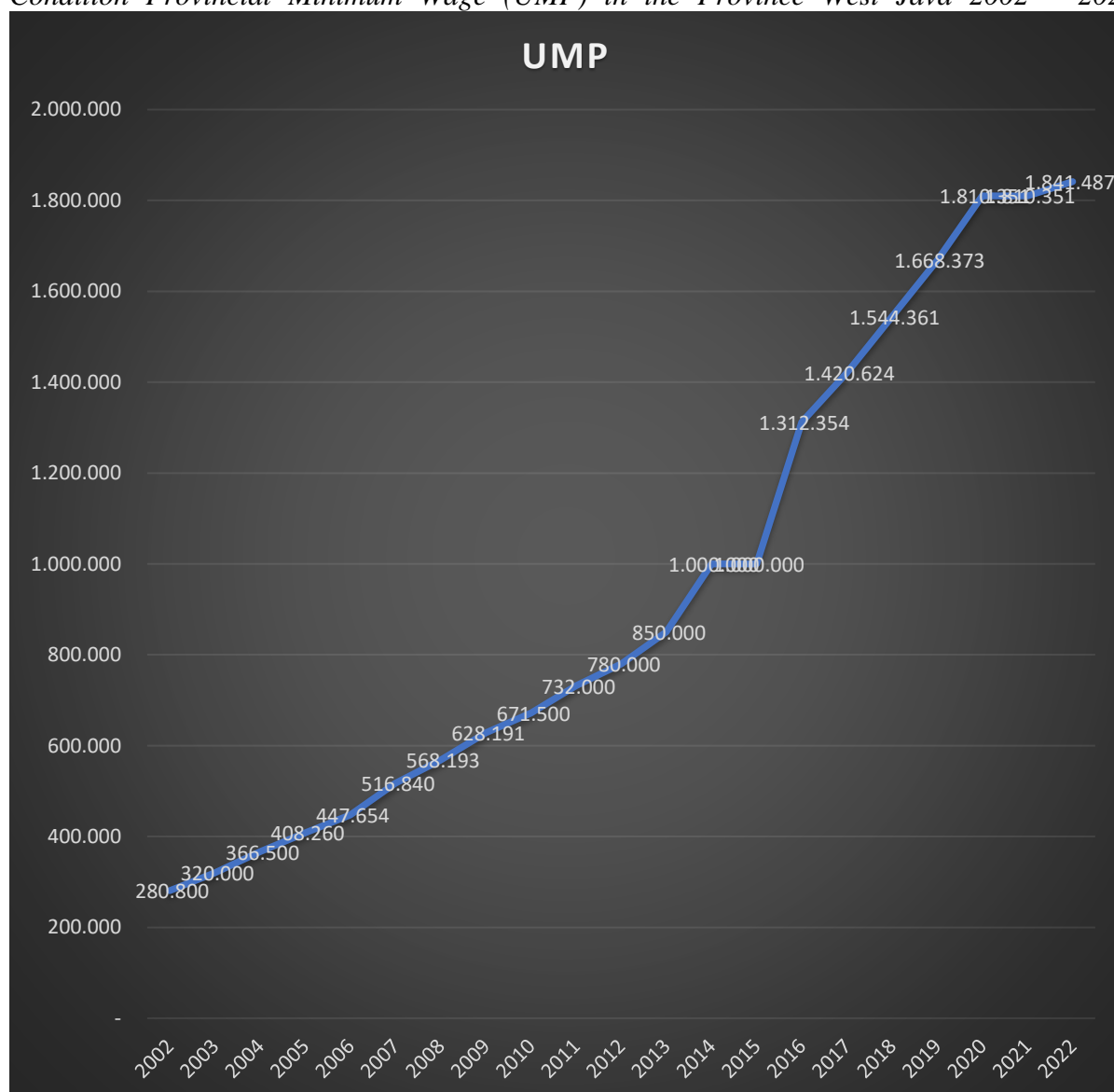
Figure 1
Open Unemployment Rate (TPT) in the Province West Java 2002 – 2022



Source : BPS Province West Java and BPS RI, 2002 – 2022, processed

In general In general , West Java TPT experienced decline in two decade last . Only in some year only TPT experienced increase , namely in the range 2003 – 2005, 2014 – 2016, and the most significant namely at the time the Covid-19 pandemic , namely in 2019 – 2020.

Figure 2
Condition Provincial Minimum Wage (UMP) in the Province West Java 2002 – 2022

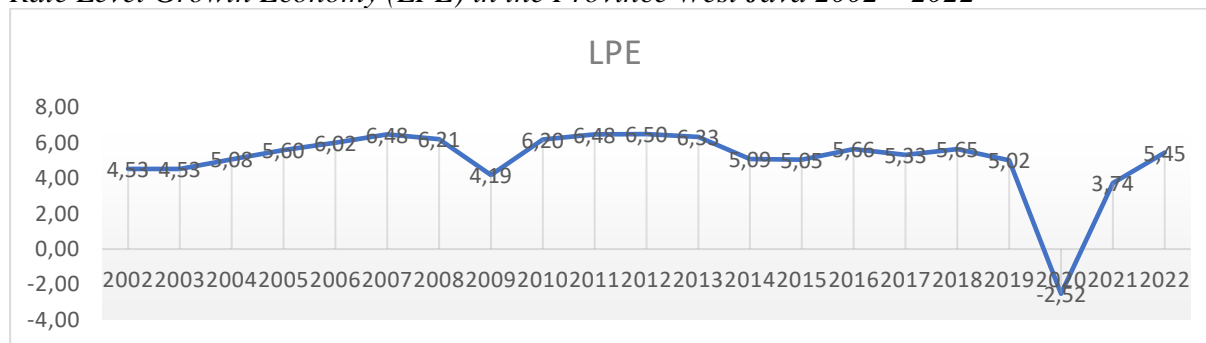


Source : BPS Province West Java and BPS RI, 2002 – 2022, processed

In two decade , the UMP level in West Java increased , this This in accordance with inflation that causes mark swap money that keeps on changed throughout time .

Figure 3

Rate Level Growth Economy (LPE) in the Province West Java 2002 – 2022

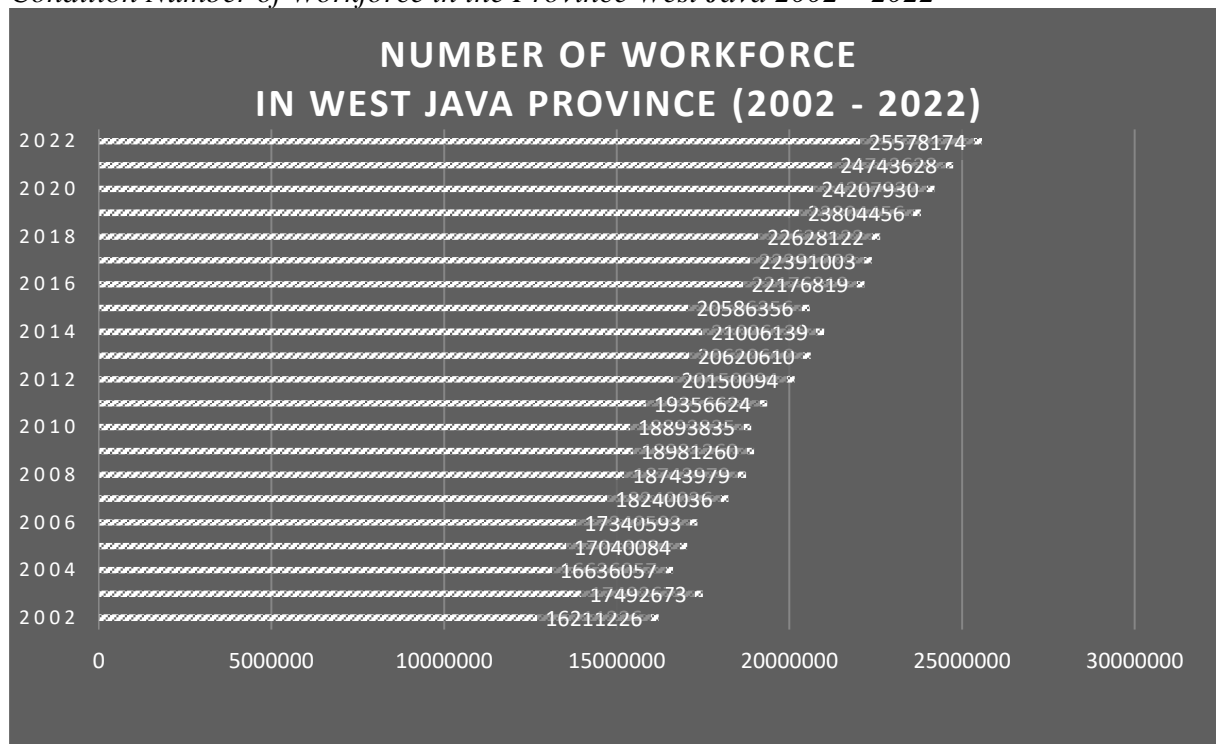


Source : BPS Province West Java and BPS RI, 2002 – 2022, processed

Rate Growth Economy during two tens years in West Java fluctuate . There are years where LPE experiences increase , there are also years where LPE experiences decline like in 2009 , 2014 and so on extreme is moment pandemic Covid 19 (year 2020). In a number of literacy , unemployment and growth economy own close relationship in theory economy . In terms of general , growth high economy tend reduce level unemployment Because improvement activity economy create more Lots field work . However , in a number of case , growth economy No always impact directly on absorption power Work .

Figure 4

Condition Number of Workforce in the Province West Java 2002 – 2022

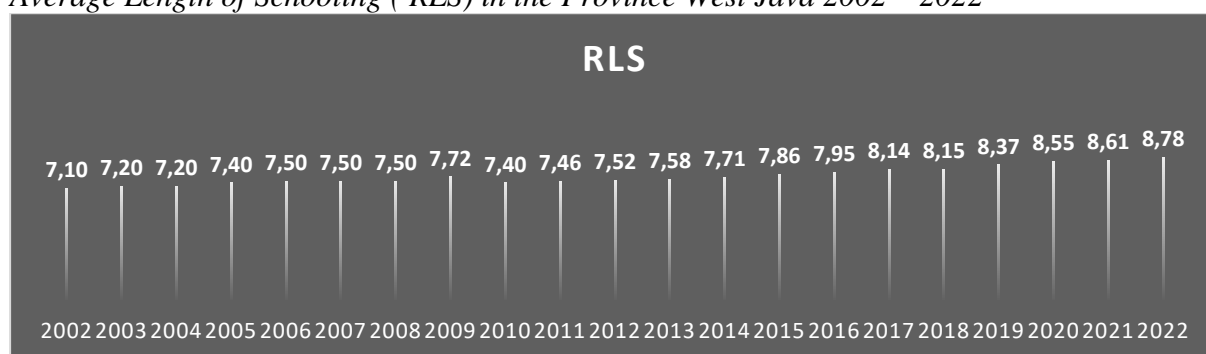


Source : BPS Province West Java and BPS RI, 2002 – 2022, processed

In accordance with theory demographics , number of workforce compared to straight with amount population . This is in accordance with BPS Province data West Java which counts Number of Workforce during two decade last . Only There is anomaly decline number of workforce in several year namely in 2004 , 2010 and 2015.

Figure 5

Average Length of Schooling (RLS) in the Province West Java 2002 – 2022



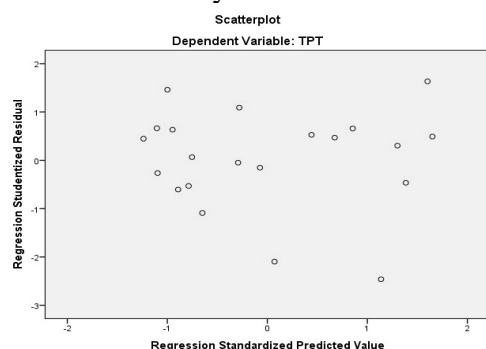
Source : BPS Province West Java and BPS RI, 2002 – 2022, processed

In the RLS data during two decade , the numbers increasingly rising from year to years . Although There is decline RLS figures in 2010 (because change method measurement), the RLS trend is increasing from year to year . Trend This in line with Theory Unemployment Educated that refers to phenomena in which individuals with level education high (such as graduate of college high) experienced difficulty get suitable job with qualification they . Unemployment educated usually happen Because imbalance between amount power Work educated and availability field work that requires skills they .

Analysis determinant unemployment in West Java during two tens years (2002 – 2022):

From the results of the Assumption Test Classic , acquired results study as following :

- Normality Test , using the Kolmogorov-Smirnov test, obtained mark asymp . Sig. (2 tailed) is worth 0.200, more big from 0.05. Based on results the can it is concluded that the residual has fulfil assumption normal distribution .
- Multicollinearity Test , from results data processing with SPSS for windows, obtained the fourth VIF (Variance Inflation Vector) value variable free that is consecutively : UMP (49,307), LPE (1,436), AK (40,503) and RLS (17,843). Can stated that only LPE variables that are not There is multicollinearity between variable free in the regression model .
- Heteroscedasticity Test



Look at the Scatter Graph on the side, it is clear that there is no particular pattern because the points are spread irregularly above and below the 0 axis on the Y axis. So it can be concluded that there are no symptoms of heteroscedasticity or H0.

- d. Autocorrelation Test , Based on Durbin Watson test results with using SPSS for Windows, obtained Durbin Watson value of 1.840. This value compared to with mark Durbin Watson table for $n=80$ and $k=4$, then Du value = 1.743 and DL = 1.534. So Durbin Watson value between D u up to 2. This is is proof No There is autocorrelation negative or positive in the regression model .

From the results model testing statistics got results as following :

- a. Analysis influence in a way simultaneous with the F test.
Based on results F test calculation with $\alpha = 0.05$, obtained mark F count amounting to 22,279 while mark F table is of 3.01. Because the value F count more big from mark F table so in a way together variable Regional Minimum Wage , Rate Growth Economy , Labor Force and Average Years of Schooling can stated have significant influence to level unemployment .
- b. Analysis influence in a way partial with t-test
For know influence variable Provincial Minimum Wage (UMP), Rate Growth Economy (LPE), Labor Force (AK) and Average Years of Schooling (RLS) . partial used t-test. From the results analysis with use level error = 0.05 and degree of freedom (nk) is obtained two variables whose sig . value not enough from 0.05 (reject H_0) which means influential significant in a way partial . Variable the are Labor Force (Sig. 0.004) and Average Years of Schooling (Sig. 0.002) . But what happened notes is mark The RLS Beta coefficient has number positive (1.555), which means with increasing level education precisely make level unemployment (TPT) increases. Different with Labor Force variables that have mark the beta coefficient is negative (-2.093), which means the more high labor force lower Open Unemployment Rate value .
- c. Analysis Coefficient Determination of R²

Model Summary^b

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
|-------|-------------------|----------|-------------------|----------------------------|---------------|
| 1 | .921 ^a | .848 | .810 | 1.01435 | 1.840 |

a. Predictors: (Constant), RLS, LPE, AK, UMP

b. Dependent Variable: TPT

Based on results calculation obtained The R² value of 0.848 indicates that connection between variable free (UMP, LPE, AK, RLS) and variable bound (TPT) very strong (approaching number 1)..

4. Conclusion

Unemployment Rate (TPT) during two decade in the Province West Java in general general experience decline . West Java TPT during two decade influenced in a way simultaneous / together influenced by the variables studied namely , Provincial Minimum Wage , Rate Growth Economy , Labor Force and Average Years of Schooling .

However in a way partial , Open Unemployment Rate (TPT) significant influenced by two variable that is number of Labor Force (AK) in total absolute and the Average Length of Schooling (RLS) figures . Which are notes is RLS variables have correlation positive with TPT. It means the more tall level education , precisely make level unemployment is also increasing . This is in accordance with phenomenon that is used background behind research and occurs in society that is phenomenon unemployment educated . Variable both of which affect TPT significantly significant is the Labor Force . Workforce correlated negative with TPT, meaning with the more Lots amount force work in West Java in two decade this , TPT actually down . This is give proof that the Workforce absorbed with good by field existing businesses in West Java during two decade.

Advice from study This is with existence phenomenon unemployment educated (unemployed) with high RLS), then expected government Lots give training Work or build more Lots vocational school or School Intermediate Vocational High School (SMK) so that SMA/SMK graduates already have Ready work . The government also needs to provide field Work with Power absorb power high work.

5. References

- Anshori, Z., & Suparta, IM (2018). THE EFFECT OF ECONOMIC GROWTH, NUMBER OF WORKFORCE,. *Journal of Economics & Business*, Volume 3, Number 2, September 2018 (<https://jurnal.untag-sby.ac.id/index.php/JEB17/article/view/2129>), 677.
- Arif, S. (1993). *Economic Research Methodology*. Jakarta: UI Press.
- Asmara, AQ (2023). REALIZE JUSTICE AND BALANCE IN LABOR REFORM IN INDONESIA. *Journal of Population and Environmental Development*, Vol. 4 No. 1 (pp. 95-108) April 2023 (2023-05-31, <http://jkpl.ppj.unp.ac.id/index.php/JKPL/issue/view/8>), 95.
- Basmar, E., & Sugeng, R. (2020). RESPONSE OF WAGE FLUCTUATION TO UNEMPLOYMENT RATE CHANGES IN INDONESIA. *Mirai Management Journal*, Volume 6 No.1 2020 (<https://journal.stieamkop.ac.id/index.php/mirai>), 38.
- Gujarati, D. (2003). *Basic Econometrics*. Jakarta: Erlangga.
- Johar, MR, Suharno, & Istiqomah. (2022). RELATIONSHIP BETWEEN AVERAGE YEAR OF SCHOOLING AND OPEN UNEMPLOYMENT RATE: MEDIATION OF ECONOMIC GROWTH RATE. *JP FEB UNSOED*, , Call for Paper and National Conference 2022: (<https://api.core.ac.uk/oai/oai:jp.feb.unsoed.ac.id:article/3078>), 656.
- Khodijah Ishak. (2018). FACTORS THAT INFLUENCE UNEMPLOYMENT AND ITS INFLUENCE ON THE DEVELOPMENT INDEX IN INDONESIA. *IQTISHADUNA: Jurnal Ilmiah Ekonomi Kita*, Vol 7, No 1 (2018) (<https://www.ejournal.stiesyariah bengkalis.ac.id/index.php/iqtishaduna/issue/view/15>), 22.
- Lubis, DS (2017). ANALYSIS OF THE EFFECT OF INFLATION AND GROWTH. *Attijarah Journal of Islamic Management and Business*, Faculty of Islamic Economics and Business, UIN Syekh Ali Hasan Ahmad Addary Padangsidempuan, Volume 3, No. 2, December 2017 (<https://jurnal.iain-padangsidempuan.ac.id/index.php/attijarah/article/view/1356>), 190.
- Prakoso, ES (2020). ANALYSIS OF THE EFFECT OF EDUCATION LEVEL, MINIMUM WAGE, INFLATION AND INVESTMENT ON THE UNEMPLOYMENT RATE IN INDONESIA IN THE PERIOD 2010 - 2019. *Scientific Journal of FEB Students*, Brawijaya University, Vol 9, No. 2 (<https://jimfeb.ub.ac.id/index.php/jimfeb/article/view/7547/6513>), -.
- Pratomo, DS (2017). PHENOMENON OF EDUCATED UNEMPLOYMENT IN INDONESIA. *SUSTAINABLE COMPETITIVE ADVANTAGE-7 (SCA-7)* , 642.
- Purba, B. (2020). Analysis of Indonesia's Economic Growth in the Period 2009 - 2018. *Humaniora Journal, Journal of Social Sciences, Economics and Law*, 4, No. 2, October 2020: 244-255 (<https://doi.org/10.30601/humaniora.v4i2.1366>), 244.
- Rahmawati, R. (2022). REPELITA: HISTORY OF NATIONAL DEVELOPMENT IN THE NEW ORDER ERA. *ETHNOHISTORY: Scientific Journal of Culture and History*, Vol. IX, No. 2, 2022 (<https://doi.org/10.33387/etnohistori.v9i2.5654>), 36.

- Sejati, DP (2020). UNEMPLOYMENT AND ITS IMPACT ON ECONOMIC GROWTH AND DEVELOPMENT. ACCELERATION: NATIONAL SCIENTIFIC JOURNAL, Vol. 2 No. 3, 2020 (<https://ejournal.goacademica.com/index.php/ja/issue/view/16>), 98.
- Suaidah, I., & Cahyono, H. (2013). THE EFFECT OF EDUCATION LEVEL ON UNEMPLOYMENT LEVEL IN JOMBANG REGENCY. CORE, Student Journal of Surabaya State University (<https://api.core.ac.uk/oai/oai:ojs.journal.unesa.ac.id:article/3739>), -.
- Sudarsih, S. (2018). CULTURAL REFORM OF JAPANESE SOCIETY. Kiryoku, Volume 2 No 2, 2018, Volume 2 (KIRYOKU, vol. 2, no. 2, pp. 78-82, Jun. 2018. <https://doi.org/10.14710/kiryoku.v2i2.78-82>), 78.
- Suliyanto. (2005). Marketing Application Data Analysis. Bogor: Ghalia Indonesia.
- Supranto, J. (2005). Econometrics Books One and Two. Jakarta: Ghalia Indonesia.
- Utomo, FW (2013). THE EFFECT OF INFLATION AND WAGES ON UNEMPLOYMENT IN INDONESIA IN THE PERIOD OF 1980-2010. Student Scientific Journal of FEB, Brawijaya University, Vol 1, No 2 (<https://jimfeb.ub.ac.id/index.php/jimfeb/article/view/472>)