

## Determinants of Provincial Income Inequality in Papua 2017-2021

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### Abstract

Despite having the fourth most people living there in the world, Indonesia is still considered a developing nation because of its high levels of poverty and income inequality. Financial development is a sign of whether a nation has a created economy or even a decay. Assuming there is high disparity in a country, it very well may be ordered as a country that has poor financial development. The country's economy suffers when inequality is high. Read up This hold back nothing factors - factor like sum destitute individuals , items gross territorial homegrown , file improvement human , and level joblessness open to imbalance pay in Papua in 2017-2021. Procedure utilized \_ that is use board information relapse with the information got from the Focal Measurements Office . Chosen model in concentrate on This is the FEM model ( fixed effect model ). Discoveries show that disparity pay in the territory Papua in 2017-2021 is affected by the number unfortunate populace and list advancement man . Though For item gross local homegrown and level ousting No important to even out disparity pay in the area Papua . From research This normal government need offer consideration more to regions that have lingering behind in economy with give support structure improvement Instructive offices too sufficient and anticipated foundation government can give upgrade field work in a manner uniformly and do improvement in a manner exhaustive with use source existing power in a manner successful and effective so that level imbalance pay can Continue to go brought down .

**Keywords:** Gini Index ; Amount Poor Population ; Human Development Index ; Level Open Unemployment ; Product Gross Regional Domestic.

## INTRODUCTION

Indonesia is a country with occupant fourth most on the planet Anyway Actually thought to be as a country that actually is creating , p the in light of the fact that many level The neediness and pay imbalance of its residents are truly noticeable. The proportion of individual pay dispersion is the action most frequently used to decide the monetary hole in the public arena in a space. This is progressively noticeable as the quantity of neediness increments from one year to another. Destitution and pay imbalance cause turmoil among its residents(Yang et al., 2017)

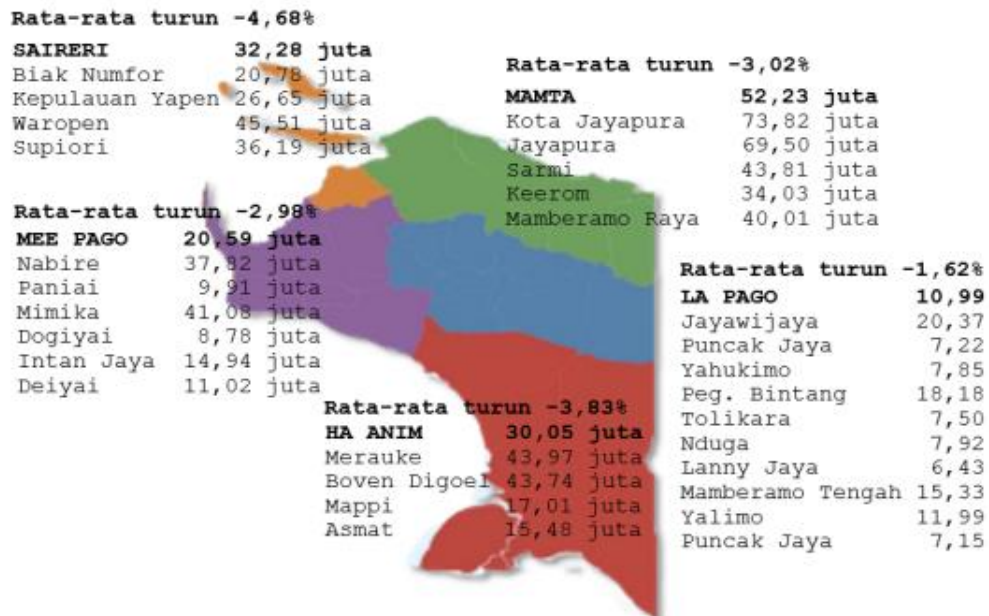
One of the triumphs of improvement completed by local states is improvement in the monetary area, an area that includes all parts in the space concerned. Financial improvement include area government , confidential area and society normal in it . Siedman (2005) states that improvement economy is a course of making and using source Power physical , source Power human , monetary , and social capital For lead to progress and equity economy and quality life for public or district. Monetary improvement become focus consideration in see improvement a district on the grounds that seen relate with capacity satisfaction want life public in a manner entirety.(Sri Hartati, 2022)

Indonesia is as yet a nation create , disparity become normal peculiarity \_ occur . One of model is Papua Area , where it is tracked down contrast or not uniformly viewpoint support economy in addition to other things , no equally dissemination pay between Rule/City in Papua Territory and level The Human Improvement File likewise causes happen disparity local turn of events.

Imbalance in pay dispersion that happens in a space or area will influence the degree of government assistance of individuals around there. The human advancement list and pay imbalance have an interrelated relationship. Expressing that the Human Improvement Record impacts pay dissemination imbalance, Becker concentrated on more profoundly the job of formal training in supporting financial development, expressing that the higher the conventional schooling got, the higher work efficiency will be. This is as per human resources hypothesis which expresses that schooling impacts monetary development and will lessen pay differences since training can assume a part in expanding work efficiency. This hypothesis expects that populace still up in the air by individual efficiency (*Febriyani, A, & Anis, A (2021).*, n.d.)

Inequality occurs \_ will can influence on growth economy area , which also has an impact on the height level unemployment and levels poverty . In 5 years last , level poverty in Papua Province tends to increase .

**Figure 1.**  
**Per Capita Income according to Traditional Areas of Papua Province 2017-2020**



Source: BPS Papua Province, 2023 (processed data)

Per Capita Income in all regions experienced a drastic decline in 2020 when compared to 2019. The highest was in the Saireri Traditional Territory with an average of -4.68%, and the lowest was in the La Pago Traditional Territory at -1.62%. The Covid-19 pandemic has caused many production delays and labor rationalization, which ultimately reduces people's income.

On the other hand, regional inequality between regions using the Williamson Index formula appears to have increased by around 0.0605 points for the entire Papua region. With the highest increase in the Saireri Traditional Areas (0.0079 points) and Mamta (0.0064 points). This means that the Covid-19 pandemic has caused gaps between regions to widen.

**Figure 2.**  
**Percentage of poor people in Papua province in 2017 – 2021**



Source : BPS data for Papua Province , 2022

## Theoretical basis

Pay difference can be impacted by various components. To overcome extending unevenness in Indonesia, the sorts of income difference ought to be known. At the point when the wellspring of dissimilarity is recognized, the savviest thought can be wanted to close the compensation apportionment opening. Wicaksono (2017), shows that tutoring, wealth and the business region are basic allies of pay lopsidedness in Indonesia. Rasyidi's (2021) research found that the elements of financial turn of events and development unfavorably impacted pay transport divergence, while the variables of the human improvement record and hypothesis had a beneficial outcome.

Hariani's (2019) research saw that there is only a solitary variable that basically causes pay uniqueness, explicitly the HDI variable. This suggests that the level of HDI influences the level of pay dissimilarity. Meanwhile, two unique variables, specifically the open joblessness rate (TPT) and the region/city the most reduced pay allowed by regulation (UMK), are not basic for cash divergence. Meanwhile, Sholikah's (2022) research found that monetary improvement impacted pay scattering difference because of continuously conflicting compensation assignment plans. The human progression record variable influences pay scattering uniqueness since incredible work effectiveness can decrease the level of unevenness. Meanwhile, the open joblessness rate hugely affects the grounds that the maintenance of existing work is at this point not great.

One of the factors that effects pay unevenness is the most minimal compensation allowed by regulation. The least compensation allowed by regulation procedure is seen as prepared to reduce pay awkwardness since it achieves high work maintenance with relentless monetary circumstances (Hanum and Sarlia, 2019) . While executing a least compensation allowed by regulation, one ought to be careful, if it is set unreasonably low, a good lifestyle will not be met. Expecting the opposite is substantial, it is evaluated that a business compromise will occur (Rohmah and Sastiono, 2021)

A high people in a space will not welcome on certain issues expecting the general population's productivity is in like manner high so it doesn't cause conflicting compensation movement. Issues will arise in case a high people is followed by joblessness and poverty which achieves dissimilarity in pay spread. According to (Arsyad, 2010) . The Open Joblessness Rate (TPT) is clearly relating to pay irregularity. Expecting that TPT assembles it will influence people's compensation levels (Sholikah and Imaningsih, 2022) . So when joblessness lessens, pay divergence will moreover decrease. No matter what the way that the joblessness rate is at this point not settled.

Difference pay moreover occurs considering the way that unevenness viewpoint economy between locale \_ with various regions . Papua Domain with Observable Human Improvement Record \_ exists update in a way legitimate at every district/city . Improvement mark Human Progression Rundown This regularly No evenhandedly scattered in each space since contrast condition economics . Considering depiction on so creator truly study with title : " Determinants Dissimilarity Pay in Papua Domain 2017-2021" . \_

## METHODOLOGY

Type of research used in the research This is study quantitative descriptive . Type of data used in study This namely secondary data , where data is obtained sourced from Central

Statistics Agency (BPS) publication . Data used in study This namely data at the Provincial and National levels.

Data collection techniques carried out by researchers is use technique documentation . On research This used method data analysis with use formula count mark Gini ratio or The Gini Index according to BPS 2017-2021 is as following .

$$IG_{it} = \beta_0 + \beta_1 \log JPM_{it} + \beta_2 GRDP_{it} + \beta_3 IPM_{it} + \beta_4 TPT_{it} + \varepsilon_{it}$$

Information :

IG	: Gini Index (Percent)
GRDP	: Gross Regional Domestic Product (percent)
HDI	: Human Development Index (Percent)
TPT	: Open Unemployment Rate (Percent)
JPM	: Number of Poor Population (thousand people)
$\beta_0$	: Constant
$\beta_1 \beta_2$	: Regression Coefficient
Log	: Logarithm Operations
$\mu$	: Interfering Variable (error term)
i	: Observation (district/city)
t	: Amount of time

The estimation stage of panel data regression analysis will include: estimating econometric model parameters using the *Pooled Least Square (PLS)*, *Fixed Effect Model (FEM)*, and *Random Effect Model (REM)* approaches; selection of the best estimated model with the Chow test and Hausman test, and the Lagrange Multiplier test if necessary; model goodness-of-fit test on the selected estimated model; and test the validity of the influence of independent variables on the selected estimated model. The type of data used in the research is panel data, namely a combination of *time series data* and *cross section data* .

## RESULTS AND DISCUSSION

The results of the estimation of the econometric model in advance using *the Pooled Least Square ( PLS )/CEM*, *Fixed Effect Model ( FEM )* and *Random Effect Model ( REM )* approaches along with the results of the model selection tests are summarized in Table 1.

**Table 1**  
**Estimation Results of Panel Data Regression Econometric Models - Cross section**

Variable	Regression Coefficients					
	CEM	prob	FEM	Prob	BRAK E	prob
C	0.1504	0.0009	-1.6166	0.0007	0.1291	0.0509
LogJPM	-0.0039	0.5876	0.3703	0.0215	-	0.9445
GRDP	-0.0025	0.0007	0.0015	0.6837	-	0.0189
HDI	0.0039	0.0000	0.0132	0.0186	0.0040	0.0000
TPT	-0.0035	0.1118	-0.0009	0.7554	-	0.1866
$R^2$	0.255962	0.622668		0.133387		
Adjusted. $R^2$	0.234704	0.514859		0.046876		
F statistics	12.04062	5.775652		5.387104		
Prob. F statistics	0.000000	0.000000		0.000459		
Model Selection Test						
<b>A. Chow</b>						
Cross- Section $F(28,112)= 3.887355$ ; Prob. $F(28,112) = 0.0000$						
<b>B. Hausman</b>						
Cross-Section random $\chi^2(4) = 16.476595$ ; Prob. $\chi^2 = 0,0024$						

The Chow test and Hausman test show that ( *FEM* ) was chosen as the best estimated model, as seen from the probability or significance in the Chow test which has a prob value of  $0.0000 < 0.05$  and the Hausman test has a prob value of  $0.0010 < 0.05$ . Complete estimation results from the *FEM estimated model* are shown in Table 1 and Table 2.

**Table 2**  
**Fixed Effect Model (FEM) Estimation Model**

$$IG_{it} = -1.616676 + 0.370301 \log JPM_{it} + 0.001538 PDRB_{it} + 0.013291 IPM_{it} - 0.000933 TPT_{it}$$

(0.0215)\*\* (0.6837) (0.0186)\*\* (0.7554)

$R^2 = 0.622668$  ;  $DW = 0.514859$ ;  $F = 5.775652$  ; Prob.  $F = 0.0000$

**Source** : BPS, processed. **Note**:\* Significant at  $\alpha = 0.01$ ; \*\* Significant at  $\alpha = 0.05$ ; \*\*\*Significant at  $\alpha = 0.10$ ; The numbers in brackets are the probability values of the t statistic.

Table 2 shows that the FEM estimated model <sup>exists</sup> *with* a probability or empirical significance of the *F statistic* of 0.0000 ( $<0.01$ ), with a coefficient of determination ( $R^2$ ) of 0.622668; which means that 62.26% **of income inequality** can be explained by the variables in the model, while the remaining 37.74% is influenced by other variables that are not included in the model.

### Research result

The Number of Poor Population variable has a regression coefficient value of 0.370301 with a linear-logarithmic relationship pattern. This means that if the number of poor people increases by 1 percent, income inequality will increase by 0.370301 percent. It would be better if the number of poor people decreased by 1 percent, then income inequality would also decrease by 3.70301 percent.

The results of data processing show that the Gross Regional Domestic Product variable does not significantly influence Income Inequality where the coefficient value is 0.001538 and the probability value is 0.6837. The unemployment rate explains the rate of economic growth in a region, rather than income inequality.

The Human Development Index (HDI) has a regression coefficient value of 0.013291. This means that the HDI variable has a significant influence on the Income Inequality variable, where if the Human Development Index increases by 1 percent, then Income Inequality will also increase by 0.13291 percent. Preferably, if the Human Development Index decreases by 1 percent, Income Inequality will also decrease by 0.13291 percent.

The Open Unemployment Rate variable shows insignificant results on Income Inequality with a coefficient value of 0.000933 and a probability value of 0.7554. The unemployment rate explains the level of unemployment in a region, rather than explaining income inequality.

### Research Discussion

In light of results interior information handling concentrate on This show that imbalance Pay in Papua Region in 2017-2021 is affected by factors Sum Poor and variable populace Human Improvement File . Transitory Item Gross Provincial Homegrown and Open Joblessness Rates don't compelling important to Imbalance Pay in Papua Region . Sum needy individuals have impact positive to disparity pay in the territory Papua , p That can deciphered that the more Parcels sum the unfortunate will also increment mark record this is what it implies increment proportion level imbalance pay . This outcome as per research that makes sense of that number disparity pay happen In light of the fact that exists hole from imbalance in something bunch public particularly bunch unfortunate society.

Variable The Human Improvement File (HDI) has huge impact \_ with mark positive It implies when the HDI rises then Imbalance Pay will also encounter increment . This outcome make sense of that The Human Improvement Record portrays condition level wellbeing nor training occupants of the area , around then conditions in the locale experience kanaan implies individuals in the district showing great outcomes , p \_ This will give power quality work \_ so that will influence the wages got \_ power Work the so distinction level quality power

Work will impact disparity pay . Research result This in accordance with Kurnianingsih (2021), variable list advancement man compelling positive and important to imbalance . The more high HDI then the more tall efficiency occupant so that level pay will the more high (Arif and Agustin Wicaksani , nd).

Considering results board data backslide shows significant coefficient \_ positive At any rate the solitary variable exploratory results figure out that improvement yield regard economy No convincing essential to irregularity pay an in the area Papua That suggests huge little improvement economy No effect level dissimilarity pay in the space Papua 2017-2021 . Research suggests investigate as of late finished by Fafan ( 2015) which showed that mark coefficient stepped positive show that if happen increase from improvement economy so will augment difference pay , advancement growing economy \_ showing level high government help , p \_ This according to Neo socialist speculation communicates that improvement economy authoritatively will constantly cause expanding gorge lopsidedness between si richand the awful Dissimilarity pay in Papua locale in 2017-2021 no become outcome direct from improvement economy in Papua region in 2017-2021 . \_ As marker the dissimilarity that occurs in Papua is impact from its level compensation in the area metropolitan like Jayapura, Mimika , Marauke and Nabire while in various districts the compensation is for the most part low.

Considering the board data backslide results, the coefficient shows a negative worth, but the outcomes of the particular variable test figure out that the outcome worth of money related improvement doesn't basically influence pay irregularity in Papua domain. This suggests that an augmentation or decrease in the amount of desperate people under the poverty line doesn't basically influence the addition or reduction in dissimilarity rates. This investigation is as per the speculation put forth by Kuncoro (1997) that the association between destitution levels and pay dissimilarity can't be secluded. From a full scale financial perspective, poverty arises due to an inconsistency in resource ownership plans, or can occur because of conflicting improvement in a region, prompting pay contrasts. Additionally, it will in general be assumed that the desperation that occurs in Papua district influences pay unevenness in Papua region, but the effect isn't particularly tremendous.

## CONCLUSION

Economic growth is an indicator of whether a country has a developed economy or even a decline. If there is high inequality in a country, it can be categorized as a country that has poor economic growth. The higher the inequality, the lower the country's economy. This research aims to find out how factors such as the number of poor people, gross regional domestic product, human development index, and unemployment rate affect income inequality in Papua in 2017-2021. The methodology used is panel data regression. The model chosen in this research is the FEM model (fixed effect model). The findings show that income inequality is influenced by the number of poor people and the human development index. This research has limitations in the form of a short observation year used, and only covers the Papua region so that further research can add other regions to see the consistency of the research results. From this research, it is hoped that the government needs to pay more attention to areas that are lagging behind in the economy by providing support in the form of building educational



facilities and adequate infrastructure and it is hoped that the government can provide an even increase in employment opportunities and carry out overall development by utilizing existing resources effectively. and efficient so that the level of income inequality can continue to be down.

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