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ANALYSIS OF WOMEN'S PARTICIPATION RATE ON ECONOMIC GROWTH IN GORONTALO PROVINCE

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Abstract:
This study aims to determine how much influence female labor participation has on economic growth in Gorontalo Province. This research uses quantitative methods. The data used in this research method is sourced from the Central Bureau of Statistics and the Regional Basic Data Management Information System (SIMREG) using regression econometric analysis, while the time period chosen in this study is eleven years (2010-2020).
The results show that, (i) the female workforce has a negative and significant effect on economic growth, which means that every time there is an increase in the female workforce, it will reduce the level of Economic Growth in Gorontalo Province. (ii) the pure participation rate at the high school level has a negative and significant effect on economic growth, which means that every time there is an increase in the pure participation rate of women at the high school level, it will reduce the level of economic growth in Gorontalo Province. (iii) women's productive age has a positive and insignificant effect on economic growth, which means that every increase in women's productive age, it will increase economic growth in Gorontalo Province. (iv) the productivity of female workers is positive and significant to economic growth, which means that every time there is an increase in the productivity of female workers, it will increase economic growth. economy in Gorontalo Province.

Keywords: Women's Participation Rate, Women's Productivity. Economic Growth.

1.INTRODUCTION

Economic growth increases the supply of resources needed for human development. Increased resources together with appropriate resource allocation and wider distribution of opportunities, especially job opportunities, will encourage better human development. This applies also vice versa, human development encourages increased economic growth. A high level of human development greatly determines the ability of the population to absorb and manage sources of economic growth, both in relation to technology and to institutions as an important means to achieve economic growth (Ramirez, et.al, 1998; Brata, 2004 in Matahariku1, 2009) .

Regional development is an inseparable part of national development, in essence regional development is a planned effort to increase regional capacity in realizing a better regional future and welfare for all communities. This is in line with the mandate of Law no. 32 of 2004 which stipulates that Regional Governments are given broad authority to determine development policies and programs in their respective regions

Economic development in a country cannot be separated from the participation of all levels of society, including the role of women. One of the indicators used to see the results of development in a country is the increasing role of women, especially in economic activities. In the last three decades, the world's female population has made up half of the total population in almost every country. Women as family members have duties and functions to support the family. The duties and functions of women are identical with domestic work.

In general, the high female labor force participation rate (TPAK) is caused by several factors, including internal factors, external factors and relational factors. Internal factors come from within, especially for women with higher

education. External factors such as support from husband and the presence of a child as well as relational factors such as financial needs and self-actualization needs (Rini, 2002).

The high LFPR of women in economic activities is caused by several things, namely changes in people's views and attitudes about the importance of education for men and women as well as the need for women's participation in development, the willingness of women to be independent in the economy, the willingness to finance their needs and people who are dependent at their own expense, there is a need to increase family income and the wider opportunities in the world of work for women such as the development of the handicraft industry.

The productive age population is expected to own and or carry out economic activities so that per capita income growth occurs which encourages the creation of a healthy economy. The research references discussed earlier show that the productive age population plays a role in the economic development of a country, therefore the quality of human resources in terms of technical and non-technical capabilities is important. One of the efforts to improve the quality of human resources can be pursued through formal education activities, including elementary, middle and high school education, which based on reference studies show that the education component is a support in efforts to improve the economy of a country.

The importance of education which has a role in economic growth makes Gorontalo Province as a province supporting Indonesia's economic growth needs to play an active role in encouraging the creation of a high education participation rate.

Based on the above background, the formulation of the problem in this research is. Seeing the background above, the research is interested in conducting research with the title "ANALYSIS OF WOMEN'S PARTICIPATION LEVEL ON ECONOMIC GROWTH IN GORONTALO PROVINCE".

2.MATERIALS AND METHODS

2.1 Theory Study.

2.1.1 Economic Growth: According to Sukirno (2011: 331) "economic growth is defined as the development of activities in the economy that causes goods and services produced in society to increase and people's prosperity to increase". So it can be said that to measure the achievement of the development of an economy from year to year, it can be seen from the economic growth of the area. So that the state will succeed in increasing services and goods through economic growth. Literally, economic growth is an increase in the ability of the economy to produce goods and services. Economic growth can be used as a very important reference in analyzing all economic problems in a country.

2.1.2 Female Labor Force Participation Rate: In 1990 the labor force in third world countries experienced an increase, especially in Asian countries which increased by 4.3%. This is due to the contribution made by women. However, it is possible that many women do not get income from their workplace, but from various agricultural sectors, approximately 80% and the office sector approximately 25-40%. Unfortunately, however, there is discrimination in remuneration and advancement in employment against women (Todaro, 2000).

2.1.3 Presentation of NER (Pure Enrollment Rate) for Female Senior High School Level:

Net Participation Rate(APM) is the percentage of the number of children in a certain school age group who are currently in school at the level of education in accordance with their age to the total number of children in the school age group concerned.To measure the absorption of the education system to the school-age population.

So the NER shows how many school-age residents are able to take advantage of educational facilities according to their level of education. If NER = 100, it means that all school-age children can attend school on time. The important role of government in realizing human capital development cannot be separated from the role of growth theory. So that this research can encourage in realizing development in order to increase human productivity.

2.2 Methods:

This type of research uses quantitative research. The data used in this study is secondary data obtained from the Central Statistics Agency. The data used is data on economic growth in Gorontalo Province in 2010-2019. The object of this research is economic growth in Gorontalo Province where there are 5 regencies and 1 city in Gorontalo Province. While the time period chosen in this study is ten years (2010-2019). The data collection procedure used in this study is documentary data, namely the process of collecting data from documents in government institutions such as the Central Statistics Agency, the Regional Basic Data Management Information System (SIMREG) and other related sources. The analysis method of this research uses regression equation analysis using multiple regression analysis method with panel data*(Fixed effect*model).

3. RESULT AND DISCUSSION

3.1 Regression Analysis

Table 1,
Multiple Linear Regression Analysis Results

Dependent Variable: PE?
Method: Pooled Least Squares
Date: 03/30/22 Time: 15:51
Samples: 1 11
Included observations: 11
Cross-sections included: 6
Total pool (unbalanced) observations: 64

Variable	Coefficient	Std. Error	t-Statistics	Prob.
C	44.44843	11.15866	3.983311	0.0002
LOG(AKP?)	-3.402959	1.164518	-2.922205	0.0051***
APM?	-0.073292	0.024893	-2.944339	0.0048***
UPP?	0.042832	0.059429	0.720718	0.4742
PTKP?	0.120935	0.049955	2.420877	0.0189***
R-squared	0.318603	Mean dependent var		6.400469
Adjusted R-squared	0.205037	SD dependent var		2.155162
SE of regression	1.921557	Akaike info criterion		4.286750
Sum squared resid	199.3886	Schwarz criterion		4.624075
Likelihood logs	-127.1760	Hannan-Quinn Criter.		4.419639
F-statistics	2.805443	Durbin-Watson stat		1.558322
Prob(F-statistic)	0.008900			

Source: Data processed, Eviews9 2022
Significant:1%***5%**10%*

Based on the results of the analysis in the table above, the research model is:

PE = 44.44843 – 3.402959 LOG (AKP) –0.073292 APM + 0.042832 UPP + 0.120935 PTKP

The interpretation of the above equation model can be described as follows:

1. Economic growth without being influenced by other variables in this study, will still be worth 44,44843 Percent
2. The female workforce has a negative effect on economic growth, which means that every 1 percent increase in the female workforce will reduce the economic growth rate by -3.402959 percent
3. Raise Pure Participation has a negative effect on economic growth, which means that every 1 percent increase in the pure participation rate, it will reduce the economic growth rate by 0.073292 percent.
4. Female Productivity Age has a positive effect on economic growth, which means that every 1 percent increase in female productivity age, it will increase economic growth by 0.042832 percent
5. Female Labor Productivity has a positive effect on economic growth, which means that every 1 percent increase in female labor productivity will increase economic growth by 0.120935 percent.

The following are regions/districts that have economic growth above the average and below the average, which can be seen from the Fixed Effect coefficient below:

Table 2
Coefficient of Fixed Effect Regency/City Gorontalo Province

Fixed Effect (Cross) Negative		Fixed Effect (Cross) Positive	
_KAB_BOALEMO--C	-0.926178	_KAB_GORUT--C	-1.613929
_KAB_BONBOL--C	-1.346559	_KAB_POHUWATO--C	-0.810684
_KAB_GORONTALO—C	1.888559	_CITY_GORONTALO--C	2.955013

Source: Data processed, Eviews9 2022

Based on the table above, it can be seen that the positive coefficient values are Gorontalo Regency and Gorontalo City, which means this Regency has an above average Economic Growth compared to Boalemo Regency, Bone Bolango Regency, North Gorontalo Regency and Pohuwato Regency which has a negative coefficient value.

3.2 Coefficient of Determination Test

Table 3.
Coefficient of Determination Test Results

Dependent Variable: PE?
Method: Pooled Least Squares
Date: 03/30/22 Time: 15:51
Samples: 1 11
Included observations: 11
Cross-sections included: 6
Total pool (unbalanced) observations: 64

R-squared	0.318603	Mean dependent var	6.400469
Adjusted R-squared	0.205037	SD dependent var	2.155162
SE of regression	1.921557	Akaike info criterion	4.286750
Sum squared resid	199.3886	Schwarz criterion	4.624075
Likelihood logs	-127.1760	Hannan-Quinn Criter.	4.419639
F-statistics	2.805443	Durbin-Watson stat	1.558322
Prob(F-statistic)	0.008900		

Source: Data processed, Eviews9 2022

Based on the results of the analysis of the coefficient of determination in the table above, it can be seen that the value of the coefficient of determination (R-squared) is 0.3186, which means that 31.86% of Economic Growth can be explained by the Female Labor Force, Pure Participation Rate (SMA), Age of Female Productivity and Female Labor Productivity. and the remaining 68.14% can be explained by other variables outside the model.

3.3 Simultaneous Test (F Test)

This method can be determined through the probability value of Fcount generated through regression analysis. Based on the results of multiple regression analysis in the table above, it can be seen that the Fstatistic value is 2.805443 with a probability value of 0.0089, this probability value when compared to the specified alpha level (1%, 5% and 10%) then this probability value is still smaller. So it can be concluded that the Female Labor Force, Pure Participation Rate (SMA), Age of Female Productivity and Female Labor Productivity have an effect on Economic Growth in Gorontalo Province.

3.4 Partial Test (t Test)

The testing and interpretation of the partial test is as follows:

1. The Influence of the Women's Labor Force on Economic Growth in the Province of Gorontalo

Based on the regression analysis in the table above, it can be seen that the tstatistic value of the Women's Work Force is -2.922205 with a probability value of 0.0051. If this probability value is compared with the specified alpha level (1%, 5% and 10%), then this probability value is still smaller, so H0 is rejected. Thus, it can be concluded that at a significant level of 1% the female workforce has an effect on economic growth.

2. The Effect of Pure Enrollment Rate (SMA) on Economic Growth in Gorontalo Province

Based on the regression analysis in the table above, it can be seen that the tstatistic value of the Pure Participation Rate (SMA) is -2,94439 with a probability value of 0.0048. If this probability value is compared with the specified alpha level (1%, 5% and 10%), then this probability value is still smaller, so H0 is rejected. Thus it can be concluded that at a significant level of 1% the Pure Participation Rate (SMA) has an effect on Economic Growth.

3. The Effect of Female Productivity Age on Economic Growth in Gorontalo Province

Based on the regression analysis in the table above, it can be seen that the tstatistic value of Female Productivity Age is 0.720718 with a probability value of 0.47. If this probability value is compared with the specified alpha level (1%, 5% and 10%), then this probability value is still greater, so H0 is accepted. Thus it can be concluded that at a significant level of 1%, 5% and 10% of Female Productivity Age has no effect on Economic Growth.

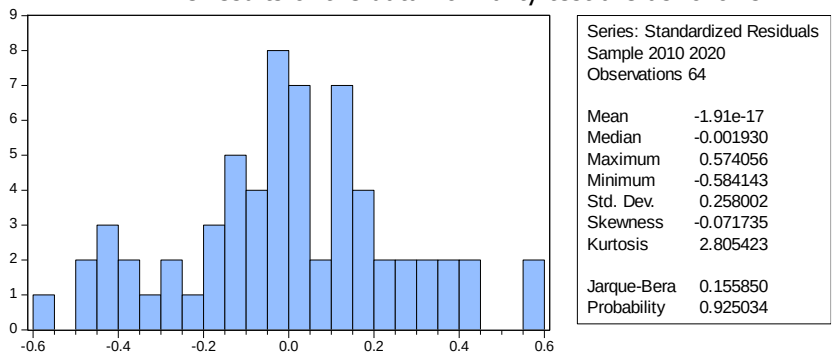
4. The Effect of Female Labor Productivity on Economic Growth in Gorontalo Province

Based on the regression analysis in the table above, it can be seen that the tstatistic value of Female Labor Productivity is 2.420877 with a probability value of 0.018. If this probability value is compared with the specified alpha level (1%, 5% and 10%), then this probability value is still smaller, so H0 is rejected. Thus, it can be concluded that at a significant level of 5%, female labor productivity has an effect on economic growth

3.5 Classical Assumption Test

Data Normality Test

The results of the data normality test are as follows:



Source: Data processed, Eviews9 2022

Graph 1.
Data Normality Test

Based on the results of the analysis in the graph above, it can be seen that the Jarque-Bera value is 0.155850 with a probability value of 0.925, which means that if this value is compared with the specified alpha level of 5%, then this probability value is still greater, so it can be concluded that the data in this study is normally distributed

Multicollinearity Test

The following are the results of the multicollinearity test analysis:

Table 4
Multicollinearity Test

Variance Inflation Factors
Date: 03/30/22 Time: 16:04
Samples: 2010 2020
Included observations: 64

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	124.5158	2158,231	NA
LOG(PAD)	1.356101	2452.824	3.360519
APM	0.000620	40.50319	1.117410
UPP	0.003532	1.116710	1.041199
PTKP	0.002496	6.658953	3.201758

Source: Data processed, Eviews9 2022

Based on the results of the analysis in table 4.? above, it can be seen that the Centered VIF value of the three variables is below 10 (VIF <10), so it can be concluded that there are no symptoms of multicollinearity in the model.

Heteroscedasticity Test

In this study, to be able to see the presence or absence of symptoms of homoscedasticity, that is by regressing the absolute value of the residual on the independent variable, where the test is subjected to the Glejser test. The following are the results of the Glejser test analysis:

Table 5
Heteroscedasticity Test

Dependent Variable: RESABS
Method: Least Squares Panel
Date: 03/31/22 Time: 14:15
Samples: 2010 2020
Periods included: 11
Cross-sections included: 6
Total panel (unbalanced) observations: 64

Variable	Coefficient	Std. Error	t-Statistics	Prob.

C	-3.667695	3.404150	-1.077419	0.2857
LOG(PAD)	0.350275	0.350693	0.998810	0.3220
APM	0.024527	0.011152	2.199427	0.0318
UPP	0.025037	0.034903	0.717333	0.4760
PTKP	-0.018068	0.02100	-0.898456	0.3726

Source: Data processed, Eviews9 2022

Based on the results of the Glejser test analysis in table 4.? above, it can be seen that the significance value of the independent variable in the model is greater than the specified alpha level, namely 1%, 5% and 10%. So it can be concluded that, in this research model there are no symptoms of heteroscedasticity.

4. CONCLUSION

Based on the results of research on the Influence of the Female Workforce, Female Pure Participation Rate at the High School Level, Female Productive Age and Female Productivity Levels on Economic Growth in Gorontalo Province, it can be concluded that:

1. The Women's Labor Force has a negative and significant effect on Economic Growth in Gorontalo Province. Which means, every time there is an increase in the female workforce, it will reduce the level of economic growth in Gorontalo Province.
2. Female Pure Participation Rate at the SMA level has a negative and significant effect on Economic Growth in Gorontalo Province. Which means that every time there is an increase in the Pure Female Participation Rate at the SMA level, it will reduce the level of Economic Growth in Gorontalo Province.
3. Women's Productive Age has a positive and insignificant effect on Economic Growth in Gorontalo Province. Which means that every time there is an increase in the productive age of women, it will increase economic growth in Gorontalo Province
4. Female Labor Productivity has a positive and significant impact on Economic Growth in Gorontalo Province. Which means that every time there is an increase in the productivity of female workers, it will increase economic growth in the province of Gorontalo.

REFERENCES

1. Anwar, Khairil, Fatmawati (2018). The Influence of the Population of Productive Age, Poverty and Inflation on Economic Growth in Bireuen Regency, Faculty of Business and Economics, Islamic University of Indonesia
2. Gorontalo Province Central Statistics Agency, 2022.
3. Satrio, Bintang (2020). The Effect of Women's Labor Force Participation Rate on Economic Growth in Indonesia
4. Vininda, Sutri, Lia Yuliana (2019). Application of Panel Data Regression The Effect of Gender Equality on Economic Growth in Riau Province. STIS . Statistics Polytechnic