Effect of Economic Growth to Gender Wage GAP

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Abstract

Gender gap persists in all aspects of life in the world. United Nations Development Programme Human Development Report states that it is important in human development is equitable economic growth between generations, gender and region. One form of gender inequality is the wage gap. Wage gap of men and women draw a lot of attention in the economic literature as related to economic growth. The aim of this study examine factors Gross Domestic Product (GDP) to the level of gender wage gap the ASIA countries. The data used are secondary data and the GDP per capita index ratio of estimated female to male earned income from 32 countries in Asia in 2005-2007 in the report of the United Nations Human Development Report. Based on linear regression and hypothesis testing concluded GDP per capita is negative and significant effect on the level of gender wage gap. This indicates that the more advanced a country the lower the level of the wage gap.

Keywords: GDP, Gender Wage Gap.

1 Introduction

Gender gap persists in all aspects of life in this world. Nature and extent of the gap varies in different countries or regions. Most of the countries in the world, women are experiencing gaps in legal rights, social and economic. United Nations Development Programme (UNDP) stated in Human Development Report (HDR) that one of the important things in human development is equitable economic growth between generations, between ethnicities, between sexes, and between regions. Where one dimension is emphasized by the UNDP gender equality.

Gender equality is a key issue of development. Gender equality will strengthen the ability of countries to grow, reduce poverty and to govern effectively. One form of gender inequality is the wage gap. The wage gap between men and women today have become a hot issue in the world and attracted a lot of attention in the economic literature as related to economic growth.

Previous research by Martin and Garvi 2009 suggests that growth Gross Domestic Product (GDP) stimulates an increase in the value of Gender Development Index (GDI) and Human Development Index (HDI) and reduce the gap between the two indices. In another study, [5] calculate the quantitative consequences to be borne by a country when there is gender inequality in education and employment in his country differences in economic growth rates that ranged from 0.9 to 1.7% in the Middle East and North Africa and 0.1 to 1.6% in South Asia when compared with countries in East Asia and the Pacific. In Indonesia the linkages between gender equality showed statistically significant and negative effect on poverty and positive impact on economic growth [10]. [4] mentions that negatively affects GDP gender wage gap.

Based on the background and some previous studies above, as for the purpose of this study is to GDP factor test for levels of gender wage gap. Effect of GDP measured using GDP index and the gender wage gap is measured using index ratio of estimated female to male earned income the Asia countries.

The hypothesis of this study are:

\( H_0 \) : Gross Domestic Product (GDP) does not affect the Gender Wage Gap

\( H_a \) : Gross Domestic Product (GDP) affect the Gender Wage Gap
2 Methodology

In this study the type of data used are secondary data, namely data collection techniques based on the data available on the internet. Data were collected in the form GDP per capita and Index ratio of estimated female to male earned income from 32 countries in Asia in the years 2005-2007 are available in the report United Nations Human Development Report. Independent variables used in this study is the value GDP per capita each country while Index Ratio of estimated female to male earned income as the dependent variable. Analysis using simple linear regression using Statistical Package for Social Science (SPSS) version 15.0.

The steps are performed in the linear analysis is the first must fulfill Classical Assumption Test. It is used to avoid biased estimates, given that not all data can be applied to regress. Classical Test assumptions in this study consisted of Normality Test, Test and Test heterocedastity autocorrelation. Normality test aims to test whether the regression model, the variable or residual penganggu have a normal distribution. Autocorrelation test aims to test whether the linear regression model is no correlation between the error in period t with disturbing disturbing error in period t-1 (previous). Heterokedastisitas test aims to test whether the regression model of the residual variance inequality occurs one other observation to observation.

After the Classical Assumption Test, then tested the research model in the form of Test coefficient of determination ($R^2$) and Test T. Test coefficient of determination ($R^2$) is used to determine the contribution of the independent variables in explaining the dependent variable. The greater the value of the coefficient of determination, it shows the greater the effect of independent variables on the dependent variable. T test aims to demonstrate how far the influence of the independent variables in explaining the variation individually dependent variable. Tests carried out using $\alpha = 5\%$.

3 Result

3.1 Classical Test Assumptions

Normality test

Normality test is used to determine whether the data used has a normal distribution.

Based on Table 1 shows that the residual normality test results showed a significantly greater level of $a(a = 0.05)$ is 0.645 to 0.072 for the variable gender and the GDP variable. Thus it can be stated both normally distributed variables sehingga unfit for regression analysis.

Table 1: One-Sample Kolmogorov-Smirnov Test

<table>
<thead>
<tr>
<th>Parameters</th>
<th>Normal</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>32</td>
<td>32</td>
</tr>
<tr>
<td>Mean</td>
<td>35.3571</td>
<td>1.3997</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>32.04776</td>
<td>.52</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td>Absolute</td>
<td>228</td>
</tr>
<tr>
<td>Positive</td>
<td>228</td>
<td>.078</td>
</tr>
<tr>
<td>Negative</td>
<td>-161</td>
<td>-131</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov Z</td>
<td>1.290</td>
<td>.739</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.072</td>
<td>.645</td>
</tr>
</tbody>
</table>

a Test distribution is Normal
b Calculated from data.

Autocorrelation Test

In this study, durbin-watson test values ($dw$) is 2.415 which is in the interval 1.502 (value du) - 2.498(value 4-du). This shows that the regression model there is no autocorrelation.

Test Heterocedastity

Figure 1: Scatterplot

Figure 1 shows that the distribution of the data points are not patterned, the data points spread above and below or around the number 0 and not accumulate just above or below it. It can be concluded that the linear regression model is free from assumptions heterocedastity classic.

3.2 Testing The Research Model

Test Koejsien Determination ($R^2$)

The test results of Table 2 shows the value of Adjusted R Square of 0.108. This means that 10.8% level of the wage gap is affected by the independent variable is GDP per capita. While 89.2% is influenced by other variables not examined in this study as the level of education, welfare and job availability.
The 3rd Uzbekistan-Indonesia International Joint Conference on Economic Development and Nation Character Building to Meet the Global Economic Challenges

Table 2: Model Summary (b)

<table>
<thead>
<tr>
<th></th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>95% Confidence Interval</th>
<th>t</th>
<th>Sig.</th>
<th>F</th>
<th>p-Change</th>
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<tr>
<td>1</td>
<td>(Constant)</td>
<td>1.612</td>
<td>.153</td>
<td>12.056</td>
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<td></td>
</tr>
<tr>
<td>GDP</td>
<td>-.006</td>
<td>-.931</td>
<td>-.376</td>
<td>-2.182</td>
<td>.037</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a Predictors: (Constant), GDP
b Dependent Variable: GENDER

Sources: Secondary data were processed with SPSS.

Hypothesis testing (t test)

Table 3:

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a Dependent Variable: GENDER

Sources: Secondary data were processed with SPSS.

Hypothesis testing is done by comparing the value of t and t table. Hypothesis is accepted if $t > t\text{ table}$ and $\text{sig.} < 0.05$. In this study the value of t table = 0.05 and df = 30 is 1.697 and t values for the variables GDP by -2.182 and $\text{sig.} = 0.05$ is 0.037. Thus it can be said that $t > t\text{ table}$ is 2.182 > 1.697 and significance value 0.037 < 0.05. Thus $H_a$ is accepted. Judging from the beta of -0.006, it shows that GDP has a negative and significant effect on the level of gender wage gap.

5 Conclusions and Recommendation

Based on the above discussion, it is known that $H_a$ is accepted and concluded that GDP per capita is negative and significant effect on the level of the wage gap between the genders. 10.8% gender wage gap is affected by the value of economic growth. This indicates that the more developed a country, the level of the wage gap, the lower or the higher the value of a country’s GDP per capita index the gender wage gap is getting smaller.

For further research are expected to use the sample countries with wider coverage and add some other factors not tested in this research.

References


