ANALYSIS OF GENDER DEVELOPMENT AND ITS IMPACT ON ECONOMIC GROWTH IN BALI

I Made Astrama
Universitas Hindu Indonesia Denpasar
Email: madeastrama59@gmail.com

Abstract
The Gender Equality Index released by Equal Measures; Indonesia got mixed results on various indicators that were used as references. For example, Indonesia has been praised for recording one of the highest literacy rates in Asia (93.59% for women and 97.17% for men). Demographic changes in Indonesia by referring to the variables of population growth, life expectancy and the growth of the ratio of workers to the total population have a big influence on Indonesia’s economic growth. The implication of these variables is economic growth. Besides that, it can also be explained that until now the Indonesian economy is still supported by household consumption, with the proportion of household consumption to GDP. Ease of access to technology will also increase women's productivity.

Keywords: Gender equality, population growth, economic growth

INTRODUCTION
World leaders will lose momentum and fail to tackle gender inequality by 2030 if they do not accelerate steps related to the role of women in world economic growth. The warning was conveyed by the organization Equal Measures 2030 when it published the Gender Equality Index in September 2019. The Director of Equal Measures, Alison Holder explained that this can be used as a reference for policy makers to direct their efforts to real problems. However, a survey conducted by 600 experts in 50 countries on the contrary shows that governments in many countries do not take data collection programs on women’s issues seriously. The Gender Equality Index, which was first released in 2018, covers six countries, namely Indonesia, Colombia, El-Salvador, India, Kenya and Senegal. These countries are still struggling with major gender equality issues in their respective regions. Holder further emphasized that every country needs a new index to measure and monitor government performance. Currently, the United Nations has a Gender Gap Index (GII) which is released annually by the United Nations Development Program (UNDP). The index uses three indicators, namely reproductive health which is measured by maternal life expectancy and birth rate, empowerment which refers to women's representation in parliament and politics, and finally economic status which is calculated based on women's participation in the labor market. Holder further emphasized that every country needs a new index to measure and monitor government performance. Currently, the United Nations has a Gender Gap Index (GII) which is released annually by the United Nations Development Program (UNDP). The index uses three indicators, namely reproductive health which is measured by maternal life expectancy and birth rate, empowerment which refers to women's representation in parliament and politics, and finally economic status which is calculated based on women's participation in the labor market.
parliament and politics, and finally economic status which is calculated based on women's participation in the labor market. Holder further emphasized that every country needs a new index to measure and monitor government performance. Currently, the United Nations has a Gender Gap Index (GII) which is released annually by the United Nations Development Program (UNDP). The index uses three indicators, namely reproductive health which is measured by maternal life expectancy and birth rate, empowerment which refers to women's representation in parliament and politics, and finally economic status which is calculated based on women's participation in the labor market.

In the Gender Equality Index released by Equal Measures, Indonesia gets mixed results on various indicators that are used as references. Indonesia, for example, has been praised for recording one of the highest literacy rates in Asia (93.59% for women and 97.17% for men). In addition, the National Health Insurance policy which covers 3/4 of the population and is listed as one of the largest national health programs in the world, has succeeded in reducing maternal mortality. However, the influence of conservatism in various legislative products still negates the civil rights of women. Taxation and inheritance laws, for example, are still considered to still discriminate against women. In addition, the product of legislation that protects women from sexual harassment and domestic violence is still weak and not enforced.

The Minister of Women's Empowerment and Child Protection (PPPA) RI I Gusti Ayu Bintang Puspayoga (2020) said the level of gender equality in Indonesia was still low. This is reflected in the gender equality index released by the United Nations Development Program (UNDP). Indonesia is ranked 103 out of 162 countries, or the third lowest in ASEAN. As for referring to other data, such as the Gender Development Index (IPG) in Indonesia as of 2018 it was at 90.99. Then, the Gender Empowerment Index (IDG) is at 72.1. Increasing the role of women and men in gender-oriented development as an integral part of national development, has an important meaning in the effort to realize a harmonious equal partnership between men and women to realize gender equality and justice in various fields of life and development (Saguni, 2020). Based on this description, the purpose of this study is to analyze the dynamics of the gender inequality index in Indonesia and the impact of the gender inequality index on economic growth.

LITERATURE REVIEW

Gender Concept

According to Handayani and Sugiarti (2008), to analyze gender inequality, it is necessary to first define the notion of gender with sex or gender. Sex is a biologically determined sex division attached to a particular sex. Sex means the difference between men and women as creatures who naturally have different organismal functions. Biologically biological tools are attached to men and women forever, their functions are not interchangeable. Permanently does not change and is a biological provision or God's provision (nature). The word "gender" is often defined as a group of men, women, or gender
differences. The concept of gender is an inherent trait of men and women which is shaped by social and cultural factors. Thus, several assumptions about the social and cultural roles of men and women were born. The social formations of men and women include: if women are known to be gentle, beautiful, emotional, or motherly creatures. While men are considered strong, rational, manly, and mighty. The above properties are interchangeable and change from time to time. Therefore, it can be said that gender can be interpreted as a social concept that distinguishes (in the sense of: choosing or separating) the roles between men and women. The differences in the functions and roles of men and women are not determined because between the two there are biological or natural differences, but are distinguished or sorted according to their respective positions, functions and roles in various fields of life and development. The social formations of men and women include: if women are known to be gentle, beautiful, emotional, or motherly creatures. While men are considered strong, rational, manly, and mighty. The above properties are interchangeable and change from time to time. Therefore, it can be said that gender can be interpreted as a social concept that distinguishes (in the sense of: choosing or separating) the roles between men and women. The differences in the functions and roles of men and women are not determined because between the two there are biological or natural differences, but are distinguished or sorted according to their respective positions, functions and roles in various fields of life and development. The social formations of men and women include: if women are known to be gentle, beautiful, emotional, or motherly creatures. While men are considered strong, rational, manly, and mighty. The above properties are interchangeable and change from time to time. Therefore, it can be said that gender can be interpreted as a social concept that distinguishes (in the sense of: choosing or separating) the roles between men and women. The differences in the functions and roles of men and women are not determined because between the two there are biological or natural differences, but are distinguished or sorted according to their respective positions, functions and roles in various fields of life and development. While men are considered strong, rational, manly, and mighty. The above properties are interchangeable and change from time to time. Therefore, it can be said that gender can be interpreted as a social concept that distinguishes (in the sense of: choosing or separating) the roles between men and women. The differences in the functions and roles of men and women are not determined because between the two there are biological or natural differences, but are distinguished or sorted according to their respective positions, functions and roles in various fields of life and development. While men are considered strong, rational, manly, and mighty. The above properties are interchangeable and change from time to time. Therefore, it can be said that gender can be interpreted as a social concept that distinguishes (in the sense of: choosing or separating) the roles between men and women. The differences in the functions and roles of men and women are not determined because between the two there are biological or natural differences, but are distinguished or sorted according to their respective positions, functions and roles in various fields of life and development.
The differences in the functions and roles of men and women are not determined because between the two there are biological or natural differences, but are distinguished or sorted according to their respective positions, functions and roles in various fields of life and development. The differences in the functions and roles of men and women are not determined because between the two there are biological or natural differences, but are distinguished or sorted according to their respective positions, functions and roles in various fields of life and development.

In subsequent gender developments, it is known that there are three types of gender roles, namely productive roles, reproductive roles, and social roles. A productive role is a role performed by a person, involving work that produces goods and suits, both for consumption and for trade. This role is often referred to as the role in the public sector. The reproductive role is the role played by a person for activities related to the maintenance of human resources and household chores, such as raising children, cooking, washing clothes and household utensils, ironing, cleaning the house, and others. This reproductive role is also called the role in the domestic sector. Social role is a role that is carried out by a person to participate in social activities.

The problem is, if the construction of gender is considered as nature, as a result, gender affects human beliefs and the culture of society about how men and women think and act in accordance with these social provisions. The distinction made by the rules of society and not the biological difference is considered as a provision of God. It is society as a group that creates the behavior of gender division to determine based on what they consider to be a must, to distinguish between men and women. The belief in the division is then passed down from one generation to the next, full of processes, negotiations, resistance and domination. Finally, over time the division of gender beliefs is considered natural, normal and natural so that for those who start to violate it is considered abnormal and violates nature. Therefore, among nations in different periods of time, the gender division is different.

Gender differences in some ways will lead to gender inequalities. Gender inequality is manifested in various forms of injustice, for example: marginalization, subordination, more workload, and stereotypes. Marginalization or also called economic impoverishment, in terms of its sources can come from government policies, beliefs, traditional beliefs and habits or scientific assumptions. Subordination is the notion that women are not important to be involved in political decision-making. Women are subordinated by socially constructed factors. This is because the concept of gender has not been conditioned in society, which has resulted in job discrimination for women.

Like other countries in the world, Indonesian people recognize the division of tasks between men and women, both roles in society and in the family. Men act as heads of families and bread winners and women are tasked with carrying out domestic activities such as managing the household, raising children and so on. Given this difference in roles, parents tend to prioritize boys over girls to go to school, especially if family finances are limited. This condition contradicts the benefits derived from higher education for women, although
this does not mean that education for women is more important than for men. According to Schultz (1995) there are three factors that motivate parents to prioritize the education of boys over girls: 1. The rate of return on investment for girls is lower than for boys. This may be because the demand for technology-related labor for women is lower than for men. 2. Remittance (money transfer) from girls is smaller than boys. 3. Parental satisfaction sees the success of boys is greater than girls. In a gender perspective, the essence of education for women is not only to produce material, which is often an excuse for having a career outside the home in order to provide the best for children, but rather as an effort to increase their capacity and potential to (1) increase the bargaining position of women in decision making (both as wives or children in the family or as members/citizens in the context of society/state); and (2) increasing the knowledge, attitudes, and skills of women as housewives to educate and raise children through parenting. Thus, development with a gender perspective is not only the amount of material (goods and services) to boost the family economy, but also creates gender equality and justice in various aspects of life and the formation of a quality nation generation. and (2) increasing the knowledge, attitudes, and skills of women as housewives to educate and raise children through parenting. Thus, development with a gender perspective is not only the amount of material (goods and services) to boost the family economy, but also creates gender equality and justice in various aspects of life and the formation of a quality nation generation.

**Endogenous Growth Theory**

Model Solow growth shows that sustainable growth comes from technological advances. But where does technological progress come from? In the Solow model, it is only assumed. One of the criticisms of Solow's growth model is its use of less specific technology improvement assumptions, especially the origin of the technology improvement variable. This theory was coined by Robert Lucas and Paul Romer. This theory states that the accumulation of physical capital and human capital is most likely to maintain the level of economic growth. If human capital remains, the increase in physical capital will provide a decreased return. Likewise, if physical capital is fixed, then an increase in human capital will provide a decreasing return. Output per worker depends on the level of physical capital per worker or the level of human capital per worker. Increased physical capital can be through investment in physical capital and human capital, which can be done through education, training, and so on.

To see the relationship between the production function above and economic growth, it is assumed that $s$ is part of the income that is saved and reinvested.
With a slight change in the production function, it can cause a statistical change in the prediction of economic growth. In the Solow growth model, the increase in savings causes only temporary growth, but the declining return on capital is what actually drives the UK economy to reach a steady state where this growth only depends on exogenous technological improvements. On the other hand, the endogenous theory states that the level of savings and investment can promote sustainable economic growth.

Can the assumption of diminishing returns to capital be ignored? It depends on how the variable K in gsi Y = AK is interpreted. From the old point of view, if K includes the total inventory of plant and equipment in the economy, ka should be assumed to be declining returns. Giving 10 computers to each worker does not increase worker productivity 10 times. Endogenous growth theory argues that the assumption of constant returns to capital is acceptable if K is interpreted broadly, for example by including science as one of the capitals. When compared with the form of capital (old point of view), knowledge capital does not have a condition of decreasing returns, and on the contrary tends to increase returns (increasing returns to capital). For example, scientific and technological innovation has continued to increase in the last few centuries, leading some economists to argue that there are increasing returns. If knowledge can be accepted as part of the theory, then the theory of endogenous growth assuming a constant return on capital is a more impressive description of long-run economic growth.

**Solow's Neoclassical Growth Theory**

Solow's Neoclassical Growth Model is designed to show how capital growth, labor growth, and technological progress interact in the economy, and how they affect a country's overall output of goods and services. The Solow model is a development of the Harrod-Domar formulation by adding a second factor, namely labor, and introducing a third independent variable, namely technology, into the growth equation. However, in contrast to Harrod-Domar which assumes a constant return to scale with standard coefficients, the Solow model adheres to the concept of a diminishing return to scale of labor and capital inputs if the two are analyzed separately; if both are analyzed simultaneously or at the same time,

The production function is Y = F(K, L), which states that output depends on the capital stock and the labor force. The Solow growth model assumes that the production function has constant returns to scale. The capital stock is an important determinant of an economy's output because the capital stock can change over time, and that change can lead to economic growth. Usually, there are two forces that affect the capital stock: investment and depreciation. Investment refers to spending on business expansion and new equipment, and it causes the capital stock to increase. Depreciation refers to the use of capital, and it causes the capital stock to decrease.

The basic Solow model suggests that capital accumulation cannot explain sustainable economic growth: a high saving rate leads to temporarily high growth, but the economy
eventually approaches a steady state where capital and output are constant. To explain sustainable economic growth, the Solow model must be expanded to include two other sources of economic growth, namely population growth and technological progress. In a steady state with population growth, capital per worker and output per worker are constant. However, as the number of workers increases at rate \( n \), total capital and total output must also increase at rate \( n \). Therefore.

To include technological progress, the production function is \( Y = F(K, L \cdot E) \), where \( K \) is capital, \( L \) is labor, and \( E \) is labor efficiency, whose growth is determined exogenously. Labor efficiency reflects people's knowledge of production methods; as technology advances, labor efficiency increases. Labor efficiency also increases when there are developments in the health, education, or skills of the workforce. \( L \cdot E \) measures effective workers. Thus, this production function states that total output \( Y \) depends on the number of units of capital \( K \) and the number of effective workers, \( L \cdot E \).

At the heart of this approach to the technological progress model is the increase in labor efficiency \( E \) as the labor force \( L \) increases. This form of technological progress is called labor-augmenting technological progress, and \( g \) is called the labor-augmenting technological progress. Since the labor force \( L \) grows at a rate \( n \), and the efficiency of each unit of labor \( E \) grows at a rate \( g \), the number of effective workers \( L \cdot E \) grows at a rate \( n + g \). Technological advances also modify the criteria for the Golden Rule. The Golden Rule level of capital is defined as the steady state that maximizes consumption per effective worker, where \( MPK = + n + g \).

According to Solow, technological advances lead to continued growth in output per worker. On the other hand, the saving rate leads to a high growth rate only if the steady state is reached. The Solow model considers technological progress as an exogenous variable.

**METHOD**

This article uses a qualitative research approach, namely research that explores and understands the meaning in a number of individuals or groups of people originating from social problems. Qualitative research in general and can be used for research on people's lives, history, behavior, concepts or phenomena, social problems, and others (Creswell, 2018). Data collection techniques using library research include academic journals, government publications and statistics, websites, and other supporting sources. Descriptive qualitative analysis method is used to interpret aspects that support the development of micro-enterprise business traditional culinary in Indonesia.

**DISCUSSION AND RESULTS**

**Gender Inequality Measure**

The idea of the importance of gender equality and equity has been accepted and adopted and has even become an international agreement (MDGs) that is binding and must be carried out by countries in the world and gives birth to the concept of development with
a gender perspective. Then the United Nations Development Program (UNDP) compiles a benchmark for development success through the Human Development Index/HDI formula. Due to the issue of gender equality, a new formula was developed that accommodates a gender perspective, namely the Gender Development Index (GDI) and the Gender Empowerment Measure (GEM).

GDI is a variation of HDI which is disaggregated by sex. The variables that make up GDI are the Human Development Index (HDI) variables which are devoted to the achievement of women, namely life expectancy, education and income per capita (PPP). Meanwhile, GEM focuses more on women's achievements in the socio-economic and political spheres. GEM explicitly measures women's empowerment activities in politics, government and economic activities.

The Ministry of Women's Empowerment and Child Protection and the Central Statistics Agency publish the Gender Development Index (IPG) and the Gender Empowerment Index (IDG), which are adjusted to GDI and GEM. The GPI measures the level of achievement of the same basic abilities as the HDI, namely life expectancy, education level, and income, taking into account gender inequality. IPG can also be used to determine the development gap between men and women. If the GPA is the same as the HDI, it can be said that there is no gender gap, but on the contrary, the GPA is lower than the HDI, so there is a gender gap.

The IDG shows the extent of women's active role in economic and political life. The active role of women in economic and political life includes political participation, economic participation and decision making as well as control of economic resources. In counting. In calculating the IDG, firstly the Equally Distributed Equivalent Percentage (EDEP) is calculated, namely the index for each component based on a percentage that is equivalent to an even distribution of EDEP. The calculation of the income contribution for IDG is the same as the calculation for IPG as described above. Furthermore, each component index, namely the EDEP value is divided by 50. The value of 50 is considered as the ideal contribution of each gender group for all components of the IDG.

Economic Growth Economic growth is an increase in the value of real GDP from time to time, or it can also be interpreted as an increase in the economic capacity of a region. In the regional framework, the concept of GDP is synonymous with Gross Regional Domestic Product (GRDP). GDP or GRDP can be measured using 3 different approaches, namely the production approach, the income approach and the expenditure approach. The production approach and income approach are approaches from the aggregate supply side (Aggregate Supply - AS) while the expenditure approach is an approach from the aggregate demand side.

(Aggregate Demand - AD). GRDP with the production approach is defined as the sum of the Gross Value Added (NTB) generated by all economic activities in a certain area during a certain period (usually one year). GRDP with an income approach is calculated based on the amount of income or remuneration received by all production factors used in the
production process in all sectors, in the form of wages/salaries for labor owners, interest or investment returns for capital owners, land rent for land owners and profits for entrepreneurs. 

From the expenditure side, GRDP is calculated as the sum of all components of final demand, namely household consumption (C), investment (I), government spending (G), and net exports (XM). The large demographic bonus in the form of a productive age population aged 15 to 65 years is able to support economic activities. This very large population can be a blessing for the Indonesian economy if it can optimally take advantage of the demographic bonus moment with educated human resources and the participation of women in work. The demographic bonus has actually started in 2000 and peaked in 2025 (Sitorus, 2016). Until now, the Indonesian economy is still supported by household consumption, with the proportion of household consumption to GDP of 55 percent. The demographic bonus has actually started in 2000 and peaked in 2025 (Sitorus, 2016). Until now, the Indonesian economy is still supported by household consumption, with the proportion of household consumption to GDP of 55 percent. The demographic bonus has actually started in 2000 and peaked in 2025 (Sitorus, 2016). Until now, the Indonesian economy is still supported by household consumption, with the proportion of household consumption to GDP of 55 percent. The demographic bonus has actually started in 2000 and peaked in 2025 (Sitorus, 2016). Until now, the Indonesian economy is still supported by household consumption, with the proportion of household consumption to GDP of 55 percent. 

GRDP at constant prices is often referred to as real GRDP and reflects the value of output calculated at prices in a certain base year. Changes in real GDP from time to time reflect changes in quantity and no longer contain elements of price changes, both inflation and deflation. Real GRDP per capita is calculated from real GRDP divided by the total population at the same time.

**Human Capital Investment**

Education is a development goal. Education plays a major role in shaping the ability of a developing country to absorb modern technology and to develop the capacity for sustainable growth and development. Education can also be seen as a vital component of growth and development—as an input to the aggregate production function. Its dual role as input and output makes education very important in economic development. From an economic perspective, education is a form of investment in human resources that will provide benefits in the future, both to the community or country, as well as to the people who attend education itself. As a form of investment in human resources, education investment can be divided into two types. 

Private investment is an educational investment at the micro level or individual level. The form of private investment is individuals who have formal or non-formal education, including parents who teach children lessons. Meanwhile, public investment is an investment made by the community and the government in the form of providing school buildings, educational institutions, teachers, education funds, providing educational infrastructure, and so on.
Relationship between Gender Inequality and Economic Growth

Previous research such as Klasen 1999, Klasen and Lamanna 2009 concluded that gender inequality is detrimental to the economic growth of a country/region. Gender inequality in education will result in low productivity of human capital so that economic growth will also be low. This is like tax evasion on education causing misallocation of educational resources and subsequently causing low economic growth (Dollar and Gatti 1999). This effect affects economic growth directly through the quality of human capital or labor productivity.

Gender inequality in education causes direct externalities. Women's education has a positive externality effect on the quantity and quality of better education for future generations. An increase in human capital will increase the rate of return on physical investment, which in turn will increase the level of investment and economic growth. Gender inequality in education also causes indirect externalities through demographic effects. There are four mechanisms of demographic impact on economic growth. First, low fertility rates reduce the dependency ratio in the workforce (dependency ratio) thereby increasing the supply of savings. Second, a large number of people entering the labor force because of the previously high population growth, will encourage investment demand. If the increase in demand is supported by an increase in domestic saving or capital inflow, it will encourage investment expansion and further increase economic growth (Bloom and Williamson 1998). Third, low fertility rates will increase the contribution of the working age population. If labor growth is absorbed by increased employment, then per capita growth will increase even though wages and productivity remain the same. This phenomenon is only temporary (referring to Bloom and Williamson 'demographic gift') because after several decades the working age population will decrease while the old age population will increase, thereby increasing the number Fourth, Arifin (2020) Gender equality is one solution in increasing economic growth, while the policy that can be carried out in the field of education is the Fair program. The role of women today can no longer only be underestimated in their role in the economy, women's economic empowerment programs are important. Development programs in the context of increasing economic growth should pay attention to cross-regional characteristics and effects.

Equitable opportunity in the education and employment sectors for each gender has a positive impact on the competitiveness of a country/region in increasing economic growth. Ease of access to technology will also increase women's productivity. In addition, the measurement effect also has an impact on gender inequality. There are many types of women's work not included in the System of National Accounts (SNA). As a result, there is no increase in productivity, the impact of this measurement has policy implications (measured or not) and economic output does not change.
Relationship between economic variables and gender

According to Klassen and Lemanna (2009), economic and gender variables related to economic growth either directly or indirectly are as follows:

1. Education
   The quality of human resources is an important factor in economic growth, because it is related to the efficiency and productivity of the population. Human capital is the most important source of growth in the view of the endogenous growth model. Human capital does not only include the total population and labor force, but also represents the quality or skills and knowledge possessed by workers. Barro (1991) states that human capital includes aspects of workforce education which can be measured by the average length of schooling for the productive age population and health aspects as measured by life expectancy. The average length of schooling by gender is important to examine to see the educational gap between boys and girls. Gender inequality in education will affect economic growth because the efficiency and productivity of the population will decrease. Gender inequality in education can also affect economic growth through investment. The higher the average length of schooling for women, the higher the investment and ultimately the increase in economic growth.

2. Population growth
   The effect of population growth on living standards is reflected in per capita income. Countries with high population growth will have low per capita income. Gender inequality in education causes an externality effect on demography (population). Amalia (2017) examines the impact of gender inequality in education on birth rates and economic growth. This study states that gender inequality in education will cause the poverty rate to increase and the economic slowdown. High population growth can hamper economic growth.

3. Workforce
   Labor growth is absorbed by an increase in employment, so per capita growth will increase even though wages and productivity remain the same. In addition, workforce education can increase economic growth. The level of education also determines the level of income received by the community. Labor force variables include male labor force participation, and female labor force participation.

4. Investment
   Investment is an important variable as a driver of economic growth of a region. Investment is the most fundamental determinant of economic growth based on the identification of neo-classical models and endogenous models. The neoclassical model states that investment has a temporary impact, but the endogenous model states that investment, especially human capital investment, has a permanent impact (Barro and
Sala-i-Martin 1995). Endogenous growth theory (Lucas and Romer) states that the accumulation of physical capital and human capital is most likely to maintain the level of economic growth.

5. Openness (Openness of trade)

Economic openness has an important contribution in increasing growth through promotion, knowledge transfer, increasing economies of scale and efficiency. Openness can be measured by the ratio of trade volume or the number of exports and imports to national output (Barro 1992). The other variable is the level of income per capita in the initial conditions (initial variable).

CONCLUSION

Demographic changes in Indonesia by referring to the variables of population growth, life expectancy and the growth of the ratio of workers to the total population have a big influence on Indonesia's economic growth. The implication of these variables is economic growth. Besides that, it can also be explained that until now the Indonesian economy is still supported by household consumption, with the proportion of household consumption to GDP. Ease of access to technology will also increase women's productivity.

REFERENCE


