MEASUREMENT OF POVERTY

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Abstract

Poverty measurement is a critical aspect of economic and social policy, providing insights into the extent and severity of deprivation within a population. Various methods and indicators have been developed to assess poverty, ranging from income-based approaches to multidimensional frameworks. Traditional poverty measurement relies on absolute and relative income thresholds, determining whether individuals or households fall below a defined poverty line. However, income alone does not fully capture the complexity of poverty, leading to the development of multidimensional poverty indices that incorporate factors such as education, health, and living standards. This study explores different methodologies used to measure poverty, highlighting their strengths and limitations. The research examines key poverty indicators, including the Headcount Index, Poverty Gap Index, and Multidimensional Poverty Index (MPI), to provide a comprehensive understanding of poverty assessment. Additionally, it discusses the role of international organizations, such as the World Bank and United Nations, in establishing global poverty measurement standards. The study also considers how economic, social, and policy-related factors influence poverty measurement outcomes. The findings underscore the importance of adopting a multidimensional approach to poverty measurement to better inform policy decisions and intervention strategies. Accurate and comprehensive poverty assessment enables governments and policymakers to design effective poverty alleviation programs tailored to specific population needs. By integrating economic and social dimensions, poverty measurement can contribute to more inclusive and sustainable development efforts.
Keywords: Poverty Measurement, Multidimensional Poverty Index, Economic Deprivation, Policy Intervention, Sustainable Development

I. Introduction

Poverty alleviation is one of Indonesia's development priorities. This is in line with the first commitment of the Sustainable Development Goals (SDGs): reducing poverty and hunger. The availability of accurate poverty figures at regional and national levels is an absolute prerequisite for formulating poverty reduction policies (Byaro et al., 2024).

In the development sector, poverty figures help formulate national development policies and plans, including (a) poverty reduction strategies. (b) setting development planning targets based on geographical location, individual and household goals; (c) Determine the allocation of poverty reduction programs. (d) Monitor and evaluate development plans, including the Medium-Term Development Plan/National Long Term Development Plan (RPJMN/RPJPN) and the implementation of SDGs. (e) Measuring the performance of central and regional governments (Bloomer & Boateng, 2024).

Poverty is essentially the inability to achieve a certain standard of living. In developing countries, absolute poverty is often used as a measure of poverty. A household's income or expenses are compared to the poverty line. This line is based on (i) the minimum expenditure or income required to obtain a certain amount of food to meet a certain calorie requirement; (ii) minimum expenditure (excluding food) for a decent living (Clavijo-Núñez et al., 2024);

The Central Statistics Agency (BPS) is a forum that is authorized by law to calculate and map poverty numbers in Indonesia. BPS has been calculating poverty numbers since the early 1980s & published them officially in 1984. This publication covers poverty numbers for the period 1976-1981. Since then, every 3 years, BPS counts the number of poor people in Indonesia at the same time using household consumption data collection through the National Socio-Economic Survey (Susenas). Since 2002, poverty numbers have been calculated every year using a household consumption module survey through Susenas (Kerschbaumer et al., 2024).

An update to the poverty measurement method was carried out in 1998. The update used a refined food basket & non-culinary component from a survey limited to ten provinces. The calculation of the culinary poverty line is based on the minimum energy requirements of the Indonesian population of 2,100 kilocalories per day, which is a recommendation of the 1978 National Widyakarya Food & Nutrition (WNPG). This method allows for the expansion of commodities in the culinary basket in each region, which creates 52 types of commodities in the culinary basket national. The

calculation of the non-culinary poverty line is based on 51 commodities in urban areas & 47 commodities in rural areas which include housing, clothing & footwear, health care, education portfolio, transportation, and various other goods & services (Osei & Owoo, 2024).

The consumption pattern of the population in Indonesia is experiencing marked changes by updating the minimum calorie consumption limit per capita to 2,150 kilocalories. These changes are the output of the 2012 WNPG & are in sync with the modern nutritional adequacy numbers (AKG) in the Minister of Health Regulation Number 75 of 2013 concerning Recommended Nutritional Adequacy Rates. Apart from that, changes in population consumption patterns (wang et al., 2024).

II. Literature Review

2.1. Poverty Indicators

1. Population ratio

Population ratio is the most commonly used tool to measure poverty levels. This ratio can be used to determine how many people in a country are actually living in poverty, measured against the poverty line, and from there the percentage can be calculated. People whose income is below the poverty line are considered poor. This study looked at poor families. The standard is household income below the poverty line.

2. Poverty Gap and Income Gap

The poverty gap and income gap are measuring tools used to determine and analyze the depth of poverty.

3. Cent Index

The Sen Index is the most general and comprehensive poverty index (Patmawati, 2006). This index combines approaches to the ratio of the number of family heads, the income inequality ratio and the Gini coefficient as indicators of income distribution among the poor.

2.2. Poverty Line and Minimum Living Standards

The poverty line or poverty threshold is the minimum income considered necessary to achieve a decent standard of living in a country.

The poverty line is a useful economic tool for measuring the number of poor people and for considering socio-economic reforms, such as social programs and unemployment insurance, to combat poverty.

The Poverty Line (PLO) is the sum of the Food Poverty Line (FPL) and the Non-Food Poverty Line (NPL). A resident is considered poor if his average monthly per capita expenditure is below the poverty line.

The Food Poverty Line (GKP) is the minimum food expenditure level, equivalent to 2,100 calories per person per day. The basic food package consists of 52 products (rice, tubers, fish, meat, eggs, milk, vegetables, nuts, fruit, oils and fats, etc.).

The non-food poverty line (NPL) is the minimum need for housing, clothing, education and health. The basic non-food product package is represented by 51 types of products in urban areas and 47 types of products in rural areas (Asiva Noor Rachmayani, 2015b).

2.3 Absolute Poverty and Relative Poverty

The concept of absolute poverty or absolute destitution refers to the minimum standard of living that is considered adequate in a particular area at a particular time. According to this concept, someone whose standard of living is below an adequate standard of living is considered poor. A decent life is the boundary that separates the poor from the non-poor: the poverty line. Absolute poverty is the difference between an individual's income and the level of income required to meet basic needs. According to the concept of absolute poverty, a person is said to be poor if he or she is unable to fulfill minimum basic needs such as food, clothing, health, shelter and education which are necessary for a decent life and optimal functioning. This is considered... . Since there are many aspects that need to be taken into account to live a dignified life, minimum basic needs are usually expressed in financial terms.

In contrast to the absolute poverty line, which is based on the nominal amount needed to cover living costs, the relative poverty line is based on social consensus regarding the poorest members of society. Once an agreement is reached, a poverty line can be set. For example, the bottom 20 percent of society are ranked based on their income or expenses.

In the European Union, people earning less than half the median income are classified as poor. In France, for example, the average salary for private sector employees is €3,000 per month, or IDR 47 million. A person with a

monthly income of less than 1,500 euros or 23.5 million rupees is considered poor.

Relative poverty lines cannot be used to compare poverty levels between regions and over time because they do not reflect the same level of prosperity. However, relative poverty measures can be used to determine pro-poor program goals.

Indicators for determining relative poverty usually include two types of information: quantitative information that reflects the distribution and information about the distribution itself. For example, 60% of the average income of society and 20% or 40% of the population with the lowest income are classified as poor. prosperity.

2.4 Non-Monetary Dimensions of Poverty

The non-monetary indicators most commonly used to measure poverty are HDI and HDI. HDI is an index that measures a country's level of human development based on three dimensions: health, education and living standards. HDI ranges from 0 to 1, with 1 indicating the highest level of human development. HDI is an index that measures the level of multidimensional poverty in a country using 10 indicators: nutrition, child health, primary, middle and high school education, sanitation, clean water, electricity, cooking fuel and assets. HDI ranges from 0 to 100%, with a value of 0% meaning the absence of multidimensional poverty.

III. Methodology

Poverty is a complex and fundamental problem in the Indonesian economy. Solutions need to be found to overcome or at least reduce the level of poverty. This research was conducted to find out and understand the calculation of the poverty line, as well as the poverty line indicators

IV. Results and Discussion

A. Poverty Indicators

Poverty is a situation where a person is economically unable to reach the average living standard of people in a particular area. This

inability is characterized by low-income capacity to meet basic needs in the form of food, clothing and shelter. This low earning capacity will also affect their ability to achieve average living standards such as public health and education levels (Yoon, 2014).

The term "poverty line" emerged because poverty can be measured (Sajogjo, 1973). There are various strategies for measuring poverty, including the basic needs strategy. The use of basic needs as a tool for measuring poverty is recommended by the United Nations (1961) and UNSRID (1966). In 1976, this concept was also promoted and popularized by the International Labor Organization (ILO). In the same year (1976), Ganguly and Gupta also developed the Basic Needs Index, followed by Glenn (1978) and Hendra Asmara (1986). According to the Indonesian Central Statistics Agency, basic needs consist of food and non-food, and are divided into urban and rural areas based on the results of the National Socioeconomic Survey (SUSENAS).

Gibson (2005) added that poverty analysis requires accurate data to determine the poverty line, which is measured based on the cost of living (level of income and expenditure relative to consumption) of poor people. Ta. With appropriate poverty lines, it is possible to identify the target beneficiaries of a program and appropriate programs. Determining the poverty line can be used to calculate poverty levels at the international, national, regional and household levels. According to the World Bank, at the international level, the main indicators of poverty are limited ownership of land and capital, limited access to standard facilities and infrastructure, unequal employment opportunities, and lack of adequate health services. Gaps in services, decent work opportunities, and the quality of human resources, poor livelihoods, poor governance, and overexploitation of natural resources without regard for ecological sustainability. The poverty line used by the World Bank is the average population income of US$1 per person per day in purchasing power parity terms (Deaton, 2005). On the other hand, developed countries such as Europe set the poverty line at one third of the annual PDP. According to the World Bank, poverty is the inability to live a dignified life (Charlier et al.,

2024).

His daily income is $1. In an international context, poverty levels are measured based on the Human Development Index (HDI) which consists of life expectancy, educational attainment and per capita income. How we calculate poverty: We compare different types of global poverty across countries, use poverty lines to calculate national poverty rates, and use and adjust poverty estimates by directly examining the experiences of poor people. (Ashiva Noor Rakhmayani, 2015a).

Poverty indicators can be analyzed using various types of poverty indices (Sudarta, 2022).

1. Population Ratio
2. Poverty Gap Ratio and Income Gap Ratio
3. Zinc Index

The following are several explanations related to poverty indicators. 3 indicators (Sudarta, 2022).

1) Head Count Ratio Head count ratio

is the most widely used tool to measure poverty levels. This ratio can be used to determine how many people in a country are actually living in poverty, measured against the poverty line, and from there the percentage can be calculated. People whose income is below the poverty line are considered poor. This study looked at poor families. The standard is household income below the poverty line.

The formula for calculating this ratio is:

$H = q/n$, where
q = number of residents/families whose income is below the poverty line
n = population

2) The Relationship between Poverty Gap and Income Gap

Poverty Gap Poverty Gap and Income Gap are measuring tools to determine and analyze poverty levels. The formula is:

$$1 \Big/ N \sum_{t-1}^{q} (z - yi)$$

Where:

P = poverty gap ratio

z – yi = poverty level the difference between poverty and income of each individual

z = poverty line

yi = income of individual i

$$I = \sum_{i=\varepsilon S\,(z)} \frac{\vartheta i}{qz} \qquad \text{where}$$

I = income inequality ratio

gi = The difference between the poverty line and personal income

q = number of people with income below the poverty line

z = poverty line

3) **Sen Index**

The Sen Index is the most general and comprehensive poverty index (Pathmawati, 2006). This index combines approaches to the ratio of the number of family heads, the income inequality ratio and the Gini coefficient as indicators of income distribution among the poor. The formula is

namely: $P_2 = H\big[1 + (1 - I)G_p\big]$ Where:

P2 = Cent Index

H = Population Ratio

I = Income Inequality Ratio

Gp = Poverty Gini Coefficient.

B. Poverty Line and Minimum Living Standards

Poverty Line and Minimum Living Standards

The poverty line or poverty threshold is the minimum income considered necessary to achieve a decent standard of living in a country.

The poverty line is a useful economic tool for measuring the number of poor people and for considering socio-economic reforms, such as social programs and unemployment insurance, to combat poverty.

The Poverty Line (PLO) is the sum of the Food Poverty Line (FPL) and the Non-Food Poverty Line (NPL). A resident is considered poor if his average monthly per capita expenditure is below the poverty line.

The Food Poverty Line (GKP) is the minimum food expenditure level, equivalent to 2,100 calories per person per day. The basic food package consists of 52 products (including cereals, tubers, fish, meat, eggs, milk, vegetables, nuts, fruit, oils and fats).

The General Non-Food Poverty Line (GKNM) is the minimum need for shelter, clothing, education and health. The basic non-food product package consists of 51 types of products in urban areas and 47 types of products in rural areas (Asiva Noor Rachmayani, 2015b).

Calculation formula:

GK = GKM + GKNM

GK = poverty line

GKM = food poverty line

GKNM = non-food poverty line

GKM calculation methodology

- The first step taken is to determine the reference group (reference population). Twenty percent of the population lives above the Temporary Poverty Line (TPL). This reference group is defined as residents of marginal strata.
- GKS is calculated based on the previous period's GK which is inflated with the general inflation rate (CPI). Based on this reference population, the Food Poverty Line (FPL) and Non-Food Poverty Line (NPL) are calculated.
- The food poverty line (FPL) is the total expenditure on 52 basic foods actually consumed by the target population, equivalent to 2,100 kilocalories per person per day. These benchmarks are based on the results of the 1978 Food and Nutrition Workshop.

Minimum food expenditure was determined by calculating the average calorie cost of 52 items. The basic formula for calculating the Food Poverty Line (GKP) is:

$$GKM_j = \sum_{k-1}^{52} P_{jk} \cdot Q_{jk} = \sum_{k-1}^{52} V_{jk}$$

Were

GKMj = food poverty line j (before adjusting to 2100 kcal).

Pjk = price of commodity k in region j.

Qjk = average quantity of good k consumed in region j.

Vjk = expenditure value for consumption of good k in region j.

j = area (urban or rural)

Thus, GKMj is the implicit average price of calories corresponding to the area j of the reference population multiplied by 2100, which is equal to 2100 kilocalories. That is

$$\overline{HK_j} = \frac{\sum_{k-1}^{52} V_{jk}}{\sum_{k-1}^{52} K_{jk}}$$

Were,

Kjk = calories of product k in region j

HKj = Average price - Average calories in region j

$$F_j = \overline{HK_j} \times 2100$$

Where:

Fj = minimum food requirements in region j, namely energy-producing food namely 2100 kcal/capita/day.

The non-food poverty line (GKNM) is the minimum need for certain non-food items, including housing, clothing, education and health. The selection of non-food goods and services has evolved and refined over the years to keep pace with changes in people's consumption habits. In the pre-1993 period, there were 14 farms in urban areas and 12 in rural areas. Since 1998, it consists of 27 subgroups (51 types of products) in urban areas and 25 subgroups (47 types of products) in rural areas. The minimum requirement value for each non-food commodity/subgroup is calculated based on the ratio of expenditure on that commodity/subgroup to the total expenditure on that commodity/subgroup recorded in the Susenas consumption module data. This ratio is calculated from the results of the 2004 Basic Needs Product Package Survey (SPKKP 2004). This survey was conducted to collect more detailed data on household consumption expenditure by non-food items than data from the Susenas consumption module.

The minimum non-food requirement value can be formulated mathematically as follows:

$$NF_p = \sum_{i-1}^{\pi} r_i \times V_i$$

Where:

NFp = Non-Minimum Expenditure for food or non-food items Food Poverty Line p (GKNMp).

Vi = expenditure per non-food commodity/subgroup in region p (from module

Consumption in Susena).

ri = Non-food expenditure ratio by region/subgroup (SPPKD 2004 results).

i = selected non-food type in area p.

p = region (urban or rural).

Proportion of poor people

Draft:

Population Index (HCI-P0) is the proportion of the population below the poverty line (PLO).

Data source:

The main data source is the panel module of the National Socioeconomic Survey (Susenas)

consumption and correlation data. Formula :

$$P_a = \frac{1}{n} \sum_{i-1}^{q} \left[\frac{z - y_i}{z} \right]^{\alpha}$$

Where,

α = 0

z = poverty line.

yi = average per capita expenditure of people below the poverty line per

month (i=1, 2, 3,

...., q), yi < z

q = number of people living below the poverty line.

n = population.

Poverty Gap Index

Draft:

The Poverty Gap Index (P1) is a measure of the average expenditure gap for each poor person compared to the poverty line. The higher the index value, the further the average population expenditure is from the poverty line.

Data source:

The main data sources used are the National Socio-Economic Survey Panel Consumption Module (Susenas) and Kor.

$$p_a = \frac{1}{n} \sum_{i-1}^{q} \left[\frac{z - y_i}{z} \right]^\alpha$$

Where,

α = 0

z = poverty line.

yi = average per capita expenditure of people below the poverty line per month (i=1, 2, 3,

...., q), yi < z

q = number of people living below the poverty line.

n = population.

Poverty Severity Index

Draft:

The Poverty Severity Index (P2) provides a general picture of the distribution of expenditure among the poor. The higher the index value, the greater the inequality in expenditure among the poor.

Data source:

The main data sources are the Consumption Module Panel of the National Socio-Economic Survey (Susenas) and Kor.

The formula is:

$$P_a \frac{1}{n} \sum_{i-1}^{q} \left[\frac{z - y_i}{z} \right]^{\alpha}$$

Where:

α = 2

z = poverty line.

yi = average monthly expenditure per capita for people below the poverty line (i=1, 2, 3,

...., q), yi < z

q = living below the poverty line Number of people who do this.

n = total population.

The Poverty Line is a representation of the rupiah needed or the price paid so that the population can live a minimum decent life which includes fulfillment. minimum culinary needs (equivalent to using 2,100 kilocalories per capita per day) & non-culinary essentials.

The Poverty Line used by BPS consists of 2 components, namely the Food Poverty Line (GKM) which consists of 52 types of commodities & the Non-Food Poverty Line (GKNM) which consists of 51 types of commodities for urban areas, & 47 types of commodities for rural areas. Poverty Line (GK) is the sum of GKM & GKNM. The Poverty Line is periodic & gets higher every year, as shown in the following picture:

Sumber: BPS Provinsi Jawa Tengah, 2014-2018

Gambar 3
Perkembangan Garis Kemiskinan Provinsi Jawa Tengah

The Central Java Poverty Line for the September 2018 period is IDR. 357,600, per capita per month, an increase of 5.54% compared to September 2017 which reached Rp. 338,815,- per capita per month (Widianingsih et al., 2022).

Poverty Data

Data related to poverty can be divided into 2 (two) groups, namely macro data and micro data which are officially published periodically by BPS.

1. Macro Data

Macro poverty data is data obtained through a survey mechanism (sample), is qualitative in nature, provides a general overview and profile of an area, as analytical material for making macro poverty reduction policies,

and cannot be displayed by name by address. An example of macro data is National and Provincial poverty data which is published twice a year (March and September periods) and once a year for the March period for districts/cities in the Official BPS Statistical News.

2. Micro Data

Micro poverty data is data obtained through a census mechanism (comprehensive in nature), is quantitative, can provide detailed information, and can be used as a program/activity intervention by name by address. An example of micro data is Social Protection Program Data Collection (PPLS) data published periodically every 3 years by BPS. Another example is the Integrated Data for Handling the Poor and Disabled People (DT PFM OTM) which is the result of updating the Integrated Database (BDT) which is published twice a year by the Ministry of Social Affairs. Micro Data is used for program interventions/poverty reduction activities.

OTM PFM Integrated Data is an electronic data system that contains social, economic and demographic information as well as the characteristics of around 40% of households with the lowest welfare status determined by the Ministry of Social Affairs. OTM PFM Integrated Data is used to improve the quality of targeting of social protection programs, as well as assisting program planning, improving the use of budgets and social protection program resources. OTM PFM Integrated Data is a micro database for poverty alleviation based on the 2015 Integrated Data Base, which was updated in 2018 (Widianingsih et al., 2022).

Poverty Reduction Strategy

Based on Presidential Regulation Number 15 of 2010 concerning the Acceleration of Response

Poverty, poverty reduction strategies are carried out through (Widianingsih et al., 2022):

1. Reducing the Expenditure Burden on the Poor. This is done to fulfill basic needs (basic life access), namely clothing, food, shelter, education, health, clean water.

2. Increasing the Capabilities and Income of the Poor

a. Carried out through start-up entrepreneurial training/skills and initial capital assistance;

b. To determine the beneficiaries of programs/activities, pay attention to the criteria contained in the 2018 BDT data, among others

    i.   Status of business ownership in a household;

    ii.   Access to KUR;

    iii.   Land ownership;

    iv.   Ownership of movable assets;

    v.   Livestock ownership;

    vi.   Highest educational status.

3. Develop & claim the sustainability of Micro & Small Enterprises

Carried out through events/activities related to facilitating entrepreneurship development, facilitating access to capital/subsidized credit (Jamkrida/KUR/Mitra 25), empowerment & ongoing mentoring, professional product/IPR allowances, and maintaining business climate stabilization & marketing facilitation.

4. Synergize poverty reduction policies & events

This is done through the synergy of planning documents through monitoring & evaluation, and developing partnerships involving universities using Thematic KKN, Corporate/BUMN/BUMD TJSLP/CSR, and

encouraging the development of rural areas.

The primary objective of calculating poverty globally (world poverty measures) is related to achieving targets for reducing poverty globally as promoted through the Millennium Development Goals (MDG) in the era 1990 to 2015 (Ferreira, et al., 2015). This effort continues where in 2013 the World Bank set a goal to end extreme poverty by 2030.

Furthermore, the United Nations (UN) plans to eradicate all forms of poverty by 2030 as outlined in the Sustainable Development Goals (SDG). To monitor developments in world poverty levels, the measurements developed must be comparable between one country and another. For this reason, the World Bank formed an international GK from the PPP concept using a certain base year.

This article presents the GK calculation approach used to estimate poverty numbers, both from the international GK and the national GK in Indonesia. The systematic writing will begin with a discussion of concepts applied to comparisons of poverty between countries and how to calculate poverty using the national GK in Indonesia. Then, the discussion continued by forming a comparative picture of poverty numbers from the 2 approaches (Hidayat et al., 2020).

Purchasing Power Parity (PPP) Concept

Analysis of world poverty requires a measure of the price level of goods and services that can be compared between countries. PPP is an inter-country price index which is a measure of the amount of money expected to buy the same amount of goods at nil relative to a comparison country, which usually uses a comparison using the United States (Deaton & Aten, 2017). The concept of PPP is closely related to the definition of price level in each country, the prices are homogeneously weighted according to a number of goods using the same types of goods and weights between these countries (Feenstra & Taylor, 2017).

Furthermore, it is assumed that PPP will apply throughout the price levels in several countries. comparable to units of the same exchange rate. A simple illustration of the PPP concept is that if the price of one banana in the United States is US$ 1. While the price of a similar banana in Indonesia is Rp. 500, then PPP is US$ 0.002/Rupiah.

International Poverty Line

The definition of extreme poverty based on the 2011 base year is those who live on below $1.9 PPP per day. The initial history of the use of PPP dollars begins with the World Bank's 1990 publication, World Development Report. At that time, the international GK limit was $1 PPP of the ICP-base year 1985 (Ravallion, et al, 1991). To form the international GK, the World Bank in 1990 used a sample of national GK according to 33 countries. Furthermore, there are still 8 poorest countries where the international GK is based on $1 PPP per day (Kenya, Nepal, Tanzania, Bangladesh, Indonesia, Morocco, Philippines, Pakistan).

Tabel 1 Sejarah Penerapan US$ PPP

Nama	Tahun Dasar ICP	Referensi Populasi	Metode	Garis Kemiskinan
1979: "India Line"	1975	India	Persentil 46 Populasi India	$0,56
1990: "Dollar a Day"	1985	Kenya, Nepal, Tanzania, Bangladesh, Indonesia, Maroko, Filipina, Pakistan	*Inspection'* *(rounded)*	$1,01
2001: 1,08/day	1993	Tiongkok, Tanzania, Zambia, India, Indonesia, Thailand, Nepal, Bangladesh, Tunisia, Pakistan	Median	$1,08
2008: 1,25/day	2005	Malawi, Mali, Ethiopia, Sierra Leone,	Mean	$1,25
2011: 1,90/day	2011	Niger, Uganda, Gambia, Rwanda, Guinea-Bissau, Tanzania, Tajikistan, Mozambik, Chad, Nepal, Ghana.	Mean (rounded)	$1,90

Sumber: Ferreira, 2015

The use of exchange rates in PPP is different from the meaning of nominal exchange rates. Based on the 2011 ICP report, the nominal exchange rate of the Rupiah against the US dollar was IDR 8,770. If the international GK was worth 1.9 PPP dollars per day in 2011, if you convert the international GK into 1 Rupiah, then the Rupiah has a nominal exchange rate of IDR 8,770 per

US dollar. However, the ``PPP Exchange Rate Conversion'' column in the ``Private Household Final Consumption Expenditure'' table in the 2011 ICP Report is used for conversion to exchange rate.

Tabel 2 Nilai Tukar PPP Tahun Dasar 2011 (Indonesia)

Wilayah	$1 PPP per hari (Rupiah)
Perkotaan	4.360,50
Perdesaan	3.666,16
Indonesia	4.091,90

Sumber: Ferreira, 2015

The calculation of poverty levels in Indonesia using the General International Classification Method is more specific because it consists of two lines per region, taking into account adjustments for urban and rural areas (Chen & Ravallion, 2010). The international urban-rural GK ratio corresponds to the urban-rural GK ratio calculated by BPS, namely 1.19. The PPP exchange rate of US$1 per day for the base year 2011 is shown in Table 1 (Ferreira et al., 2015).

Calculation of Indonesia's National Poverty Line

The cost of basic needs (CBN) approach is a poverty measurement method officially released by BPS. This approach calculates costs as a component of food consumption expenditure to meet minimum nutritional requirements equivalent to 2,100 calories per person per day (Haughton & Khandker, 2009). Then, the portion of a number of essential non-culinary expenditures is included in the overall calculation (total) to complete the portion of the culinary consumption portion (BPS, 2016). The value of the minimum needs for the non-culinary group. using the expenditure ratio for each type of non-culinary expenditure to the total expenditure obtained based on the output of the basic needs commodity package survey (SPKKD).

The data source for the national GK calculation is the consumption module that still exists in the National Socio-Economic Survey (Susenas). The

calculation of culinary consumption expenditure in the national GK involves 52 commodities, while non-culinary expenditure items which are part of the national GK calculation include: 51 types for urban areas & 47 types for rural areas (BPS, 2016).

B.2. Definition of Early Childhood Development

Social growth refers to a person's ability to behave in accordance with prevailing social norms (Miranti&Putri,2021). In children, social growth refers to the growth of their attitude in getting used to the rules contained in the society where they live (Anzani& Intan, 2020). This growth process takes place gradually through various life sessions. Sometimes, a person faces crisis periods during childhood and puberty. Growth is a process leading to perfection that cannot be repeated (Miranti&Putri,2021).

The growth process takes place continuously and alternately adrift between the existing components. Along with physical development, children's character also faces more mature growth (Miranti&Putri,2021). This growth is influenced by the maturation process of the organs of the body and occurs in every reasonable person, so it can be predicted in advance (Masganti, 2015). Thus, we can predict at what age someone will start talking or stop developing (Miranti&Putri,2021).

Poverty Levels Based on Two Poverty Line Calculation Methods

Figure 1 shows the evolution of poverty levels by year based on two types of poverty lines. Before 2012, the poverty rate was calculated using the national GK issued by BPS is lower than the poverty level calculated using the international GK (US$1.9 per day at purchasing power parity). Since 2012, the poverty rate has continued to increase. Based on higher national GK. This fact means that in 2012, national team goalkeepers were worth more than international goalkeepers.

Gambar 1 Perbandingan Angka Kemiskinan

Sumber: BPS dan Bank Dunia (diolah)

The distribution of per capita expenditure in 2019 is shown in Figure 2. The distribution of per capita consumer expenditure in Indonesia tends to be skewed to the right. The data used comes from the March 2019 Susenas report. The average consumption expenditure of the population per month is IDR 1,165,241 per capita (BPS, 2019). This graph shows that many people have lower per capita consumption expenditure than the national average.

Gambar 2 Distribusi Pengeluaran Konsumsi Per Kapita
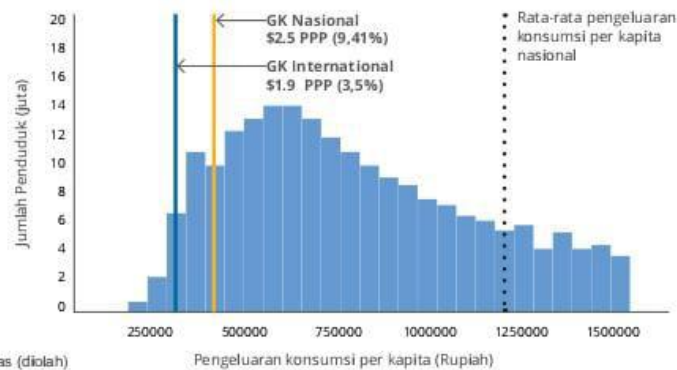
Sumber: BPS, Susenas (diolah)

The national poverty rate calculated by BPS is higher than the international poverty rate of $1.9 PPP per day in the base year 2011. The poverty rate based on the national poverty rate was 9.41% in 2019 (BPS, 2019). Using the Consumer Price Index inflation rate and an international general wealth tax of US$1.90 per day in purchasing power parity as the base year for 2011, the estimated poverty rate using an international general wealth tax of US$1.90 per day is 3.5. The result is %. The BPS domestic GK value is IDR 425,250 per person per month or the equivalent of international GK of 2.5 PPP

dollars per day. (Hidayat et al., 2020).

Poverty and the Nature of Poverty

Poverty is considered in an aggregate and comprehensive manner, but a micro approach is needed to determine the actual poverty situation, namely who is poor and what their characteristics are. The household level approach is an example of a micro approach. According to (Andersson et al., 2006), the household as a unit of analysis can be carried out in developing countries.

The lack of accumulation of existing resources in a household may be the reason why the household in question is a poor household, that is, destitute. According to Dowling and Valenzuela (2010), human capital such as education, training and skills development is what causes people to become poor. They also have very little physical capital. Additionally, even if you have superior human and physical capital, you may be denied employment opportunities due to discrimination. According to Haughton and Khandker (2012), the main causes of poverty, or at least causes related to poverty, include three characteristics: local, community, household, and individual. Local characteristics include vulnerability to floods and typhoons, remoteness, quality of governance, and property rights and their enforcement. Community characteristics include the availability of infrastructure (roads, water, electricity) and services (health care, education), proximity to markets, and social connections. In addition, we also take into account household and individual characteristics in terms of demographic aspects such as number of household members, age structure, dependency ratio, and gender of the head of household, as well as economic aspects such as employment status, working hours, and ownership. type., and social aspects (health status, nutrition, education, housing, etc.).

Kuncoro (2003) further states that poverty has three causes, namely: First, poverty occurs at the macro level due to unequal resource ownership structures, which causes income distribution to be uneven, and poor people have limited and poor-quality resources. Second, poverty arises from

differences in the quality of human resources. The poor quality of human resources causes low productivity and wages. Third, poverty arises from differences in access and capital. Restrictions and lack of access mean people have limited (or no) options for living their lives outside of what they currently have to (not should) do.According to Todaro and Smith (2006), the level of poverty in a country is determined by two main factors: the level of average national income and the level of inequality in income distribution. No matter how high a country's per capita income is, as long as income distribution is unequal, poverty in that country will definitely remain high. And no matter how evenly income is distributed within a country, poverty will be more common if average per capita income is low. This is in line with Atalay's (2015) statement that poverty is a problem faced by all countries. Economic growth is an indicator of poverty reduction. Economic growth is the concept of economic development. (Bapeda, 2021).

Poverty Reduction Policy in Indonesia

According to Jonaidi (2012), the Indonesian government focuses on quality economic growth, increasing access to basic services, overcoming poverty, and taking steps to lift poor people out of the poverty trap caused by the crisis. continue to carry out various efforts to reduce poverty. It strengthens society by meeting needs such as education and health. Through the National Community Empowerment Program (PNPM) which aims to provide opportunities for poor people to participate in the development process and increase their opportunities and bargaining power, and through the Family Hope Program which aims to improve social welfare and the social security system. aims to improve. (PKH).

Various poverty reduction programs are implemented, including family-based social assistance programs, community-based poverty reduction programs, and small business empowerment programs. To achieve the goal of poverty reduction, the Indonesian government adopted a policy to accelerate poverty reduction through various approaches, including an institutional

approach through the formation of the National Team for the Acceleration of Poverty Reduction (TNP2K) (Purwantini and Rusastra, 2015).

Social protection programs such as PKH, BLT, Jamkesmas, Raskin and BOS are the most targeted poverty reduction programs. However, to increase program effectiveness, targets need to be further refined. One of the reasons why targeted poverty reduction programs are ineffective is that different programs have different targeting approaches and beneficiary databases, which means there is still a large margin for error in terms of exclusion and inclusion. This is what is happening. By considering these things, it is necessary to improve targeting to improve program performance through unifying the national target system (TNP2K, 2012).

The Indonesian government is also implementing a direct cash assistance program throughout Indonesia. The direct cash transfer program provided to eligible households to compensate for reduced fuel subsidies aims to: 1. Help poor communities continue to meet their basic needs; 2. Prevent economic difficulties that can damage the welfare of the poor. 3. Strengthening shared social responsibility (Indonesian Ministry of Social Affairs, 2008). BLT recipients are target households (RTS) obtained from the results of BPS data collection. Households that receive BLT include very poor, poor and almost poor households throughout Indonesia. (Bapeda, 2021).

C. Absolute Poverty and Relative Poverty

Conceptually, poverty can be divided into absolute poverty and relative poverty, the difference lies in the criteria used to measure poverty. The indicators used to determine relative poverty measures are more subjective than absolute poverty measures. Relative poverty depends on subjective factors within a community. Meanwhile, absolute poverty really depends on setting standards for basic needs, both food and non-food (Ardi Adji Taufik Hidayat Hendratno Tuhiman Sandra Kurniawati Achmad Maulana, 2020).

Poverty can be seen at the macro and micro levels. At the

macroeconomic level, poverty is collected and seen in general, but to determine the true picture of poverty, including who is poor and what their characteristics are, we have to look at the microeconomic aspect. An approach is needed. The household level approach is an example of a micro approach. According to (Andersson et al., 2006), the household is an appropriate unit of analysis in developing countries.

1. Absolute Poverty

The concept of absolute poverty or absolute destitution refers to the minimum standard of living that is considered adequate in a particular area at a particular time. According to this concept, someone whose standard of living is below an adequate standard of living is considered poor. A decent life is the boundary that separates the poor from the non-poor: the poverty line. Absolute poverty is the difference between an individual's income and the level of income required to meet basic needs. According to the concept of absolute poverty, a person is said to be poor if he or she is unable to fulfill minimum basic needs such as food, clothing, health, shelter and education which are necessary for a decent life and optimal functioning. This is considered... . Since there are many aspects that need to be taken into account to live a dignified life, minimum basic needs are usually expressed in financial terms.One of the advantages of the concept of absolute poverty is that it can be compared across time periods and regions, as long as the definition of poverty remains the same. For example, in the United States, poverty is determined by household composition. According to the United States Census Bureau, in 2010 the minimum income for a family of four with no children under the age of 18 was $22,541. For a family with two more children and four adults, the minimum income is $22,162 per year. By this measure, the poverty rate in 2014 was 15.1%, higher than 14.3% in 2010. Because the definition of poverty remains the same, the concept of absolute poverty can be used to assess the success of poverty reduction measures.

The poverty line takes into account differences in purchasing power, or

what is commonly known as the poverty line in US dollars per capita in PPP as determined by the World Bank is an example of the application of the concept of absolute poverty. The World Bank defines extreme poverty as living on less than $1.90 a day.

Reference populations are Malawi, Mali, Ethiopia, Sierra Leone, Niger, Uganda, Gambia, Rwanda, Guinea-Bissau, Tanzania, Tajikistan, Mozambique, Chad, Nepal, and Ghana. . The World Bank's goal in defining poverty is to compare poverty levels across countries, which has implications for the allocation of financial assistance to combat global poverty.A The index commonly used to measure absolute poverty is the Foster-Greer-Sorbek. Equality:

$$FGT_a = \frac{1}{N} \sum_{i-1}^{H} \left(\frac{z - y_i}{z} \right)^{\alpha}$$

If, then the FGT indicator becomes, or is called the poverty level., the FGT indicator becomes an index of the depth of poverty or is called the depth of poverty index. If, then the FGT index is, which is called the poverty severity index. (2020).to the top.

a. Causes of Absolute Poverty

The causes of absolute poverty are:

1) Limited job opportunities

2) The agricultural sector is not yet developed

3) Low level of education

4) There is a cause of conflict

5) Poor infrastructure

6) Mental health problems

b. How to overcome absolute poverty

How to overcome absolute poverty overcome absolute poverty:

1) Increase the income of the Solusi community

2) Limitations of fair infrastructure development

3) Increasing access to education

4) Increase access to health care

5) Solutions for social protection and security programs. (Article, 2023)

2. Relative Poverty

Unlike the absolute poverty line, which depends on the nominal amount needed to cover living costs, the relative poverty line is based on social consensus regarding the poorest layers of society. Once an agreement is reached, a poverty line can be set. For example, the bottom 20 percent of society are ranked based on their income or expenses.

In the European Union, people earning less than half the median income are classified as poor. In France, for example, the average salary for private sector employees is €3,000 per month, or Rs.47 million. Those earning less than 1,500 euros or 23.5 lakhs per month are considered poor.

Relative poverty lines cannot be used to compare poverty levels between regions and over time because they do not reflect the same level of prosperity. However, relative poverty measures can be used to determine pro-poor program goals.

Indicators for determining relative poverty usually include two types of information: quantitative information that reflects the distribution and information about the distribution itself. For example, 60% of society's average income and 20% or 40% of the population at the lowest welfare level. (Ardi

Azi Taufiq Hidayat Hendratno Tuhiman Sandra Kurniawati Ahmad Maulana, 2020)

D. Non-Monetary Dimensions of Poverty

A. Poverty Measure

To measure poverty, we need indicators of the prosperity or lack of prosperity of a population. These metrics can be monetary or non-monetary. Monetary indicators are indicators that use monetary values as a measure of prosperity, such as per capita income

or poverty line. Non-monetary indicators are indicators that use variables other than money as a measure of prosperity, such as the Human Development Index (HDI) and the Multidimensional Poverty Index (HDI).

B. Financial Indicators

The most commonly used financial indicator to measure poverty is the poverty line. The poverty line is the minimum level of income or consumption that a person needs to meet their basic needs. The poverty line can be determined in absolute or relative terms. The absolute poverty line is a fixed poverty line that is the same for all countries and is set by the World Bank, for example US$1.90 per day. The relative poverty line is a poverty line those changes depending on the standard of living of a country's citizens.

C. Non-monetary Indicators

The most commonly used non-monetary indicators to measure poverty are HDI and HDI. HDI is an index that measures a country's level of human development in three dimensions: health, education and living standards. HDI ranges from 0 to 1, with a value of 1 indicating the highest level of human development. HDI measures the level of multidimensional poverty in a country using 10 indicators: nutrition, child health, primary, secondary and tertiary education, sanitation, clean water, electricity, cooking fuel and wealth.

This is an indicator. HDI ranges from 0 to 100%, with a value of 0% meaning the absence of multidimensional poverty.

D. Comparison of poverty indicators

Monetary and non-monetary poverty indicators each have advantages and disadvantages. The advantage of monetary measures is that they are easy to calculate and easy to compare between countries. The weakness of using monetary measures is that they do not reflect qualitative aspects of welfare, such as health, education, environment, participation and human rights. The advantage of nonmonetary measures is that they reflect qualitative aspects of well-being. The disadvantage of non-monetary measures is that they are difficult to calculate and compare between countries.

V. Conclusion

Poverty is a condition of economic inability to meet the average living standards of people in an area. This condition of incapacity is characterized by the low ability of income to meet basic needs in the form of food, clothing and shelter. This low-income capability will also have the impact of reducing the ability to meet average living standards such as public health standards and education standards

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