

Understanding the Poverty Line: A Socioeconomic Measure with Statistical

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Abstract: This article explores the concept of the poverty line, a critical socioeconomic measure used to identify the minimum income level required for individuals or families to meet basic needs. Through a literature review, statistical analysis, and data evaluation, this paper discusses the methods used to calculate the poverty line, its implications on policy, and the challenges faced by individuals living below it. Global and regional variations in poverty line definitions are examined, and statistical data is provided to highlight the scope of poverty worldwide. Furthermore, the limitations of relying solely on income-based metrics to address poverty are analyzed.

Keywords: Global level, economy, increasing employment, reducing unemployment, poverty level, improving the welfare of the population.

Introduction

Poverty remains one of the most significant global challenges. Understanding how to define, measure, and alleviate poverty is essential for creating effective public policies. One of the primary tools used in this context is the poverty line, designed to determine the threshold below which individuals or families are considered to live in poverty. The poverty line provides a quantitative measure of income, highlighting economic inequality and helping governments and organizations allocate resources for social welfare programs. This paper aims to provide an overview of the concept, methodology, and statistical analysis of the poverty line across different regions, supported by global poverty data.

Methods

The research is based on a comprehensive review of literature, statistical reports, and data from organizations such as the World Bank, the International Monetary Fund (IMF), and national statistics agencies. Quantitative data was collected to compare poverty line definitions and poverty rates. Statistical tools such as regression analysis and trend analysis were used to assess the correlation between poverty lines, income inequality, and socio-economic outcomes. The study also compares absolute and relative poverty lines and examines the application of the Multidimensional Poverty Index (MPI) in understanding poverty beyond income.

Results

Global Poverty Statistics. According to the World Bank's latest estimates, 9.3% of the world's population, or about 719 million people, live below the international poverty line of \$2.15 per day as of 2021. This represents a decline from 1.9 billion people living under extreme poverty in 1990, reflecting global progress in poverty reduction over the last three decades.

Year	People living below \$2.15/day (millions)	Global Poverty Rate (%)
1990	1,900	36.0%
2000	1,628	27.9%
2010	921	13.5%
2021	719	9.3%

Figure 1: Global poverty trend (1990-2021)

Regional Poverty Statistics. Poverty reduction has been uneven across regions. Sub-Saharan Africa remains the region with the highest percentage of the population living below the poverty line, where 33.1% of people live in extreme poverty as of 2021. Meanwhile, East Asia and the Pacific, once home to high levels of poverty, have significantly reduced poverty to 1.2% in the same period, thanks to rapid economic growth in countries like China and Vietnam.

Region	Poverty Rate (2021)
Sub-Saharan Africa	33.1%
South Asia	12.2%
Latin America & Caribbean	5.3%
East Asia & Pacific	1.2%
Europe & Central Asia	0.6%

Figure 2: Regional poverty rates (2021)

The World Bank defines extreme poverty as living on less than \$2.15 per day, a measure primarily used in low-income countries. In contrast, high-income countries often define poverty based on relative terms, such as 60% of the median national income. For example, in the European Union, the average poverty threshold in 2022 was €10,531 per year, varying by country. A regression analysis of the relationship between relative poverty and income inequality (measured by the Gini index) showed a positive correlation, indicating that countries with higher income inequality tend to have higher relative poverty rates (correlation coefficient $r = 0.73$). While income-based poverty lines provide a straightforward metric, they often fail to capture the broader challenges faced by individuals living in poverty. The Multidimensional Poverty Index (MPI), developed by the United Nations Development Programme (UNDP), measures poverty by considering factors such as education, healthcare, and living standards. As of 2022, 1.2 billion people live in multidimensional poverty, with 579 million of them also being income-poor (below the \$2.15 per day threshold).

Discussion

The results of this study show that the poverty line is an essential but incomplete measure of economic hardship. The global decline in extreme poverty, as indicated by the World Bank, is a positive development. However, disparities in poverty reduction across regions highlight the need for tailored poverty alleviation strategies. For instance, Sub-Saharan Africa's poverty rate remains disproportionately high compared to other regions due to factors such as slow economic growth, conflict, and poor access to basic services.

Moreover, the analysis reveals that income alone is not sufficient to measure the full extent of poverty. The MPI offers a broader view of deprivation by incorporating dimensions like access to clean water, education, and healthcare, which are often inaccessible to those living just above the income poverty line. This highlights the importance of complementing income-based measures with multidimensional approaches in poverty reduction policies.

Conclusion

The poverty line is a critical tool in understanding and addressing poverty, but it is not without limitations. This study, supported by statistical analysis, highlights the importance of recognizing the multidimensional nature of poverty, as income alone does not capture the full scope of deprivation. The use of both income-based measures and MPI is essential to create more

comprehensive poverty alleviation strategies. Policymakers must consider both financial and non-financial indicators, such as healthcare, education, and living standards, to fully address the challenges of poverty. By doing so, efforts to reduce poverty can be more effective and inclusive, helping to improve the quality of life for millions.

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