

Measuring Economic Growth and Development

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Submitted: 25 July 2019; Accepted: 26 Aug 2019; Published: 09 Sep 2019

Abstract

Economic development is thus a multivariate concept; hence there is no single satisfactory definition of it. Development is conventionally measured as economic growth with level of development in the process of size of economy. A country's economic health can usually be measured by looking at that country's economic growth and development. Most of the economists clamored for dethronement of GNP and define development in terms of removal of poverty, illiteracy, disease and changes in the composition of input and output, increase in per capita output of material goods.

Keywords: Development, GDP, GNP, HDI

Introduction

Development refers making a better life for everyone. It is very essential because it produces an economy, and more broadly a society and culture that determine how people live in terms of income, services, life chances, education and so on. People defining development as modernity, and look at development largely in economic terms. The conception of development underpins much of the work of international organizations. Development is conventionally measured as economic growth with level of development in the process of size of economy. A country's economic health can usually be measured by looking at that country's economic growth and development. The existing development framework and indices seem insufficient to accurately measure development in its comprehensive sense; it could still provide valuable insight to provide a better alternative to the existing development indices.

Concept of Growth and Development

The concept of development is interpreted in terms of growth of output over time and later in terms of per capita output. The terms growth and development are used interchangeably. During 1950 and 1960s many developing countries realized their economic growth targets but standard of living of the people did not change. In fact existence of mass poverty, illiteracy and ill health continued to plague the developing countries. This implied that there was something wrong with this definition of economic development. Most of the economists clamored for dethronement of GNP and define development in terms of removal of poverty, illiteracy, disease and changes in the composition of input and output, increase in per capita output of material goods. Increase in output of goods and services and in income does not imply an improvement in the standard of

living of the people because GDP is a narrow indicator of economic development that does not include non-economic indicators such as leisure time, access to health, education, environment, freedom or social justice.

Economic development is thus a multivariate concept; hence there is no single satisfactory definition of it. Economic development is a process where low income national economies are transformed into modern industrial economies. It involves qualitative and quantitative improvements in a country's economy. Political and social transformations are also included in the concept of economic development in addition to economic changes. Economic growth and development are generally defined to include improvements in material welfare especially for persons with the lowest incomes, the eradication of mass poverty with its correlates of illiteracy, disease and early death, changes in the composition of inputs and output that generally include shifts in the underlying structure of production away from agricultural towards industrial activities, the organization of the economy in such a way that productive employment is general among working age population rather than the situation of a privileged minority, and the correspondingly greater participation of broad based groups in making decision about the direction, economic and otherwise, in which they should move their welfare.

Definition of Development

Development can be defined as passage from lower to higher stage which implies change. Its definition is varied in the following way: Amartya Sen pointed out that development requires the removal of major sources of unfreedom, poverty as well tyranny, poor economic opportunities as well as systematic social deprivation, neglect of public facilities as well as intolerance or over activity of repressive states [1].

Kindleberger while making a distinction between growth and development argues that economic development implies both more output and changes in the technical and institutional arrangement by which it is produced and distributed [2].

Meier opined as development is a process whereby an economy's real national income increases over a long period of time [3].

According to Michael Todaro definition of development includes both economic and social choices and suggests that improving standard of living must guarantee economic and social choices and argues that development should expand the range of economic and social choice to individuals and nations by freeing them from servitude and dependence, not in relation to other people and nation states, but also to the forces of ignorance and human misery [4].

Development includes economic growth measured in terms of GDP and its distributional dimensions. In respect of this some economists include role of reducing poverty, provision of improving basic needs, goods and services and reduced inequalities in income distribution in the definition of economic development. Development is thus a broad concept which includes both economic and non-economic aspects.

Measuring Economic Growth and Development

Development being a multivariate concept having many dimensions, there is no single measure of development that completely captures the process. Clearly these indicators or measures of development should be valid and amenable to measurement and comparison. Per capita income has been one of the earliest and also a popular measure of economic development [5]. Some economists have emphasized on certain social indicators as a measure of development such as levels of literacy, health and employment, while others have emphasized on reduction in poverty as an important indicator of development. It has now become a common practice to measure development in terms of composite indices such as HDI (Human Development Index), GDI (Gender Development Index), HPI (Human Poverty Index) etc. but per capita income has been a widely used indicator for measuring economic development [6,7]. It is a primary indicator which measures economic performance of a country.

GDP as a Measure of Development

For measuring national economic development, for making an assessment of economic performance of a country and for measuring standard of living of the people per capita GDP, commonly referred to as per capita income is used as an important indicator in monitoring economic growth trends. Economic planners and forecasters have used the GDP per capita as it signifies economic welfare. It helps in developing policies and plans for development because GDP per capita shows whether an economy is improving or not in a more comprehensive manner. It is easily understandable and has been used for measuring human development and well-being of a nation and is regarded as a substitute for all economic activity. Estimates of GDP per capita have been produced by most UN member countries which make comparison between the countries easy and meaningful. The most important advantage of per capita income is that it concentrates on the raison dethronement of GNP which is the removal of poverty and raising the standard of living of the people. Based on per capita income states are classified into forward and backward. Many states, which are classified as backward based on per capita income, possess common characteristics such as high birth rate, high death rate, small amount of saving, low level of technology, low agricultural

productivity etc [8].

Social Indicators of Development and Growth

Per capita income does not have special features which the non-monetary or social indicators have. The most important feature is that these social indicators are free from distributional effects. Second most important characteristic of social indicators is that they are direct measures. Among the social indicators length of life, state of prevalent health, housing status, nutritional condition, educational achievement are direct measures that can provide information about the standard of living of the people. Thus, social indicators better reflect the welfare of the people. They are less prone to difficulties of measurement, complex schemes of valuation, conceptualization and measurement. Some of the more important social indicators of development are various educational and health indices, access to safe drinking water etc. These are discussed at some length below [9].

- a) **Education:** Education, especially female education proves as a good social indicator of economic development of a nation. Education helps one person to acquire knowledge, skills, values and attitudes, which help to achieve a better quality of life. Education is an important determinant of all stages of change and it opens the doors of modernization. It is thus a trustworthy and suitable indicator of development.
- b) **Health:** Good health is an important requirement of a satisfying life and is a measure of the quality of human capital. For achieving higher rate of economic and social development health is the most important driver. Health is an index of the inherent capacity of an individual to be able to do things and it affects welfare. A statistical estimate suggests that each ten percent improvement in life expectancy at birth results in increase of economic growth of at least 0.3 to 0.4 percent per year. Thus, growth rate difference between high income (LEB=77Yrs) and a low-income country (LEB=49yrs) is about 1.6 percent per year.
- c) **Access to Safe Drinking Water and Sanitation:** It is the restricted access to safe drinking water that affects the health status of the people directly and significantly and also the overall quality of life. Large segments of population in both rural and urban areas remain without access to sufficient safe drinking water. As a matter of fact many water borne diseases continue to be life-threatening diseases for example diarrhea, which takes the lives of millions of children. Many harmful chemicals such as arsenic cause water contamination, which further causes serious harm in many parts of the country.

Composite Index of Development

The trend now is that development is measured in terms of composite indices of development which take account of different aspects of development. Several such indices have been developed, some of which are discussed in the following way:

- a) **Physical Quality of Life Index (PQLI):** It is developed by Morris D. Morris in 1979. He calculated the PQLI taking account of literacy, life expectancy and infant mortality. Thus, it shows improvement in the quality of life with increase in life expectancy (LE), fall in infant mortality rate (IMR), and rise in basic literacy rate (BLR). This index was considered inadequate as it did not cover important aspects of development and it did not measure total welfare either.
- b) **Human Development Index (HDI):** It is invented Amartya Sen and launched by Mahbubul-Haq, a leading Pakistani economist.

The HDI is a composite index of three social indicators: life expectancy, adult literacy and years of schooling. It also takes into account real GDP per capita. Thus the HDI value of a country is calculated by taking three indicators: Longevity, Educational attainment and decent standard of living.

- c) **Human Poverty Index:** The United Nations Development has created a measurement system based on what is lacking in different areas of the 72 world. This measurement is called the Human Poverty Index. Human Poverty Index was first launched in 1990 and it is used by the United Nations to signify the standard of living in a specific country. It measures the amount of deprivation people experience in different countries. Factors such as short life expectancy, low literacy rates and overall living conditions are recorded in the human poverty index.

Measures of Inequality

- a) **Coefficient of Variation:** To find out the imbalance between the different states in terms of per capita incomes. Coefficient of variation is based on mean and dispersion. It is an average index of inequality for all regions. It measures the variation of observation from the mean. $\text{Coefficient of Variation} = \frac{S.D}{\text{MEAN}} \times 100$ Where S.D = is the standard deviation of that period. MEAN = is the mean of that period.
- b) **Kuznets Hypothesis:** At the American Economic Association meeting conference in 1954 Simon Kuznets suggested that income inequalities first increase among regions and then decrease as a country industrializes. Kuznets hypothesis of inverted u-shaped curve of inequality among the states tested with the help of coefficient of variation across the states over the time.
- c) **Gini-Coefficient:** It measures the degree of inequality in the total population which arises due to inequality among states. It is the best way of measuring whether the pattern of growth has led to an increase in inter-state inequality. The Gini-Coefficient provides a measure of inequality for the total population of the states.

Criticism of Growth and Development Measure

There are some limitations of the measure of economic growth and development. First of all, not only do these data vary hugely in reliability from regions to regions but also characteristics such as income, production or education, in reality, culturally specific rather than universal. GDP per capita does not take into account free goods and nonmarket goods/services. It only counts monetary transactions [10.11]. GDP accounting also ignores household activities and assigns a zero value to all activities such as for domestic work, housekeeping etc. GDP does not take into account local differences in the quality of goods that is why cross border comparisons of GDP can be inadequate. So GNP and GDP measure economic modernization in the prejudiced sense that how closely a country replicates the west development model.

Again HDI have nothing whatsoever to do with variations in the quality of life. For example, the west increased economic growth but does not increase happiness. Gini-coefficient, social indicators and others measuring process does not give a proper articulation of development measurement.

Conclusion

An adequate conception of development must go beyond the accumulation of wealth and growth of national product and other

inter related variables, without ignoring the importance of economic growth. Historically, GDP, GNP, HDI has been thought of as a key indicator in measuring the development level of a nation. Over the years, researchers have found that the single GNP indicator is not sufficient to be used to measure development. Numerous efforts have been done to create other composite indicators that could serve as complements or alternatives to the traditional measure. The questions that arise from these efforts include: (i) what are the development frameworks that underlie the existing development indices? (ii) What are the advantages and limitations of the particular development indices? So, it can be understood that development is essentially concerned with not only the wealth but also the enhancement it does to people's life.

References

1. Sen A (1999) Development as freedom. Oxford: Oxford University Press. New York p5.
2. W. B. Back (1958) Economic Development. Charles P. Kindleberger. New York: McGraw-Hill Book Company, Inc., American Journal of Agricultural Economics 40: 784-785.
3. Kenneth H. Parsons (1964) Meier, Gerald M., Leading Issues in Development Economics, New York, Oxford University Press, American Journal of Agricultural Economics 47: 484-487.
4. Todaro, Michael P (1997) Economic development in the Third World. London : Longman
5. Escobar A (1995) Encountering development: The making and unmaking of the third world. Princeton: Princeton University Press.
6. Hoogvelt AM (1978) The sociology of developing societies. London: Macmillan.
7. Paul S (1996) A Modified Human Development Index and International Comparison. Applied Economics Letters 3: 677-682.
8. Peet R and Hartwick E (2009) Theories of development: Contentious, arguments, alternatives. New York: The Guilford Publications.
9. Sen AK (1998) Mortality as an Indicator of Economic Success and Failure. Economic Journal 108: 01-25.
10. Stiglitz JE, A Sen and JP Fitoussi (2009) Report by the Commission on the measurement of economic performance and social progress. Mimeo.
11. Willis Kate (2011) Theories and practice of development. Oxon: Routledge.

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