

**ASSESSING THE PLAUSABILITY OF GDP AS A PROXY
INDICATOR FOR MEASURING SOCIAL AND HUMAN
DEVELOPMENT: A CASE STUDY OF INDIA FROM 2005-2015**

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Abstract

Keywords:

Gross domestic product;
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Simon Kuznets and further innovators in the showground of National Bookkeeping not once well-thought-out that Gross National Products might or must accommodate as a measure of economic or communal welfare. It critiques the unsuccessful use of Gross Domestic Product (GDP) as a grade of nationwide well-being, something for which it was never envisioned. By holding up queries like, weather an upsurge in GDP automatically means that the service level and hence the jobs would grow, further helping in eliminating poverty by giving foremost people an income to tolerate living on or weather former is a fairytale. We conclude that much valuable work has been completed; many of the alternate indicators have been used magnificently in numerous levels of community preparation.

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1. Introduction

In addition to half century, the utmost commonly acknowledged measure of a nation's economic evolution has been fluctuations in its Gross Domestic Product (GDP). It is classically restrained by totaling together a nation's individual consumption expenses, government expenses, net distributes, and net capital foundation.. Indeed, as has often been pointed out, GDP may present in a positive light, situations that are negative in terms of well-being. For instance, traffic jams upshot in increased GDP through the manufacture and auction of more petrol, but do not deliver any benefit to civilization, and indeed may harm the atmosphere and superiority of life by growing emissions. In general still, specialists have preferred an substitute method, namely measures and dimensions that will enhance, rather than adjust, GDP so as to give a better representation of well-being and advancement. Some of these measures take the method of accumulated or merged indexes that associate a amount of indicators to yield a solitary value for instance- human development index. Miklos Antal recommends replacements to GDP as a degree of communal welfare or anthropological progress and these are fleetingly evaluated. However, many individuals who admit the inadequacies ponder on that we first have to extant a dependable alternativename ISEW and GPI based on corrections of GDP, sustainable or green(ed) GDP, genuine savings/investments and composite indexes. While others like Progress Consulting S.R.L environmental and social material is often ages old by the time it spreads to the policy makers. The way frontward, therefore, also stresses progress on the various dimension tools. Authors like Karen Dynan, Louise Sheiner The indicator of an individual as well as societal well-being are way above the production and consumption of economic commodities i.e GDP, and this research paper tries to find out all those determinants that people at individual level feel are important for measurement of standard of living. For the methodology we consider if nominal GDP adequately captures the size of economy measured in dollars and then by converting nominal to real GDP we discuss challenges related to deflators for measuring real GDP. The indicator of an individual as well as societal well-being are way above the production and consumption of economic commodities i.e GDP, and this research paper tries to find out all those determinants that people at individual level feel are important for measurement of standard of living. For the methodology we consider if nominal GDP adequately captures the size of economy measured in dollars and then by converting nominal to real GDP we discuss challenges related to deflators for measuring real GDP.

2. Research Method

The paper discourse the connection between GDP growth and welfare by figuring out the relationship and the influence that GDP has with further significant social pointers. For the agreed study secondary data has been castoff.

Objectives are as follows:-

1. To study the trends of GDP and Employment and find out if Employment and GDP in any way are related to each other or not
2. To find out if there is any relationship between GDP and Human development index indicators. And this objective is further divided into 3 parts:
 - (a) Relationship between GDP and life expectancy
 - (b) Relationship between GDP and education attainment
 - (c) Relationship between GDP and standard of living

First objective is achieved by applying correlation test between GDP and Employment indices while the second one and hence its further parts are inferred by applying regression test between GDP variable and the respective variables, taking GDP as the independent and other indices as the dependent variables.

3. Results and Analysis (10pt)

OBJECTIVE 1

Year	GDP(in Crore INR @ 2011-12 prices)	Employment
2005	5914614	662444712
2006	6391375	661165322
2007	6881007	662980856
2008	7093403	658430798
2009	7651078	656920141
2010	8301235	657343689
2011	8736331	656046151
2012	9213017	656794243
2013	9801370	663573785
2014	10527674	671512974
2015	11386145	679399016

NULL HYPOTHESIS- There is no correlation between GDP of and the employment ratio

ALTERNATE HYPOTHESIS- There is some correlation between GDP and the Employment ratio

Correlations			
		GDP(in Crore INR @ 2011-12 prices)	Employment
GDP(in Crore INR @ 2011-12 prices)	Pearson Correlation	1	.643*
	Sig. (2-tailed)		.003
	N	11	11
Employment	Pearson Correlation	.643*	1
	Sig. (2-tailed)	.003	
	N	11	11
*. Correlation is significant at the 0.05 level (2-tailed).			

Interpretation: Although for this objective we are accepting the Null Hypothesis i.e. there is some correlation between GDP and employment parameters, since the value of 'R' is greater than 0.5, however we cannot say that Employment can be easily calculated and seen to be increasing or decreasing based on seeing the trend of GDP fall or rise is not recommended since the correlation coefficient is moderate and not high.

OBJECTIVE 2.1

Year	GDP(in Crore INR @ 2011-12 prices)	Life expectancy at birth (age)
2005	5914614	64.5
2006	6391375	64.96
2007	6881007	65.38
2008	7093403	65.8
2009	7651078	66.21
2010	8301235	66.62

2011	8736331	67.01
2012	9213017	67.37
2013	9801370	67.71
2014	10527674	68.02
2015	11386145	68.3

Null hypothesis: There is no relationship between GDP and Life expectancy of a country over a period of time i.e. life expectancy is not dependent on GDP.

Alternative Hypothesis: There is some relationship between GDP and Life expectancy for an economy i.e. Life expectancy is dependent on GDP.

Model Summary^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.975 ^a	.951	.945	.2986270
a. Predictors: (Constant), GDP(in Crore INR @ 2011-12 prices) b. Dependent Variable: Life expectancy at birth (age)				

INTERPRETATION: The interpretation of this test is that we have rejected the null hypothesis and accepted the alternative hypothesis and it is concluded that life expectancy is highly dependent on GDP to increase or decrease. In case there would have been some developed country that we were talking about then probably the regression coefficient might not have been so high because according to evidences the relationship between income and life expectancy begins to weaken once income reaches a certain level.

OBJECTIVE 2.2

Year	GDP(in Crore INR @ 2011-12 prices)	Mean years of schooling(in years)
2005	5914614	4.8
2006	6391375	4.9

2007	6881007	5
2008	7093403	5.2
2009	7651078	5.3
2010	8301235	5.4
2011	8736331	5.3
2012	9213017	5.6
2013	9801370	5.8
2014	10527674	6.1
2015	11386145	6.3

Null hypothesis- There no significant relationship between GDP of a country and the literacy rate over a period of time.

Alternative hypothesis- There is some relationship between GDP and literacy rate of a country over a period of time.

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.986 ^a	.972	.969	.0854774
a. Predictors: (Constant), GDP(in Crore INR @ 2011-12 prices)				
b. Dependent Variable: Mean years of schooling(in years)				

INTERPRETATION: we have rejected the null hypothesis and accepted the alternative hypothesis and it is concluded that literacy rate are highly dependent on GDP to increase or decrease. Now that we know that these literacy rate is too much dependent on GDP to increase, however the vice-versa is also true according to evidences and logics. As a consequence, developing the skills and knowledge of the labor force is regarded as a key strategy for promoting national economic growth. Because we have lacked direct measures for 'skills,' indicators of educational attainment have typically been used as a proxy measure, with educational attainment being measured either as years of schooling or as highest level of

education completed, ranging from less than high school to having one or more university degrees.

OBJECTIVE 2.3

Year	GDP(in Crore INR @ 2011-12 prices)	GDP per capita(USD)
2005	5914614	707.01
2006	6391375	792.03
2007	6881007	1018.17
2008	7093403	991.48
2009	7651078	1090.32
2010	8301235	1345.77
2011	8736331	1461.67
2012	9213017	1446.99
2013	9801370	1452.2
2014	10527674	1576
2015	11386145	1606.04

Null Hypothesis- There is no significant relationship between GDP of a country and standard of living i.e. measured through GNI per capita

Alternative Hypothesis- There is significant relationship between GDP of a country and standard of living that is measured through GNI per capita

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.430 ^a	.365	.349	123.35973
a. Predictors: (Constant), GDP(in Crore INR @ 2011-12 prices)				

INTERPRETATION: Even if GDP is increasing it does not necessarily mean that GDP per capita will also increase because in a country like India inequality is at its peak. Top 20% of population of India earns four times more than bottom 80%, which is quite a huge inequality. Thus even when GDP is increasing the income of only those who are in the top might be increasing which is why GDP per capita is not dependent on GDP in any way.

4. Conclusion

GDP is a rigorous indicator for economic purposes & even is proved to be a good indicator for some of the social indicators at the time being, but it is not guaranteed that at each point of time it will give the same relationship and thus would be always considered as a good indicator for Health or education parameters. It is expected to continue playing a role in economic decision-making but it is not a good indicator of well-being. Rather than looking for a single alternative to GDP, a number of potential alternatives should be considered, from new headline and/or composite indicators to integrated accounting.

Access to quality, timely data is important. Environmental and social information is often years old by the time it reaches policy makers. The way forward, therefore, also demands progress on the various measurement tools. As an essentially subjective concept, there might not be consensus on what well-being is and this implies problems of aggregation and territorial comparability of the information.

Suggestions and recommendations:

* Developing (i) a comprehensive environmental index and (ii) improved quality-of-life and well-being indicators to complement the GDP indicator with information on the environmental and societal dimensions of development.

* Producing timely data to allow policymaking to react quickly to new developments. The Communication focuses on the mechanisms used to collect environmental and social data, and in particular on the way these mechanisms can be improved to generate more timely information.

Improving reporting on distribution and inequalities: the current analysis looks not only at income disparities but also at other non-monetary aspects of social exclusion

* Developing a Sustainable Development Scoreboard and establishing thresholds for environmental sustainability. The scoreboard is expected to be based on, but not be limited to,

the EU set of Sustainable Development Indicators (SDIs), agreed with the MS to monitor progress against the objectives of the EU Sustainable Development Strategy (SDS), and is meant to stimulate the exchange of experience on policy responses.

* Developing consistent data frameworks at national accounts level for environmental and social information

Improving the measurement of economic performance should be complemented by the development of new indicators providing information to policy makers on well-being and progress. Substantial conceptual work has been carried out at the international level to define these two concepts and the frameworks for their measurement. Due to their subjective nature, commonly agreed definitions are unlikely; democratic debates and wide participation of stakeholders should be pursued with a view to defining relevant dimensions of progress and well-being as well as indicators for their measurement.

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