



Does Human Development Balance with Economic Growth? A Study of Saarc Countries

KEYWORDS

Correlation, GDP, HDI, SAARC Countries, Scatter Plot

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ABSTRACT Economic growth's major indicator is Gross Domestic Product (GDP) as well as Human Development Index (HDI) that shows the prosperity level of society but the relation varies in developing countries. It is an attempt to find relationship between GDP and HDI of SAARC countries (Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal and Pakistan) through Pearson Correlation for the duration of 2000 to 2012. This study draw out divergent results like Correlation between SAARC countries has inverse relationship. Within SAARC countries only Afghanistan has shown positive and significant result. It generates need to improve developmental policies and implementation for better society.

Introduction

Human Development Index is a composite index to measure a country's progress not just in terms of its output but also provides an assessment of achievement about standard of living of the population, based on attainment levels of different quality of life attributes e.g. educational attainment and life expectancy at birth. It is a weighted average of indices of life expectancy, education measured by adult literacy, enrolment in education and the standard of living measured by the GDP growth. The purpose of human development is creating conditions in which its people can live a long and a healthy life. On the other hand, Economic growth of a country is defined by an increase in its output which is measured by calculating the Gross Domestic Product (GDP). SAARC was formed in 1985 as a major diplomatic breakthrough in South Asia. It was formed to promote intraregional trade that can be done with increase of their economic activities among each other. Any country can grow fully only when its citizen's social welfare improves with development in its economic condition. This paper is an attempt to study the correlation between HDI that shows social welfare and GDP depicts economic status of the SAARC Countries and investigate into the development scenario of each member countries named as Afghanistan, Nepal, Bhutan, Pakistan and India etc., over a period of 2000-2012.

Review of Literature

Akbar Khodabakhshi(2011) investigated the Relationship between GDP and Human development Indices in India and found that per capita gross domestic production index in the Indian economy has had good growth but the impact on other indicators of human development index is very low even on some indicators such as life expectancy has been ineffective.

Swaha Shomeand Sarika Tondon (2010) studied the correlation between growth and development in the ASEAN 5 economies the study revealed that development and growth have not moved in tandem in the ASEAN 5 economies. Removing the income parameter from the HDI has shown that all five economies need to take effort in directing growth towards education. Only then will the challenges of development be met by achieving a higher growth rate.

Sadequ Islam(2010) examines the relationship between per capita real GDP and the human development index in high, medium and low human development countries. The sensitivity of the human development index to changes in per capita GDP is found to be highest in low human development countries. An 'inverted U' type relationship between per capita GDP and the human development index appears to be valid for medium human development countries.

Alejandro Ramirez, Gustav Ranis and Frances Stewart(1997) reconnoitred links between economic growth and human development, identifying two chains, one from economic growth to human development, and the other, conversely, from human development to economic growth. It finds that there exists a strong positive relationship in both directions and that public expenditure on social services and female education are especially important links determining the strength of the relationship between economic growth and human development, while the investment rate and income distribution are significant links in determining the strength of the relationship between human development and economic growth.

Objective of the study

The Objective of study is to investigate the movement of Human development Index with Economic Growth of SAARC Countries from 2000 to 2012.

Hypothesis

"H0: Economic growth and human development of SAARC Countries are independent of each other".

Research Design and Methodology

- Variables used under the Study:
- ❖ Human Development Index(HDI)
- ❖ Gross Domestic Product per capita (ppp\$) as indicator of economic growth

For our research we have considered SAARC economies as a conglomerate and to understand the movement further we have also considered the SAARC countries individually. The Pearson correlation have been found, which are shown by fitting line in the scatter plots.

For considering individual economies, Pearson's Correlation coefficient has been found and is shown graphically with the help of scatter plots. HDI is a measure for human development that considers both income and non-income parameters. These have also been demonstrated by scatter diagrams. All data for GDP has been taken from IMF site, and HDI data has been taken from the Human development reports published by UNDP. For our research purpose correlation equal to 0.5 and above is considered strong. The latest human development report was released in October 2013 based on data in 2011. The report covers 186 countries. The top 47 countries of the world this year have been put in an exclusive group of very high human development. Of the SAARC 7 economies, Bhutan, India and Maldives are in the category of medium human development and the remaining economies in the category of low human development.

A correlation between the two parameters has also been attempted. There is Table 1 for showing significance between and within the SAARC countries:

Table 1: Correlation Between and Within SAARC Countries

Countries	Correlation between HDI and GDP	N (Number of Pairs)	Critical Value @5% (two tailed) for Pearson's Correlation	Hypothesis Status
Between SAARC	-0.36505	13	.553	Accept Null Hypothesis
Afghanistan	0.79356	13	.553	Reject Null Hypothesis
Bangladesh	0.174125	13	.553	Accept Null Hypothesis
Bhutan	0.137754	13	.553	Accept Null Hypothesis
India	-0.50232	13	.553	Accept Null Hypothesis
Maldives	-0.60928	13	.553	Accept Null Hypothesis
Nepal	-0.50078	13	.553	Accept Null Hypothesis
Pakistan	0.039063	13	.553	Accept Null Hypothesis

Source:Own Computation

In order to explore the correlation between HDI and GDP growth rates, we will look at the correlation of each of the member countries. This will help us to understand why there is discrepancy between the countries on the HDI index and identify those economies which are the driver economies in growth as well as development.

Analysis and Findings:

❖ The above values of correlation indicate that the correlation between Growth and Human development index has been negative for the region as a whole. It can be concluded that there is insignificant and negative correlation between the SAARC Economies which accepts the null hypothesis, the same has been shown by the Figure 1 of Scatter plot of GDP and HDI.

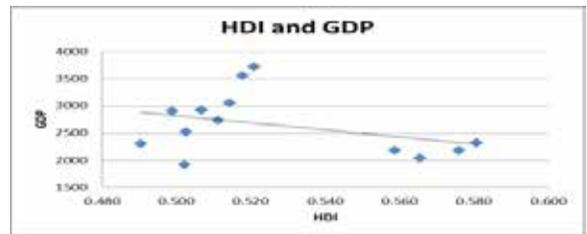
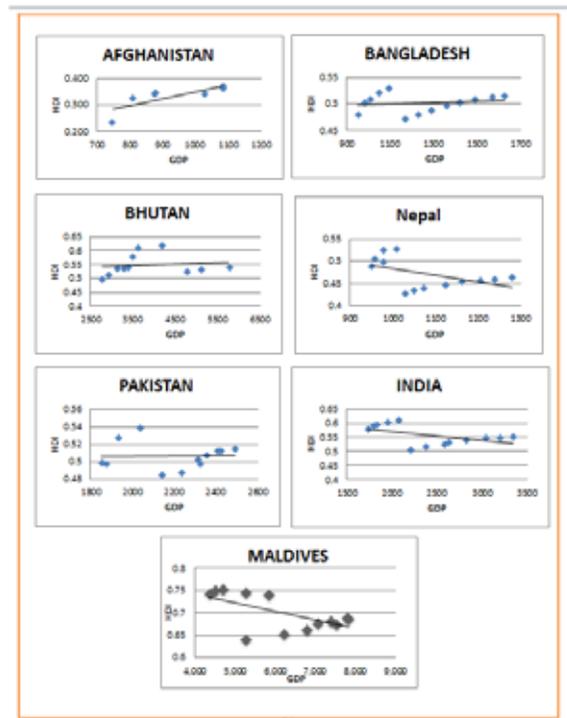


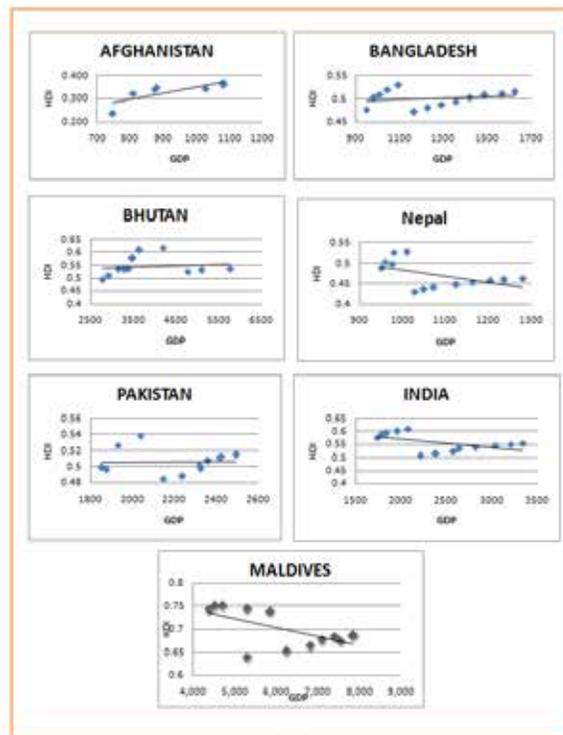
Figure 1: Scatter Plot of GDP and HDI [Source: World Bank and UNDP Human Development reports]

- ❖ For Afghanistan, it's the only economy which has significant and positive Correlation between growth and development that rejects the null hypothesis among other SAARC economies. With Scatter Plot, we can determine the strength and direction of the relationship between variables .Under this case, In Figure trend line is sloping upward that's indicates positive correlation and increase in one variable will increase another variable.
- ❖ For Bangladesh, it's the second economy which has insignificant, positive and very low correlation between growth and development but this economy has made significant progress in growth but not in the index of development. The scatter plot (Figure 2) reflects the same inference and accepts the null hypothesis.
- ❖ For Bhutan, this economy also has same situation like Bangladesh, positive but very low or negligible correlation that accepts null hypothesis and indicates that growth and development does not have significant correlation, any apparent correlation is due solely to chance and the same has been shown by Scatter Plot (Figure 2).
- ❖ For Pakistan, there is insignificant and negligible or zero correlation between growth and development That means that variables are not related to one another. Increases or decreases in one variable have no effect on increases or decreases in your second variable and the same can be further understood by Scatter plot(Figure 2), trend line has no slope.
- ❖ For other three economies (India, Maldives and Nepal), there is negative correlation with in the economy between growth and Development that means increases in one variable are correlated with decreases in other variable, for better understanding we can see ,trend line that in Figure 2 starts high and gradually slopes downward. This shows the acceptance of null hypothesis that there is no significant correlation between GDP and HDI and any apparent correlation is due solely to chance.

Figure 2: Scatter Plot Presentation of Countries Correlations between HDI and GDP



areas and focus regions. This study shows that an increase in economic variables does not necessarily imply an increase in the social welfare of the population. The objective of Policy maker should not simply be a country's economic growth, but increasing his welfare also. We conclude that economic growth is a necessary but not sufficient condition for achieving human development in a country. Critical role, in the development process, play the institutions that mark the plan and implementation of the policies, and the formation of equal opportunities.



Suggestion

Being as a regional cooperation, there are some reasons that impede intraregional trade which directly affects the economic growth of each economy in SAARC like they export similar item which increase competition among them, tariff barriers, lack of adequate transport and information links and the most specific "The Political Differences". So, each economy should work over their issues to boost up their economic growth as well as social welfare.

Conclusion

Despite a number of extensive reforms undertaken in South Asian economies in current period, the region remained one of the lowliest in terms of per capita income. Furthermore, the region has ominously lagged behind in the field of social provisions, infrastructure and functioning of the institutional structure. There is need of an collective conviction among these countries that economic co-operation among the countries of the region can bring about better and effective regional co-operation. Various strides also to be taken to promote exports through multilateral and bilateral initiatives, as well as identification of plunge

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