

The Effect of Human Development Index Towards Economic Growth in Bandung Barat Regent

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Abstract

Human development is an integral part of an economic growth of a country not to mention the regent or province in the country. Bandung Barat Regent or also known as Kabupaten Bandung Barat is a new region that was established not more than 6 years ago. The establishment of the new district was the result of UU No. 12 Year 2007 on Kabupaten Bandung Barat. In the beginning of its establishment, there are problems that the government body of Bandung Barat regent must face. Problems such as infrastructure, road, banking industry, cooperation and health facility are some of the problems. Nevertheless, Bandung Barat regent has gone through a milestone, as government with its policy has make Bandung Barat flourished and shows growth in its economy. The study looks on the growth of human development and the economy of Bandung Barat regent. The result of the study shows that there is a significant correlation between human development index in terms education and economic growth of Bandung Barat Regent ($p = 0.039$) and also between average human development index and economic growth of Bandung Barat ($p = 0.012$). Thus, they are each contributing to the increase of economic growth 92.4% and 97.%, respectively.

Keywords: *Bandung Barat, Human Development Index, Economic Growth*

Introduction

Human development index (HDI) in various regions in Indonesia shows an uptrend of improvement with the implementation of the National Medium Term Development Plan (RPJMN) 2010-2014. An initial evaluation conducted by the Program of the United Nations Development Programme (UNDP), the Government of Indonesia, and German Agency for International Cooperation (GIZ). Evaluation of RPJMN second phase of Indonesia Long Term Development Plan (RPJP), from 2005 to 2025 carried through the UNDP project strengthening Provincial Governance Strengthening (PGSP). As reported by Srihandriatmo Malau of Tribunnews on March 24, 2013, the results indicated that Indonesian Human Development Index (HDI) as an indicator of social welfare was increasingly improved over the last two decades, although the pace of

improvement is relatively behind compared with neighboring countries.

West Bandung Regent or also known as Kabupaten Bandung Barat is a new region that was established not more than 6 years ago. The establishment of the new district was the result of UU No. 12 Year 2007 on Kabupaten Bandung Barat. In the beginning of its establishment, there are problems that the government body of KBB must face. Problems such as infrastructure, road, banking industry, cooperation and health facility are some of the problems. Nevertheless, KBB has gone through a milestone, as government with its policy has make Kabupaten Bandung Barat flourished and shows growth in its economy. The following table 1 indicates the growth of KBB PDRB or Regional Gross Domestic Product Based on their industry.

Table 1
Regional Gross Domestic Product
Based on Industry (%)

	GDP	Farm	Mining	Manufactur e industry	Utilit y	Infrastructur e	Trade Hotel & Restauran t	Transportation & Communicatio n	Banking , Rent & service Compan y	Service s
2009	4.64	7.09	5.06	2.49	7.13	4.15	7.38	3.81	5.6	5.3
2010	5.47	5.3	4.97	3.88	7.19	7.27	7.82	7.14	7.82	4.76
2011	5.75	2.14	8.12	5.68	6.04	11.66	7.57	4	6.35	5.8
2012	6.04	4.86	3.12	4.84	7.02	11.25	9.14	4.64	5.92	5.05

Source: *BPS Bandung Barat Regent (2012)*

Table 1 above indicates that based on their industry, the percentage growth shows fluctuate growth. Nevertheless, the Regional Gross Domestic Product shows that they are steadily increasing every year indicated by 4.64% on 2009, growing 5.47% on 2010, another growth of 5.7% on 2011 and on the last year the growth exceeding 6% numbered in 6.04%. Thus, the performance of KBB in the year 2012 shows a steady growth. However, the growth of KBB is not as fast as West Java Province. As a young Regent, KBB still need to work hard to accelerate the development of its territory. Nevertheless, KBB has shown a well performance in their economy.

Based on the description above, as young regent KBB has shown growth in their economy nevertheless how much of the growth in economy was supported by the growth in the human development. Thus, the research looks on the Human Development Index of Bandung Barat and its effect on the Economic Growth of Bandung Barat Regent.

Statement of the Problem

Based on the background of the study above, the study try to solicit answers on the following research questions:

1. What is the Human Development Index in terms of Health of Bandung Barat Regent?
2. What is the Human Development Index in terms of Education of Bandung Barat Regent?
3. What is the Human Development Index in terms of Purchasing Power of Bandung Barat Regent?
4. What is the Average Human Development Index in terms of Health of Bandung Barat Regent?
5. What is the Economic Growth of Bandung Barat Regent?
6. Is there any relationship between Human Development Index and Economic Growth of Bandung Barat Regent?

Hypothesis

Based on the statement of the problem above, the hypothesis of the study is as follows:

- H1: There is a significant correlation between Human Development Index in terms of Health and Economic Growth of Bandung Barat Regent.
- H2: There is a significant correlation between Human Development Index in terms of Education and Economic Growth of Bandung Barat Regent.

- H3: There is a significant correlation between Human Development Index in terms of Purchasing Power and Economic Growth of Bandung Barat Regent.
- H4: There is a significant correlation between Average Human Development Index and Economic Growth of Bandung Barat Regent.

Review of Related Literature

Human Development Index

The goal of a country is not just about economic growth but also important to stress on the aspect of human development. United Nations Development Programme (UNDP) defined Human development as a process for the expansion of more choice to residents through empowerment efforts that support the improvement of the basic human ability to fully participate in all areas of development. The reason why Human Development needs to be addressed is since that many countries, developing countries in this sense that have growing well nonetheless, they fail to address and reduce social issues and poverty. For develop country, the issue is that they has higher income per capita still they struggle with social problems such as drugs, AIDS, alcohol, unemployment, and domestic violence. And that for some countries, even though they are low in their income per capita however they were able to use their limited resources to good use and develop their human basic skills.

Elements of human development firmly underlines targets to be achieved, namely to live a healthy and long life, educated and able to enjoy a decent living. This means that human development aims to improve the welfare of the community with regard to the quality of man and society. Therefore, man is central to the development process.

Looking at the growth of human development concept, the latter finds its theoretical base on Sen's (1985) capabilities approach as described in Ranis (2004) as "a person's capability to have various functioning vectors and to enjoy the corresponding well-being achievements."

To see how far the a nation has success in the development and their people's welfare, UNDP (2013) created a Human Development Index to weight on the success of development and the welfare of the nation. Human is the central point in this model, and in the UNDP development model, human is the central point of the whole process and its development activity. Human Development Index is the way to compute it. There are three areas of human development index, they are as follows: life birth rate, literacy rate, and education, also purchasing power. Those areas are indicator for Human Development Index, and moreover, life birth rate is the indicator of health, literacy rate and school terms are the indicator of education, and lastly the purchasing power indicator.

Human Development Index and Economic Growth

Human development is connected to economic growth as development is an integral part of growth, and in this sense, economic growth. Economic growth can be seen through the result of investment. People invest using capital and technology, and the results could increase the income of the people. Sukirno (2000) sees that through investment the people can be active and increase their income and welfare. A paper conducted in Yale University by Ramirez et al (1997) and Boozer et al (2003) explores the two-way relationships between Economic Growth (EG) and Human Development (HD). The research sees the importance of Human Development that was continued from an earlier work by Ranis, Stewart, and Ramirez (2000). The research implied that Human Development is not only a product of Economic Growth but also an important input to it (Boozer et al, 2003). Boozer et al (2003) said that, "A strong sequencing implication of our findings is that HD must be given priority for the achievement of both higher EG as well as HD." Ranis (2004) further in his research stated that "human development will have an important effect on growth. Similarly, to the extent that increased incomes will increases the range of choices and capabilities enjoyed by households and governments, economic growth will enhance human development." The results come as he analyze the relationships and the two-way linkages involved.

Method of the Study

The method of study in this research is descriptive. Samples were taken from the Bandung Barat regent profile from Badan Pusat Statistics of its 2009-2012 data. Variables used in the study are human development index and economic growth of Bandung Barat regent. Data were analyzed using statistical formulas and processed with statistical software called SPSS with an error rate of 5 percent using t-test analysis.

Results of the Study

Human Development Index of Bandung Barat Regent

The study of human development index of Bandung Barat regent is on the average human development index and the 3 indicators of Bandung Barat Regent human development index of health, education and purchasing power of the people. Table 2 below indicate the Bandung Barat regent human development index.

Table 2
Human Development Index
Bandung Barat Regent

Year	HDI	Health	Education	Purchasing Power
2009	72.99	72.68	82.23	63.05
2010	73.35	72.75	83.61	63.68
2011	73.93	73.55	85.06	63.18
2012	74.27	73.73	85.52	63.57

Source: *BPS Bandung Barat, 2012*

The above table 2 indicates the human development index in the Bandung Barat regent and they are showing a promising increase when we look at the beginning year of 2009 data and the 2012 data. The following discussions below will further sees each of human development index indicators.

Table 3
Human Development Index
Bandung Barat Regent

Year	HDI	Diff.	%
2009	72.99		
2010	73.35	0.36	0.00
2011	73.93	0.583333	0.01
2012	74.27	0.343333	0.00

Table 3 above shows that the average Human Development Index of Bandung Barat Regent and the data show that they are increasing every year since 2009. As shown in the table from 2009-2012, there is an increase of 1.28 in average human development index. The increase shows an uptrend in the focus of the regent government on social issues of the society and their welfare in terms of health, education, and purchasing power.

Human Development Index Based on Health

The following table 4 shows the human development index based on health. The table shows the difference each year and percentage of the difference of the health part of human development index.

Table 4
Human Development Index
Based on Health

Year	Health	Diff.	%
2009	72.68		
2010	72.75	0.07	0.00
2011	73.55	0.8	0.01
2012	73.73	0.18	0.00

Table 4 above shows that the Human Development Index of Bandung Barat Regent based on health index increase every year since 2009. As shown in the table from 2009-2012 there is an increase of 1.05 in the human development index based on the

health. The increase shows an uptrend in the focus of the regent government on social issues of the society in terms of health. Nevertheless, the regent government of Bandung Barat needs to boost their performance in health issues in comparison with other region in Indonesia.

Human Development Index Based on Education

The following table 5 shows the human development index based on education. The table shows the difference each year and percentage of the difference of the education part of human development index.

Table 5
Human Development Index
Based on Education

Year	Education	Diff.	%
2009	82.23		
2010	83.61	0.07	0.00
2011	85.06	0.8	0.01
2012	85.52	0.18	0.00

Table 5 above shows that the Human Development of Bandung Barat Regent based on education index increase every year since 2009. As shown in the table from 2009-2012 there is an increase of 3.29 in the human development index based on the health. The increase shows an uptrend in the focus of the regent government on social issues of the society in terms of education. This human development index however, is indicated to be the most develop index in terms human development in the Bandung Barat regent.

Human Development Index Based on Purchasing Power

The following table 6 shows the human development index based on purchasing power of Bandung Barat Regent. The table shows the difference each year and percentage of the difference of the education part of human development index.

Table 6
Human Development Index
Based on Purchasing Power

Year	Purchasing Power	Diff.	%
2009	63.05		
2010	63.68	0.63	0.01
2011	63.18	-0.5	-0.01
2012	63.57	0.39	0.01

Table 6 above shows that the Human Development of Bandung Barat Regent based on purchasing power index fluctuates since 2009 up to 2012. As shown in the table from 2009-2012 there is only an increase of 0.52 in the human development index based on the purchasing power. However, on 2011 data shows that there is a decrease of 0.50 in the purchasing power of Bandung Barat regent and it came back up in 2012 by 0.39. Bandung Barat regent government should give their concern on the development of the economy of the people and hopefully to be able to see the difference in the purchasing power of the people in the future.

Economic Growth

The following table 7 shows the economic growth of Bandung Barat based on the Regional Gross Domestic Product of Bandung Barat. The table shows the difference each year and percentage of the difference of gross domestic product.

Table 7
Regional Gross Domestic Product
Bandung Barat Regent

Year	R-GDP	Difference	%
2009	10670613		
2010	11616126	945513	0.09
2011	12547927	931801	0.08
2012	13810500	1262573	0.10

Source: *BPS Bandung Barat, 2013*

The table above indicates that Bandung Barat has experience increased in their gross domestic product and thus, their economic growth.

Correlation

Hypothesis 1

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.935 ^a	.875	.812	5.81272E5

a. Predictors: (Constant), HDI Health

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.577E8	4.549E7		-3.467	.074
	HDI Health	2.322E6	621663.482	.935	3.735	.065

a. Dependent Variable: Regional Gross Domestic Product

The table above resulted in $r = 0.935$ which means that there is a very strong correlation between human development index based on health and the economic growth of Bandung Barat Regent, however, the results is not significant ($\rho = 0.065$) at $\alpha = 0.05$. Thus, null hypothesis is accepted.

Hypothesis 2

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.961 ^a	.924	.886	4.53209E5

a. Predictors: (Constant), HDI Education

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-8.602E7	1.994E7		-4.313	.050
	HDI Education	1.164E6	236415.604	.961	4.923	.039

a. Dependent Variable: Regional Gross Domestic Product

The table above resulted in $r = 0.961$ which means that there is a very strong correlation between human development index based on health and the economic growth of Bandung Barat Regent, and the results is significant ($\rho = 0.039$) at $\alpha = 0.05$. Thus, null hypothesis is rejected and $H_a 2$ is accepted. The government focus on Human Development in terms of education shows their contribution of 92.4% towards economic growth of Bandung Barat regent.

Hypothesis 3

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.464 ^a	.215	-.177	1.45408E6

a. Predictors: (Constant),
HDI Purchasing Power

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.181E8	1.758E8		-.672	.571
	HDI Purchasing Power	2.055E6	2.775E6	.464	.741	.536

a. Dependent Variable: Regional GDP

The table above resulted in $r = 0.464$ which means that there is a medium correlation between human development index based on purchasing power and the economic growth of Bandung Barat Regent. However, the results is not significant ($\rho = 0.536$) at $\alpha = 0.05$. Thus, null hypothesis is accepted, and Ha 3 is rejected.

Hypothesis 4

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.988 ^a	.975	.963	2.57849E5

a. Predictors: (Constant), HDI

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	-1.577E8	1.911E7		-8.254	.014
	HDI	2.307E6	259476.200	.988	8.891	.012

a. Dependent Variable: Regional GDP

The table above resulted in $r = 0.988$ which means that there is a very strong correlation between average human development index and the economic growth of Bandung Barat Regent, and the results is significant ($\rho = 0.012$) at $\alpha = 0.05$. Thus, null hypothesis is rejected and Ha 4 is accepted. The government focus on Human Development shows their contribution of 97.5% towards economic growth of Bandung Barat Regent.

Conclusion

Based on the results of the study and discussion of above, the conclusions of the study are as follow:

1. The Human Development Index in terms of Health of Bandung Barat Regent shows an uptrend and indicate increase from 2009-2012.
2. The Human Development Index in terms of Education of Bandung Barat Regent shows an uptrend and indicate increase from 2009-2012.
3. The Human Development Index in terms of Purchasing Power of Bandung Barat Regent shows an uptrend and indicate increase from 2009-2012.
4. The average human development index of Bandung Barat Regent shows an uptrend and indicate increase from 2009-2012. This is a good sign for Bandung Barat, nonetheless, Bandung Barat regent need to improve its effort for the welfare of Bandung Barat human development.
5. The economic growth of Bandung Barat Regent shows an uptrend and indicate that it increases from 2009-2012. This is a good sign for Bandung Barat, nonetheless, Bandung Barat regent need to improve its effort for the welfare of Bandung Barat economic growth.
6. Based on the four hypothesis given, the results shows that there is a significant correlation between Human Development Index in terms of education and economic growth of Bandung Barat Regent ($\rho = 0.039$) and also between average human development index and economic growth of Bandung Barat ($\rho = 0.012$). Thus, they are each contributing to the increase of economic growth 92.4% and 97.7%, respectively. The rest shows no significant correlation. Thus needs improvement.

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