The Effect of Increase in Population on the Economic Growth of Bangladesh

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Abstract
Cross countries studies on the relationship between economic growth and population growth is inconsistent because the underlying parameters and assumption vary greatly across countries. Specific country analysis is more useful; in this study I examine the impact of population growth on economic growth for Bangladesh using data from 1980 to 2005 by employing multiple linear regression model. The result indicates that economic growth and population are both negatively correlated and that an increase in population will have a negative impact on the economic growth of Bangladesh. Government can focus on family planning programs to overcome the negative consequences of rapidly increasing population.
Keywords: Population growth, Economic growth, Bangladesh, Per Capita Income.

1. Introduction

Economic growth is a delicate phenomenon which means a positive change in the level of production of goods and services. This process is made possible by various factors and their interaction with each other. The factors of production such as labor, land and capital according to conventional economics are the important determinants of growth. Due to the development of technology, production functions have been changed over time. Population growth on the other hand can be defined as the increase in the number of human inhabitants of a given place. The importance of population is crucial because it has significant impacts on the development and growth process of a country.

The implication of population in terms of size or composition, development and the quality of life has long and widely been debated by economists. Basically, there are three alternative views regarding population-economic growth nexus. “Population pessimists” A popular view which belongs to the “Malthusian” or “Orthodox” school- believing that rapid population growth is problematic because it tends to overwhelm any induced response by technological progress and capital accumulation (Coale & Hoover, 1958; Ehrlich & Holdren, 1969) . “Population optimists” on the other hand are of the view that rapid population growth allows economies of scale to be captured and promotes technological and institutional innovation (Boserup, 1981; Kuznets, 1967; Julian L Simon, 1998). Later research views emerged as “population neutralists” they believe that population growth in isolation from other factors has neither a significant positive nor a significant negative impact on economic growth (Bloom & Freeman, 1988).

Bangladesh is one of the most densely populated country with a population of 157 million ranking 8th in the world (Bureau, 2013). The area of Bangladesh is about 147,570 sq. km. Its population density is three times that of neighboring India, four times that of the United Kingdom, seven times that of China, and over 30 times that of the United States. Population growth (annual %) in Bangladesh was last measured at 1.19 in 2012, according to the World Bank. Government formulated the national population policy, 2004 in the light of International Conference on Population and Development (ICPD), Poverty Reduction Strategy (PRS) and Millennium Development Goal (MDGs). In the Health Population and Nutrition Sector Development Program ((HPNSDP), 2011-2016) which laid emphasis on access to health services for the poor people. According to the Population policy of 2004 the government laid down some objectives to be achieved like reducing total fertility rate from 3.0 to 2.2 percent per woman, increasing contraceptive prevalence rate from 58.1 to 72 percent, reducing maternal mortality rate from 3.2 to 2.4 percent per thousand live births, reducing infant mortality rate from 52 to 37 per thousand live births. Around 50 percent of the total populations of Bangladesh are women.

Approximately 75 of the population live in rural areas. They constitute an important segment of the society and cannot be ignored, because they can play a significant role in the pursuit of economic development. The population of Bangladesh is equivalent to 2.19% of the total world population (Bangladesh Economic, 2015).

In Bangladesh, the Family Planning (FP) services started in private sector at the beginning of 1953. While in the public sector, the FP services began in 1965. Over time, the Contraceptive Prevalence Rate (CPR) gradually increases from 8 percent of mid seventy to 61 percent in 2011.

The Total Fertility Rate (TFR) has declined from 6.3 births per woman in 1971-75 to 2.3 births per woman in 2011. Under the umbrella of Health Population and Nutrition Sector Development Program ((HPNSDP), 2011-2016), Bangladesh aims to increase contraceptive use to 72 percent by 2016 (Bangladesh Economic, 2015). Various programs have been implemented by the government of Bangladesh over the last few decades to achieve couple of goals, including socio-economic development and speedy reduction in poverty. Increasing population is a hurdle in achieving these objectives. Population growth affects economic growth and development in various ways, on one side the size of population is large and on the other hand there is high increase in its rate so its management becomes difficult. It seems that the low economic growth and poverty is attributable to the persistent increase in population. Health services provision is affected badly due to high population.

The relationship between population growth and economic growth has been a controversial topic in the literature of economic development. Traditionally it is argued that increase in population has a negative effect on the real per capita incomes. Most empirical studies of the relationship between economic growth and population reveal that there is no significant adverse effect. World history shows that period of low population growth have been associated with period of low economic growth and vice versa. From the examination of economic growth and population it can be said with certainty that the rapid increase in population over a long period of time is responsible for low economic growth rates and high poverty, low health status of the poor adds more to the problem. There are some studies conducted on cross country analysis including (Bloom et al., 2010; Dao, 2012; Levine & Renelt, 1992), while the study for an individual country is much more appealing because the underlying assumptions differ among different countries. The objective of the present study is to fill this gap. It analyzes the impact of population growth on economic growth for Bangladesh.

1.2 Statement of the problem

This writing is based on the question raised by (Malthus, 1798), whether food production would be able to keep pace with the growing demand of ever increasing population and his answer that the power of population is greater than the power of the earth to provide the basic needs to human kind. But in advance countries of the world due to technological innovation they are able to produce sufficient food for their people and so they have secured themselves. By examining data from Bangladesh Ministry of Finance, it is clear that the growth in population is consistent while growth in GDP is changing continuously. Growth rate of GDP was 4.1 percent in 1993-94 while population was 116.9 million, during 2001-02 GDP grows at a rate of 4.4 percent and the population goes to 131.6 million, and in 2013-14, GDP growth was 6.12 percent and the population rose to 155.8 million. The economy of Bangladesh is growing at a good speed, but it is difficult for the government to handle the pressure of ever increasing population. Unemployment is a big problem for Bangladesh; both the total and youth unemployment is increasing with the rise in population. (Julian Lincoln Simon, 2014) argued that there are various controversial opinions on the consequences of population growth on economic growth. The debate is whether population affects economic growth positively or negatively. On the positive side it says that higher population leads to technological advancement and innovations, encouraging competition in businesses activities and as the population of the country increases, the size of the market also expend. On the other side Malthus was of the opinion that population retards the growth process of a country due to heavy pressure on the resources. Now the crux of the matter is that how to manage the growth in population as we seems to be in a situation of vicious cycle of poverty. This research study considers the complex relations between population growth and economic growth with regard to Bangladeshi Economy and it examines how the economic growth is affected by the increase in size of the population.

Based on the problem the following research questions are put forward.

a. Is there relationship between population growth and economic growth with regard to Bangladeshi Economy? Positive? Negative?
b. What is the magnitude of the effect of increase in population growth on economic growth of Bangladesh?

1.3 Significance of the Study

Population growth is one of the key factors to the economic growth and development of any country. There are diverse opinions on the consequences of population on economic growth, so this study will contribute to the knowledge base and offer information about Bangladesh. There are very few studies on the subject with respect to Bangladesh so it will provide information to the scholars and policy makers. In this study I will show how the increase in population will affect the economic growth and development and can provide useful information on some important variables and so that policy may be devised in light of those findings and can enhance economic growth. The information from the study is also useful for private as well as public sector in designing such programs and projects which can help bring a balance between population growth and economic growth.

2. Empirical Literature Review

The role of population demographics in economic development is one of the oldest themes in economics, dating back to Thomas Malthus's Essay on the Principle of Population (1798). Economists have been divided into three categories regarding the relationship between population growth and economic growth. One state that population growth and economic growth are positively related, increase in population helps in economic growth and attainment of development. The second category is based on Robert Malthus findings. According to (Malthus, 1798) "The power of population is indefinitely greater than the power in the earth to produce subsistence for man". The third category is that population does not have any impact on economic growth. According to the above scenario (Thuku, Gachanja, & Obere, 2013) stated that there is a need to check the relationship of population growth and economic growth in Kenya. They used the time series data from 1963 to 2009 employing Vector Auto Regression estimation technique. The results of the study supported the first school of thought; Population growth affects economic growth positively and promotes economic development.

According to the neo-classical growth model, population is beneficial to an economy due to the fact that population growth is correlated to technological advancement. The rising population will promotes the need for some sort of technology so that the needs of the people can be fulfilled in an efficient way. Moreover the high population supplies a large labor force; this leads to business activities because labor is cheaply available (Coale & Hoover, 1958).

Traditionally it is believed that population growth has negative effects on real per capita income. The population restriction policy of china is based on the traditional view. There is sufficient evidence that population growth does not affect economic growth adversely. There is some trend with world population, the period of low population associated with period of low economic growth and vice versa. Mostly the history shows period of low population and low economic growth. Only recently we have seen period of both high population and economic growth (Johnson, 1999).

The effect of population on economic development is studied by (Adewole, 2012) for Nigeria. The method of ordinary least squares is used for the analysis, employing time series data from 1981 to 2007. The results revealed that economic growth is positively affected by population growth. Other econometric techniques such as Autoregressive Distributed Lag (ARDL) Model was utilized to examine the relationship between economic growth and population growth for Pakistan taking time series data from 1975 to 2008. The result shows a positive connection between the two. But the main problem is the management of problems associated with huge population i.e. newly supplied labor force, providing them job opportunities and other basic facilities for life become a great challenge for the policy makers and government. To handle the issue of unemployment rate and expenditure on health & education are used in the model, and it is concluded that the impact of population is positive on economic growth both directly & indirectly in Pakistan. Population has helped in attainment of development, but has negatively affected by the high unemployment rate. On the one hand it helps in growth, but on the other hand it creates problem of unemployment and also leads to lack of educational and health facilities (Ali, Ali, & Amin, 2013).

Population grows geometrically, while resources arithmetically. Meaning that, the increase in population is faster than food supply. Malthus was of the opinion that in the absence of a formal check on population, scarce resources will be distributed among an increasing number of individuals in the short run. If such checks do exist, Malthus has divided them into two categories, preventive & positive. In the absence of these two checks, the rate of population is maintained by diseases, famines, war and earthquakes (Malthus, 1798). Further the increase in population tends to decrease savings. The need for social services becomes high and public expenditures should be used for the provision of basic needs, which definitely will affect the development work. More food will be imported and there will be high pressure on foreign exchange. High population created unemployment problems and difficulty in providing health services to ever increasing population (Martin, 2009).

(Afzal, 2009) examined relationship between population growth and economic development for Pakistan using data from 1950 to 2001, employing multivariate methodology for analysis. He found significantly negative relationship between economic growth and economic development.

(Dao, 2012) on the other hand conducted a study for twenty three developing countries, the dependency ratio, the mortality rate and the rate of population growth remains less than 1.2 percent per year, while growth rate if linearly dependent on population growth.

The comparative trend of population growth determinants between developing countries (Bangladesh, Ethiopia, Indonesia, Mexico and Nigeria) and developed nations (Germany and United States) have been analyzed by (Atanda, Aminu, & Alimi, 2012). According to the study, the major causes of population growth are high fertility rate, low crude death rate low birth & mortality rate and high youth dependency ratio. In another study for Nigeria the effects of population growth on economic growth have been studied. Linear model is employed using the time series data from 1960 to 2008. Augmented Dickey-Fuller (ADF) stationarity test combined with Granger Causality and Co integration tests were used for analysis. The results indicate that population growth affects economic growth and there is also a long run relationship between the two (Nwosu, 2014).

Labor force is provided by population. High population size will proved high labor force and vice versa. Labor is one of the important factors of production, but if other resources are lacking then labor alone is useless and will create problems for the economy. And if resources are available in sufficient quantity then labor is productive asset for the economy. The result concluded that higher population in many developing countries is a hindrance to economic growth and development due to lack of other productive resources (Agarwal, 2014).

The relationship between population and economic growth have been examined for Nigeria using the data from 1980 to 2010, specially focusing on the effects of fertility and infant mortality rates on the economic growth. The method of estimation was Vector Auto Regressive (VAR) econometric techniques. The results showed that decrease in fertility rate increased economic growth rate gradually from 3.3% to 7.9% for horizon of 12 years during the period of the study. Also, an increase in infant mortality rate increased economic growth rate from 0.6% to 15.9 % for same time horizon (Olabiyi, 2014).

3. Data and Methodology

This study tends to examine the relationship between population growth and economic growth for Bangladesh for the period of 1980 to 2005. Data have been taken from world development indicator. The dependent variable taken is GDP (Gross Domestic Product) growth measure as annual percentage and is used as a proxy for economic growth. The other variables taken are Population as annual percentage growth, growth in exports of goods and services, Foreign Direct Investment (FDI) have been included as a percentage of GDP (Gross Domestic Product and Gross National Income (GNI) per capita. The method of ordinary least square (OLS) is used for analyzing the effect of population growth on economic growth in Bangladesh.

3.1 Model Specification

I construct two models, one for Gross domestic product (GDP) and other for Gross National Income (GNI) Per capita income so that the relationship between population growth and economic growth can be grasped in a better way.

The variables can be represented by the following equation

Y1 = f (Popn, Expt, FDI)………… (1)

Y2 = f (Popn)………………. (2)

Y1 is Gross Domestic Product (GDP) growth and Y2 is Gross National Income (GNI) Per Capita used as a proxy for economic growth, popn is population, Expt represents Exports and FDI means foreign direct investment.

The formal econometric model can be written as follows

$$Y1 = \beta o + \beta 1Popn + \beta 2Expt + \beta 3FDI + \mu \;\ldots\ldots (3)$$

$$Y2 == \beta o + \beta 1Popn + \varepsilon \;\ldots\ldots. (4)$$

The error term (μ) in equation 3 and ε in equation 4 are error terms, means that besides the stated explanatory variables there are some other variables which can also affect the dependent variable, but those variables are not included in the model. And the effects of all such variables are represented by the error terms.

4. Empirical results

The results of equation 3 have been shown in table 1, 2 and 3. Various diagnostic tests were applied on all the equations and data and were found correct. For the normality of data I used Skewness/kurtosis test and also Shapiro-wilk test and the data were found normally distributed. For omitted variables, Ovtest is used, there is no omitted variables found in the model. Multi-collinearity was checked by using the Variance inflation factor and no correlation was found among the explanatory variables. In fact the data supported all the diagnostic tests.

The model summary has been shown in table 1. The overall model is significant as shown by the probability value of 0.002, meaning that explanatory variables do explain the change in dependent variable, R square value is satisfactory. Table 2 showing the ANOVA table and table 3 showing the main result of the equation. All the signs of the coefficient are same as expected.

Table: 1 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.698[a]	.487	.417	1.02028593	.487	6.965	3	22	.002

a. Predictors: (Constant), FDI, Expt, Popn

Table: 2 ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	21.752	3	7.251	6.965	.002[a]
	Residual	22.902	22	1.041		
	Total	44.654	25			

a. Predictors: (Constant), FDI, Expt, Popn

b. Dependent Variable: Y1

Table: 3 Coefficients

y1	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
fdi	.165102	.9601579	0.17	0.865	-1.826144	2.156348
expt	.039541	.0205673	1.92	0.068	-.0031129	.0821948
popn	-1.870966	.6955944	-2.69	0.013	-3.31354	-.4283913
_cons	8.111934	1.73561	4.67	0.000	4.512498	11.71137

Dependent Variable: y1

The results of equation 4 have been shown in equation 4, 5 and 6. Various diagnostic tests are applied as we did in previous case and all are found correct. Table 4 showing the model summary. R square value is very high showing that there is collinearity problem, but still it is useful for our analysis, perhaps it shows us the relationship between per capita Gross National Income and population. The probability value of 0.000 shows that population do play a strong role in explaining the per capital gross national income. The sign of co-efficient is up to the expectation.

Table: 4 Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.970[a]	.941	.939	.91518612

a. Predictors: (Constant), Popn

Table: 5 ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	320.514	1	320.514	382.673	.000[a]
	Residual	20.102	24	.838		
	Total	340.615	25			

Table: 6 Coefficients [a]

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	40.056	.952		42.081	.000
Popn	-8.236	.421	-.970	-19.562	.000

a. Dependent Variable: Y2

5. Discussion

The variable of interest is population. The coefficient for population growth is negative and statistically significant meaning that population growth negatively affects economic growth. If there is increase in population by one unit, there will be decrease in economic growth by -1.87 percentages. Growth in population is a real problem for a country like Bangladesh. Its economic growth is fluctuating, while the increase in population is persistent, so this increase in population will be a burden on the scarce resources of the country. Moreover there will be more spending on consumption, and less money will be left for productive works. The number of economically active population above 15 years in Bangladesh are 5.67 crore (56.7million), out of which 5.41 crore (54.1million) (male 3.79 crore (37.9million) and female 1.62 crore (16.2million) is engaged in different professionals. Of the total expatriate workers, more than 70 percent are employed in Middle East. The recent political turmoil in this region has become a matter of concern for Bangladesh. So adjusting additional people will be a problem for the government

The coefficient for export and foreign direct investment are positive but not statically different from zero. Exports and FDI being a positive contribute to economic growth, but being not significant implies that its impact is not noteworthy. The economy of Bangladesh grows at an average rate of 6.02 percent in the last five years (during FY 2008-09 to FY 2012-13, base year: 2005-06). However, negative impacts have been observed on the economy due to slow down in developed world for the last two years. Export growth decelerated from 41.49 percent in FY 2010-2011 to 5.99 and 11.2 percent in FY 2011-2012 and FY 2012-2013 respectively. Foreign direct investment has been an important part of the economic transition, business liberalization, and macro-economic growth in Bangladesh over the last decade. Despite these developments, it is still true that when competition for investment promotion incentives, both tax and non-tax is taken into account, Bangladeshi’s incentive measures have a number of disadvantages to those of rival countries in south Asia in terms of both tax and financial incentives for exports and R&D. These factors make Bangladesh less attractive for investment.

The relationship between Population and per capita income is negative, as population increases the per capita income decreases, because the income will be divided among more individuals. The current GNI per capita of Bangladesh is $1010 according to (World, 2013). So if Bangladesh wants to enhance the standard of living of its masses it should reduce its population.

6. Conclusion

This study has empirically determined the effects of population growth on economic growth of Bangladesh between 1980 and 2005. The effect of population growth on economic growth is still an open question as optimistic as well as pessimistic views are available in the literature. Growth in gross domestic product (GDP) and Gross national income (GNI) per capita has been used as proxies for economic growth. The result of the study has confirmed that population growth has negative consequences on the process of economic growth as per as Bangladesh is concerned.

Two different equations have been employed one for the relationship between GDP growth and population also including FDI and exports, the other equation used GNI per capita as a function of population. Both the models were found significant, the relationship between economic growth and GNI per capita with population were significantly different from zero. This study is found similar in spirit with (Afzal, 2009; Coale & Hoover, 1958; Ehrlich & Holdren, 1969; Martin, 2009; Olabiyi, 2014).

It can be concluded from the literature that large size of population and its fast rate of growth increases the consumption needs of people and so consumption expenditure will increase. There is lesser money left for saving and so capital formation and investment remains low. The part of scarce resources which is mobilized by such developing economies is eaten away by the fast growing population. It is found that increase in population makes it difficult to absorb the high number of people entering into the labor market every year. There are fewer job opportunities at home, about 70% expatriate workers are working in Middle East and oil rich countries, if the population increases at higher rate it will be a problem for the government. So large increase in population is more a liability than an asset in the developing country like Bangladesh.

Furthermore the recent political turmoil in Middle East is creating problems for Bangladeshi government, policy makers as well as common people who are working there.

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References

Adewole, A. O. (2012). Effect of population on economic development in Nigeria: A quantitative assessment. *International Journal of Physical and Social Sciences, 2*(5), 1-14.

Afzal, M. (2009). Population growth and economic development in Pakistan. *The Open Demography Journal, 2*, 01-07.

Agarwal, S. (2014). Impact of India's population growth on economic development. *Paripex Indian journal of research, 3*(5).

Ali, S., Ali, A., & Amin, A. (2013). The Impact of Population Growth on Economic Development in Pakistan. *Middle-East Journal of Scientific Research, 18*(4), 483-491.

Atanda, A. A., Aminu, S. B., & Alimi, O. Y. (2012). The role of population on economic growth and development: evidence from developing countries.

Bangladesh Economic, R. (2015). (Various).

Bloom, D. E., Canning, D., Hu, L., Liu, Y., Mahal, A., & Yip, W. (2010). The contribution of population health and demographic change to economic growth in China and India. *Journal of Comparative Economics, 38*(1), 17-33.

Bloom, D. E., & Freeman, R. B. (1988). Economic development and the timing and components of population growth. *Journal of Policy Modeling, 10*(1), 57-81.

Boserup, E. (1981). Population and technological change: A study of long-term trends.

Bureau, P. R. (2013). World Population Data Sheet, New York.

Coale, A. J., & Hoover, E. M. (1958). Population growth and economic development in low-income countries: a case study of Indias prospects.

Dao, M. Q. (2012). Population and economic growth in developing countries. *International Journal of Academic Research in Business and Social Sciences, 2*(1), 6-17.

Ehrlich, P. R., & Holdren, J. P. (1969). Population and panaceas a technological perspective. *BioScience, 19*(12), 1065-1071.

Health Population and Nutrition Sector Development Program (HPNSDP). (2011-2016). Health Population and Nutrition Sector Development Program.

Johnson, D. G. (1999). Population and economic development. *China Economic Review, 10*(1), 1-16.

Kuznets, S. (1967). Population and economic growth. *Proceedings of the American Philosophical Society*, 170-193.

Levine, R., & Renelt, D. (1992). A sensitivity analysis of cross-country growth regressions. *The American economic review*, 942-963.

Malthus, T. R. (1798). 1986. An Essay on the Principle of Population. *The Works of Thomas Robert Malthus, EA Wrigley and D. Souden, eds, 1*.

Martin, P. (2009). Demographic and Economic Trends: Implications for International Mobility.

Nwosu, C., Dike, A. O., & Okwara, K. K. . (2014). The effect of population growth on economic growth in Nigeria. *The international journal of engineering and science (IJES), 3*(11), 07-18.

Olabiyi, K. A. (2014). The effects of population dynamics on economic growth in Nigeria. *Research journal's journal of economics, 2*(1).

Simon, J. L. (1998). *The ultimate resource 2*: Princeton University Press.

Simon, J. L. (2014). *Population and development in poor countries: Selected essays*: Princeton University Press.

Thuku, G. K., Gachanja, P. M., & Obere, A. (2013). The impact of population change on Economic growth in Kenya.

World, B. (2013). World Bank Data. Retrieved from http://data.worldbank.org/country/bangladesh.

Appendix

Table 7 Bangladesh GDP growth rate at Constant price (%) and Population (M*)

Time	Growth rate of GDP at Constant Price (%)	Population(Million)
1993	4.1	116.9
1994	4.9	118.8
1995	4.6	120.8
1996	5.4	122.6
1997	5.2	124.5
1998	4.9	126.3
1999	5.9	128.1
2000	5.3	129.9
2001	4.4	131.6
2002	5.3	133.4
2003	6.3	135.2
2004	5.4	1370
2005	6.6	138.8
2006	6.4	140.6
2007	6.2	142.4
2008	5.7	144.2
2009	5.9	146.1
2010	6.4	149.7
2011	6.5	151.6
2012	6.0	153.7
2013	6.1	155.8

Source: Bangladesh Economic Survey (Various Issues)
*Million

Table 8 Top 10 largest countries of the world in Population

Rank	Country	Population(Million)
1	China	1,357
2	India	1,277
3	United States	316
4	Indonesia	249
5	Brazil	196
6	Pakistan	191
7	Nigeria	174
8	Bangladesh	157
9	Russia	143
10	Japan	127

Source: World Population Data Sheet

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