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POPULATION, ECONOMIC GROWTH AND DEVELOPMENT IN THE EMERGING ECONOMIES

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Abstract

The impact of population on economic development is an issue that has sparked debate across different organizations. Despite discussions, one thing is clear: developing countries are not able to afford a very large increase in population. Unlike developing countries which are facing increasing number of population Albania has recently decrease of population. The main challenge for Albania is: population is ageing; this brings reduction in workforce participation. The methodology consists in using secondary data from World Bank reports for econometric approach, obtaining quantitative results through regression analysis, for a period of 24 years (1990-2014) with the purpose to examine the economic effects of the demographic transition in developing countries. The objective of this paper is to determine main demographic factors that affect economic development and economic growth in developing countries, empirically stated for Albania case. By identifying the factors that influence the economic decrease we have the opportunity to put forward in the future the best policies to ensure sustainable economic growth.

Keywords: Demography, ageing population, economic growth

Introduction:

Often the growth and economic development are used as the same concept, but there are two different concepts. Growth is concerned about the GDP. Economic growth is the increase of production, production capacity and all other components of an economy. Economic growth is due to the increase of labor or capital, technology or profitability of workers.

Economic development includes policies and processes by which a nation improves economic political and social prosperity. This includes

adjustments in a variety of indicators such as educational level, indicators of life expectancy, poverty rates, environmental conditions etc. Economic development attaches importance GDP per capita taking into consideration other indicators that show about the quality of life such as: access to education, access to health care, income distribution, environmental quality etc.

The article aims to find an empirical model for the demographic factors that affect economic growth in case of Albanian economy, one of the emerging economies of Western Balkan. The statistical findings could be used as a theoretical point of reference for those who formulate economic policies taking in consideration attribute of demographic growth and population ageing.

Literature review:

The table below summarizes papers and works used as a reference point for the article.

Table 1: Used Literature

Authors	Topics	Conclusions
Dyson, 2010	Mortality rate and economic development	The mortality decline is the main cause of economic development.
McKeown, 1976		The direction of casuality is reversed, the improvement in the standart of living results in lower death rates.
Easterlin, 1996, Schofield and Reher 1991		Living condition of industrial revolution in European cities during 19th century might have raised mortality rates.
Malthus, 1830	Population growth and standart of living	Rapid population growth decline the standart of living due to limits to technical progress .
Kuznets 1967, Kelley 1988, Kelley and McGreevey 1994	Population growth and GDP	High population growth rates in developing countries since the middle of the twentieth century have had little effect on per capita GDP growth.
Simon 1981, 1989		Population growth may have had a positive impact on GDP per capita growth in the long run .
Headey 2009		Rapid population growth has had a significant negative effect on economic growth in developing countries.
Bloom et al. 2009	Population ageing	Population ageing can have a negative impact on economic growth.
Fox and Dyson 2008	Urban growth	Urban growth has been positively associated with GDP per capita growth (international data for the period since 1975)

Source: The author

The theoretical model:

Assuming that various exogenous factors affect GDP per capita growth in a developing country, we can state the following statistical model:

$$EC\_GR\_RATE = \beta 0 + \beta 1\ POP\_TOT + \beta 2\ G\_POP\_URB + \beta 3\ B\_RATE + \varepsilon$$
$$(+) \qquad (-) \qquad (+)$$

Where:

EC_GR_RATE	economic growth rate (based on GDP per capita)
POP_TOT	annual average growth rate of the total population in Albania
G_POP_URB	annual average growth rate of urban population in Albania
B_RATE	the number of live births per 1000 habitants in Albania

When population increase this means increase of participation in the workforce. As a result, we expect the coefficient estimate of the population growth variable to have a positive sign.

We suggest emerging economies that experience a decline in the total birth rate, have an opportunity to better them economically. Moreover, there is considerable evidence that fertility decline results in improvement in children's health in terms of food consumption and nutritional status as well as their education. We expect the coefficient estimate of the birth rate variable to have also a positive sign.

Theoretically, the higher the rate of urban growth and the higher the level of urbanization, the higher the per capita GDP growth rate would be (Fox and Dyson, 2008).

But, due to the fact that urbanization is done without proper planning this leads to reduction of quality of life. The growth of urban population becomes uncontrollably brings slowdown in economic growth and also accompanied with problems that hinder sustainable development (Henderson, 2000). As a result, we expect the coefficient estimate of the growth rate of urban population variable to have a negative sign for the case of Albania.

Methodology and empirical results:

Purpose of the study:

By identifying the demographic factors that influence the economic growth we have the opportunity to put forward in the future as best policies to ensure sustainable economic growth.

Methodology:

Secondary data are used from World Bank and the UN. Econometric approach for obtaining quantitative results is based on the analysis of variance and regression analysis of log-log model with OLS technique. The study was conducted for a period of 24 years (1990-2014).

Demographic data overview:

For the first time the census of Albanian state was conducted in September 1923 where the total number of population resulted in the figure 803,959 habitants. This registration for the time in which it was conducted was a modern and accurate registration. Later, after dictatorial regime, the first census was conducted in 2001 and the second registration was conducted 10 years later in 2011 (Source: World Bank).

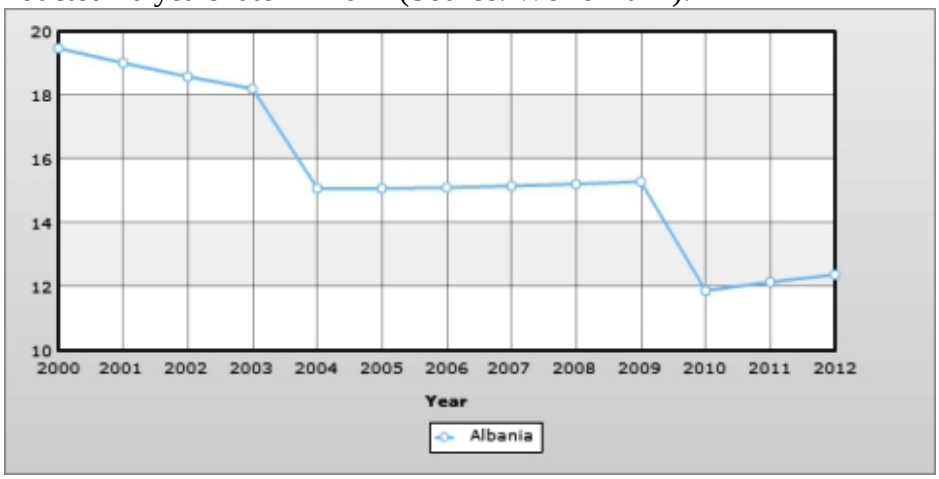

Figure 1: Birth Rate in Albania
Source: Indexmundi.com

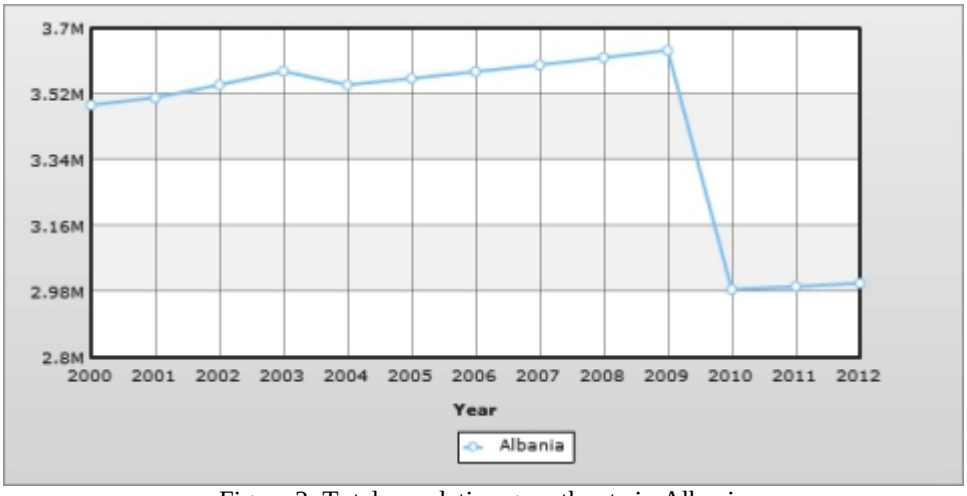

Figure 2: Total population growth rate in Albania
Source: Indexmundi.com

After 1990 in Albania the total population has been reduced. The population growth rate is 0.3% (INSTAT est. 2014). Why? Two main factors cause the decrease of the population in Albania: massive emigration (an Albanian family has 3.8 members (World Bank, 2013)) and fertility decline

(1.5 children born/woman INSTAT est.2014). Even more, population is ageing (total median age: 31.6 years - INSTAT est.2014).

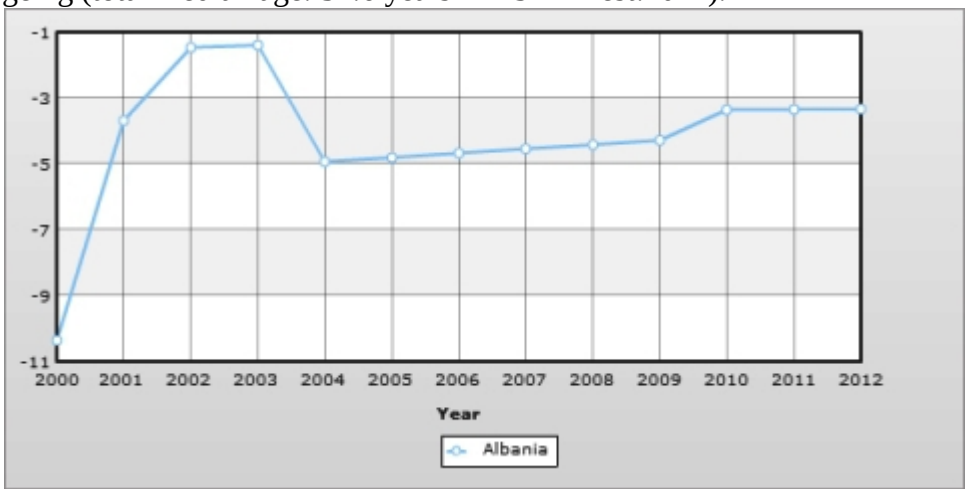

Figure 3: Net migration rate in Albania
Source: Indexmundi.com

Model and results:

The article is based in the below formulated hypothesis and variables:

H1: Total population, urban population growth and birth rate affect economic Albanian growth

EC_GR_RATE	economic growth rate (based on GDP per capita)
POP_TOT	annual average growth rate of the total population in Albania
G_POP_URB	annual average growth rate of urban population in Albania
B_RATE	the number of live births per 1000 habitants in Albania

Table 1: Regression models

Regress. Models	**Depen. Variables**	**Indepen. Variables**	**β Coeffic.**	**Model´s Signific.**	**Adjusted R^2**	**F Value**
1	EC_GR_RATE	POP_TOT	+26.907*	,005	,604	6.601
		G_POP_URB	-2.059*			
		B_RATE	+0.314*			

Note: *Significant at 5%
Source: Author´s calculation

There is a positive correlation between total population and economic growth, because when population increase that translate into increase of participation in the workforce (Solow model).

There is a positive correlation between increased birth rates and economic growth, because growth rates of fertility leads to population growth (Solow model).

There is a negative relationship between urban population growth and economic growth because population growth in urban areas is done without proper planning and leads to reduction of quality of life. Initially urban population growth associated with economic growth, but the growth of urban population becomes uncontrollably brings slowdown in economic growth and also accompanied with problems that hinder sustainable development (Henderson, 2000).

Table 2: Correlations

		EC_GR_RATE	POP_TOT	G_POP_URB	BIRTH_RATE
Pearson Correlation	EC_GR_RATE	1.000	**.474***	**-.571***	**.703***
	POP_TOT	**.474***	1.000	**-.080**	**.217**
	G_POP_URB	**-.571***	**-.080**	1.000	**-.842**
	BIRTH_RATE	**.703***	**.217**	**-.842**	1.000

Note: *Significant at 5%
Source: Author´s calculation

Limitations of the model:

Econometric analysis is used in order to estimates expected results but without stopping in detail in methodological explanations of various tests performed for validation and specification of models. The number of independent variables under consideration is limited. It is a future purpose to compare these results with those of other emerging economies of Western Balkans.

Conclusion

Economic development is the primary objective of the majority of nations in the world, one of the key factors to be taken into consideration when analyzing the dynamics of population growth.

Human capital development and economic growth are related to each other. Economic growth provides the conditions for human development and human development provides opportunities for economic growth.

Developing countries are unable to afford an increase of such rapid population (as is currently happening and is expected to happen in the coming years). This will negatively affect quality of life and slow economic growth.

In developing countries is not always true that economic growth and urbanization are positively correlated with each other.

Albania is an emerging economy because it possesses the typical characteristics of developing countries: the mass movement from rural to urban, corruption, informal economy, etc.

Albanian population is aging and in the future it will exert more pressure on the pension system, health and economic productivity.

Recommendations:

Governments of developing countries should take measures to avoid population growth rates so high, they can apply restrictions or family planning programs.

The laws regarding child labor in developing countries should be stronger, because in many developing countries, children have not reached working age leave school and work.

In developing countries should definitely increase the social and economic status of women and to ensure political stability in the reverse cannot be claimed for economic development.

Developed countries can help developing countries through improved trade relations, such as tariff and quota free to the markets of developed countries, the most appropriate transfer of technology.

The next challenge for Albania is aging population, which will affect many of the pension system and the health system. A good idea to face pressure to be exerted on the pension system would increase the amount of contributions and minimize informal economies, because undeclared businesses do not pay social security contributions for their employees. Current pension system reform gives effect after 2025.

The growth of urban population should be done in a controlled manner otherwise could slow economic growth. Urban population growth in urban areas requires new reforms to be formulated and applied.

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