



Research Article

© 2022 Otjela Lubonja and Elona Shehu.
This is an open access article licensed under the Creative Commons
Attribution-NonCommercial 4.0 International License
(<https://creativecommons.org/licenses/by-nc/4.0/>)

Received: 5 September 2022 / Accepted: 28 October 2022 / Published: 5 November 2022

Impact of Urbanization and Economic Growth in Albania

Otjela Lubonja¹

Elona Shehu²

¹PhD. Faculty of Engineering and Architecture,
European University of Tirana, Xhura Complex,
Xhanfize Keko Street, Tirana 1000, Albania

²PhD. Faculty of Economics, Business and Development,
European University of Tirana, Xhura Complex,
Xhanfize Keko Street, Tirana 1000, Albania

DOI: <https://doi.org/10.36941/jesr-2022-0163>

Abstract

One of the goals of the study is to analyze how urbanization and economic growth are related, identify the elements that influence a nation's urbanization, and add to the body of theoretical and empirical research on urbanization. Over the past 32 years, Tirana has undergone a number of swift and challenging transformations in the economic, social, and political arenas. The sudden transformation of the natural and populated terrain serves as a stark example of an unforeseen and novel phenomenon for Albanian society. Various researchers have confirmed this statement but no previous study has used socio-economic data to study this relationship in the city of Tirana, as a city with a promising economic development. Urbanization is linked to problems including insufficient housing, poor waste management, and insufficient infrastructure, all of which are very difficult to eradicate and control. These problems are still a battle in developed nations. Tirana and other developing cities have a much higher rate of urbanization than did the wealthy nations of today when they were first developing (Dutt and Parai, 1994). Through an examination of the causal relationships between variables and their effects on the economy, this study looks at other aspects of population migration. This study is analytical and exploratory. The research findings can support attempts to discover acceptable solutions to urban problems, particularly in Tirana and beyond, by providing an up-to-date understanding of the elements that project urbanization. The study is based on contemporary urbanization theory, which is particularly relevant in the instance of Tirana. The following ways that this study will increase knowledge are as follows: it will pinpoint socioeconomic factors that attempt to forecast Tirana's urbanization; it will develop a method to measure urbanization and economic growth through a standardized measure. The basic methods according to which such an evaluative analysis will be made are related to the correlation between the variables as well as the regression analysis. The data have been obtained from INSTAT and the World Bank for the period 1998-2019.

Keywords: Urbanization, Cities, Economy growth, Population, Correlation, Migration

1. Introduction

In order to understand this process, several urbanization-related aspects, urbanization theories, and research are taken into account. Urbanization, development, and their relationships have all been

covered. Urban planning – the term derives from the Latin word *urbs* meaning city. Urban planning is the science, art and the technique of building cities and residential sites, following a certain plan, in order to allow for proper living/working conditions and leisure activity. Urban planning is the theory and practice of building cities (*Faja, Urbanistika*).

Urban problems in time and space have changed. Investments in certain areas bring about urban development and economic growth in a country. What kind of urban development is Albania expected to have in the future? It is not easy to decide on a stable line since urban planning is an ever changing phenomenon. However, it is certain that the future development lines are connected with: cities; population growth. Urban planning is concerned with various facets of social life, including state, law, economic development, society, material culture, and spirituality; buildings, roads, centers, and infrastructure; and daily activities.

It's a fact that the concept of "city" has not always been around; it was created in a certain period of time, as a result of one or more factors: geographical, social, economic and cultural. Let us deal with the preurban conditions which have led to the creation of cities or civilization, in different time periods and spaces.

Their urban features – the connections between them or between the urban features of ancient cities and those of modern ones. Based on this chronology, we must first get acquainted with the historical-cultural framework of the East, which is defined as the cradle of civilization by historians.

The city was born:

- at the end of the 4th millennium BC, in the Near East;
- in the middle of the 3rd millennium we see it in the Indus valley;
- in the middle of the 2nd millennium, we can talk about cities in the Yangtze and Huang He river area (the yellow river and the red river);
- in the period between the first millennium BC and the first millennium AD cities were born in some regions of Equatorial Africa and in the American continent.

What factors lead to the development of cities?

It is challenging to pinpoint the causes because independent civilizations existed in Mesopotamia, Egypt, India, Greece, China, and other places. These civilizations later flourished, though not to the same degree. There are various theories, though:

- a. The usage of a highly structured water system results in surplus production, and a sophisticated bureaucracy is needed to set up an effective irrigation system. This is one of the urban development theories.
- b. Jane Jacobs provided a different theory on how cities might have evolved as centers for commercial industry in her book "The economy of cities-1969". Agriculture was intensified to support city trade. This idea has a flaw in that not every ancient city had a bazaar or market, which is due to their location at the junction of streets and the distance between them and other cities.
- c. The notion that they might have been developed as a result of the requirement to safeguard a collection of homes may also be accurate, but this raises the question of why they weren't developed earlier, during the pre-urban era, when there existed a similar requirement for protection.
- d. There is also the idea of creating cities as cult centers.

In conclusion of all these thoughts, we can say that there is not only one reason for the creation of cities. Based on the conditions before their creation, one can talk about one of these reasons or a correlation between some of them (*Friedmann 1986*).

2. Methods and Materials

Primary and secondary data were used to study urbanization, the economy, and their influencing factors. Data were collected for the period 1998-2019 because, prior to this period, our country went

through rapid wavering changes in the economy, and in the distribution and movement of the population due to the social turmoil of 1997. This research is investigative and analytical.

The secondary data have been obtained from the existing literature, both for developed and developing countries, and data from INSTAT, the World Bank, and other institutions. These data contribute to both the theoretical and the practical bases of the study. Descriptive and regression analyses are the main components of analyzing the results of this research, testing hypotheses, and drawing final conclusions.

2.1 Use of the theoretical framework to conduct the empirical study

There are numerous theories on urbanization. Most of them have been included in the theoretical framework of this research. However, in view of the research questions and basic hypotheses of this study, only a part of the theoretical framework will be used in detail in the empirical part of the study, in data collection, processing, and interpretation. Specifically, the main issues of the theoretical framework that will serve as tools to carry out the analysis of empirical data are:

First, the theoretical framework part that explains the theories of urbanization constitutes one of the most important elements in this research. Second, the correlation that exists between urbanization and the economy. This makes it possible to conduct the first part of the empirical study, which is about identifying the factors that affect the relationship between them. The second part, in the third chapter, focuses on the city of Tirana and its development. Third, indicators measuring the degree of urbanization will be an integral part of this study. This research has an evaluative judgment. The basic methods according to which such an evaluative analysis will be made are related to the correlation between the variables as well as the regression analysis. The data have been obtained from INSTAT and the World Bank for the period 1998-2019. This material serves to make a general illustration of the econometric analysis and methodology used in this study through the “E-views” software.

3. The City Concept, Global Urbanization and Economic Growth

According to (Sjöberg 1960) urbanization has existed from 5,000 B.C. The amount of urbanization is assessed using both the % of the total population, that lives in urban settings and the rate of population growth over time. Urbanization spread quickly across the world after World War II.

Urbanization rates are high in industrialized nations like those in Europe, North America, and Oceania, where more than 50% of people occupy urban areas (United Nations 2002). More over 40% Urbanization in Latin America and the Caribbean has reached a rather high level, of the population currently resides in cities. A 2000 study found that only roughly 40% of people in Africa and Asia lived in cities. In Albania there has been a massive movement of people towards the city of Tirana over the years.

The slow increase in the urban population characterizes the first stage of urbanization. By 2050, more people are anticipated to reside in metropolitan regions.

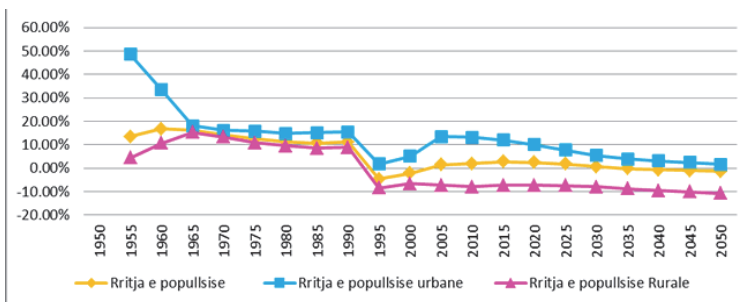


Figure 1: Figure showing the rural, urban and total population growth rates for the period 1950-2050
Source: INSTAT, 2010

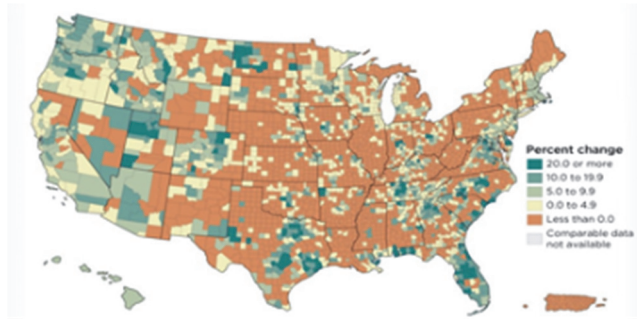


Figure 2: Figure showing the percentage of population by counties 2001-2011
Source: CENSUS, 2020

Figure 1 makes it obvious that Tirana is experiencing rapid urbanization. According to the chart above, we have levels of Urbanization less than 20% in 2000. After ten years, we see a percentage of the population rising at a pace of 26.8%. Urbanization rates will continue to rise. The populace migrated from rural to urban areas in search of work and a better quality of life. Economic growth, which is the rise in the value of the goods and services provided by a nation's economy, and an increase in the population living in cities go hand in hand. This is known as urbanization. Urban regions have been established that play a vital role and have become the hubs for many global economic activities as a result of the rise and globalization of the world.

Only 15% of people on earth were urban dwellers in 1900. When compared to the 1950s, urban population growth changed dramatically during the 20th century. It is believed that half of the world's population resided in cities sixty years later. Population growth rates associated with urbanization are not out of control, especially because they dramatically slowed after reaching a peak of 3.7 percent between 1950 and 1975 (2003 *National Research Council*). According to UN estimates, between 2000 and 2030, the urban population in developing nations will increase by more than 65 million people annually (UN 2006). I saw enormous cities as hazardous, Thomas Jefferson wrote to Benjamin Rush in 1800. Hell is a very large metropolis, like London, Percy Bysshe Shelley wrote twenty years later. Recently, "parasitic cities" and their negative repercussions in developing countries were discussed in writings by Paul Bairoch, the famous economic development and cultural change, and Bert Hoselitz, a historian of urbanization throughout history. For developing nations to continue to grow, urbanization is essential

Managing urbanization is a crucial component of economic progress; economic downturns can only occur in underdeveloped nations. In other words, urbanization plays a mysterious role in economic development. Some models, like those of (Lucas 2004, 2007), expressly take urbanization into account as a means of accelerating economic growth. When viewed from a more historical perspective Landes (Williamson 1987), the urbanization situation is seen as an essential part in the modernization of countries. There are numerous initiatives to hasten urbanization and economic progress. Policies encourage positive urbanization in an effort to support the widespread economic expansion that characterizes the emerging countries. The effects of urbanization and urbanization concentration are favorable for economic growth (Moomaw RL, 1996). In a paper published lately, the claim that urbanization fosters economic growth is refuted by data demonstrating how the degree of urbanization determines how quickly the economy is growing (Bloom DE, Canning D, Fink GScience 2008).

3.1 Urban sector in Albania

Albania is continually developing, population fell by 3.6% in the first ten years of the transition. as people used their newfound freedom to emigrate overseas in order to escape the country's economic

and political problems. Between the two censuses (1989 and 2001), the population of the nation saw a significant redistribution, with migration from the northern and mountainous regions to the center and the coast, particularly to the nation's capital. Tens of thousands of migrants have moved into the Greater Tirana area and the Tirana-corridor, Durres which have both become hubs for new industrial, commercial, and service operations.. Urbanization, with a rise in population in cities from 35 to 42 percent between censuses, is the most evident sign of population redistribution within the nation. Our nation's transition to a market-based economy from a rigidly planned economy has advanced significantly in recent years. Urbanization increased during the economic and social change, rising from 36% in 1990 to 44% in 2003.

One of the transition economies with the fastest growth rates is Albania, which saw an average real GDP growth of 7.5% between 1998 and 2004. (IMF 2006). Remittances, which accounted for USD 1 billion in 2004, or 13.5 percent of GDP, according to the Bank of Albania, are what are driving this substantial increase (*Hernandez-Coss et al 2006*). More than in other Western Balkan nations, high economic performance, remittances, and low levels of income inequality have all helped to reduce poverty over time influences on urban development include:

- *population growth*
- *rural migration*
- *urban migration*

Between 1912-1920, Albania was in a purely backward economic and social situation. Many Albanians were living abroad. Based on the registered population in 1923, there were 817 thousand people. The population increased to 1 million and 30 thousand in 1930 and remained unchanged until 1938, where 1 million and 45 thousand people were registered in the country. Between 1945-1946, the first Albanian communist government undertook a radical phase-separated agrarian reform for the expropriation of large and medium-sized farmland owners, including state-owned, foreign-owned, religious institutions-owned land, and its distribution to the poor and landless peasants.

Between 1960-1975, about 60-70 percent of the Albanian foreign trade was exchanged only with China, and the countries' final disruption of relations in 1978 did not stimulate Albania's search for new partners but instead transformed it into a total autarky.

The economy showed signs of a total crisis during 1980-1990. Consumer goods began to be in short supply, and the system switched to a food coupon system for the population, exports decreased, while the demand for basic necessities was constantly increasing. Macroeconomic imbalances became more profound, the budget deficit rose sharply, reaching 16.6 percent of GDP, and modest economic growth of 1-2 percent during 1980-1985 became negative between 1985-1990. In early 1991, external debt exceeded 30 percent of GDP. The first two years, 1991-1992, constitute the most difficult period of the Albanian economy of the last 50 years, during which, GDP dropped to 50 percent, economic growth reached a negative level of -13 percent, staple product prices increased 5-6 times only in 1991, industrial and agricultural production were almost paralyzed, the budget deficit exceeded 50 percent of GDP, inflation increased rapidly reaching 400 percent at the end of '91, the external debt increased over 600 million dollars, unemployment reached over 50 percent of the active population, etc.

Economic growth, what would be the best strategy? Economic growth can be achieved or rather promoted in several ways:

- *through foreign debts and loans*
- *through exports of raw materials*
- *through economic restructuring*

4. City and Economy of Tirana

The geography and city rationale is based on the mechanisms of comparative advantage, which deal with the productive factors of a country that are its capital and labor (*Davis and Henderson 2003*). The economic geography rationale is based on two types of forces: dispersion forces and

concentration forces. Concentration forces lead to the concentration of economic activity, while the dispersion forces make it convenient for enterprises to move away from each other (Combes and Overman 2004). The land price represents a significant and classic example of dispersion forces, as the land price is the baseline of prices for homes, offices, warehouses, and industries. The highest prices are found in urban areas, and in our case in Tirana.

The basic and primary element to prove the superiority of the concentration forces is the connection between the urbanization of Albania and the Gross Domestic Product (the Economics of European Integration by Baldwin and Wyplosz, 2012). The analyzed data have been obtained from 1998 onwards in an attempt to find connections in a peaceful country, free from wars and social unrest, which may alienate and unbalance the normal economy and population trends. During the analyzed years, the population living in cities increased from 1,270,214 to 1,747,593 inhabitants. At the same time, the Gross Domestic Product increased from ALL 409 billion to nearly ALL 1680 billion. In both cases, there was a similar trend increase but a scientific analysis is needed to prove the consistency and cause-effect relationship between the two aggregates.

Table 1: Table showing the Values of Urbanisation and Gross Domestic Product in Albania over the years

Years	Urbanization	GDP
1998	1270214	409208
1999	1279853	471578
2000	1289391	523043
2001	1298584	583369
2002	1327220	622711
2003	1354848	694098
2004	1381828	751022
2005	1407298	814797
2006	1430886	882208
2007	1452398	967670
2008	1473392	1080676
2009	1495260	1143936
2010	1519519	1239645
2011	1546708	1300624
2012	1575836	1335488
2013	1604648	1350555
2014	1632744	1393540
2015	1654503	1434307
2016	1680247	1472479
2017	1706345	1550645
2018	1728969	1635715
2019	1747593	1677918

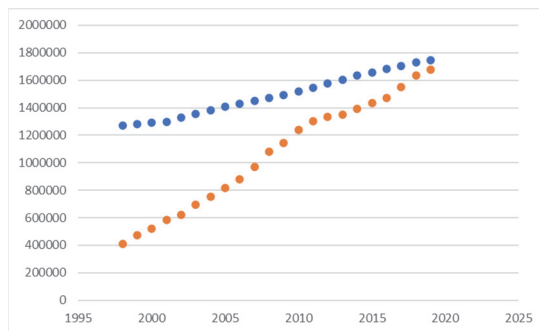


Figure 3: Figure showing the comparison of Urbanization and GDP

Source: INSTAT, 2020

Since it is difficult to compare the inhabitants and the Gross Domestic Product expressed in ALL because the two aggregates do not have the same measuring unit, we have taken 1998 as the baseline year to compare the aggregates with themselves on a yearly basis. The table shows that the population in cities has increased by 37.6% since 1998, while GDP has increased by 310% since 1998.

Table 2: Table showing the evolution of Urbanization and GDP compared to themselves.

Year	Urbanization	GDP
1998	1	1
1999	1.008	1.152
2000	1.015	1.278
2001	1.022	1.426
2002	1.045	1.522
2003	1.067	1.696
2004	1.088	1.835
2005	1.108	1.991
2006	1.126	2.156
2007	1.143	2.365
2008	1.160	2.641
2009	1.177	2.795
2010	1.196	3.029
2011	1.218	3.178
2012	1.241	3.264
2013	1.263	3.300
2014	1.285	3.405
2015	1.303	3.505
2016	1.323	3.598
2017	1.343	3.789
2018	1.361	3.997
2019	1.376	4.100

Source: INSTAT and the author, 2020

To identify the value of the urbanization “translation” coefficient, the e-views software was used and the regression was analyzed through the Least Squares method. The two variables analyzed in regression are Urbanization (by the acronym Urb) and Gross Domestic Product (which is specified by the acronym GDP). In this case, the Urb is the dependent variable and the GDP in ALL from 1998 to 2019 is the independent variable.

The next step is the interpretation of statistical results referring to the estimation of the parameters analyzed by the software.

The sample proposed in this research is represented by the following equation:

$$Y_t Y_y = \beta_0 \beta_0 + \beta_1 X_t \beta_1 X_t + \varepsilon_t \varepsilon_t$$

Where by $Y_t Y_y$ (dependent variable) we denote the number of inhabitants in Albanian cities for the period t, and by $X_t X_t$ (independent variable) we denote the Gross Domestic Product value at constant prices for period t expressed in ALL.

This analysis raises the hypothesis (Ho) that rising urbanization levels are correlated with rising GDP and vice versa.

In the first regression, we see that the probability of the independent variable coefficient (GDP) is 0.000, which is less than 5%. This result means that the variable is significant, so this is an important variable to explain the dependent variable (Urb). In this sample, the variables have a direct correlation with each other, as the sign of the coefficient is positive.

Also, if we look at F-statistic, it results (1105,247) with Prob (F-statistic) = 0.00000, a p-value <5%, which means that it is significant or, in other words, F-statistic is significant.

Table 3: Table showing the equation

Dependent Variable:	URB			
Method:	Least squares method			
Date:	01/30/21			
Time:	08:52			
Sample:	1998 2019			
Included observations:	22			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.855269	0.010290	83.11626	0.0000
GDP	0.123673	0.003720	33.24526	0.0000
R-squared	0.982226	Mean dependent var		1.175818
Adjusted R-squared	0.981337	S.D. dependent var		0.123401
S.E. of regression	0.016858	Akaike info criterion		-5.241485
Sum squared resid	0.005684	Schwarz criterion		-5.142299
Log likelihood	59.65633	Hannan-Quinn criter.		-5.218120
F-statistic	1105.247	Durbin-Watson stat		0.294587
Prob(F-statistic)	0.000000			
Estimation Command:	LS URB C GDP			
Estimation Equation	URB = C(1) + C(2)*GDP			
Substituted Coefficients:	URB = 0.855269221334 + 0.123672918008*GDP			

Source: The author

The hypothesis raised Ho is proven according to the following equation. The regression shows that the values of the constant and the coefficient of the independent variable are significant. GDP and urbanization have a favorable relationship

$$URB = 0.855269221334 + 0.123672918008 * GDP$$

According to the equation, an increase of 1% of Gross Domestic Product in Albania leads to an increase of about 0.123% of Urbanization.

This implies that, with Tirana at the top of the list, economic growth is clearly correlated with urban growth in Albania. The population of Albanian villages will decline and the size of the cities will increase in direct proportion to GDP growth. In the following case, we will seek to verify the opposite correlation, which means that, it is not only economic growth that attracts residents to cities. The urban population growth increases the markets and this causes demands for economic growth. Economic growth can also be encouraged by the competencies and capital that people transferred to the city can put to use.

In the second regression, the dependent variable is Gross Domestic Product (GDP) and Urbanization (Urb) is the independent variable. The analysis shows that the probability of the coefficient of the independent variable (Urb) is 0.000, which is less than 5%. This result means that the variable is significant. Also, in this model the variables have a direct correlation with each other, as the sign of the coefficient is positive. F-statistic results (1105.247) with Prob (F-statistic) = 0.00000, a p-value <5%, which means that it is significant or, in other words, F-statistic is significant.

Table 4: Table showing the equation

8	GDP			
Method:	Least Squares			
Date:	01/30/21			
Time:	08:48			
Sample:	1998 2019			
Included observations:	22			

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.746589	0.282370	-23.89273	0.0000
URB	7.942128	0.238895	33.24526	0.0000
R-squared	0.982226	Mean dependent var		2.591909
Adjusted R-squared	0.981337	S.D. dependent var		0.988893
S.E. of regression	0.135094	Akaike info criterion		-1.079188
Sum squared resid	0.365006	Schwarz criterion		-0.980003
Log likelihood	13.87107	Hannan-Quinn criter.		-1.055823
F-statistic	1105.247	Durbin-Watson stat		0.297349
Prob(F-statistic)	0.000000			
Estimation Command:	LS URB C GDP			
Estimation Equation	GDP = C(1) + C(2)*URB			
Substituted Coefficients:	GDP = -6.74658923771 + 7.94212785023*URB			

Source: The author

The regression shows that the values of the constant and the coefficient of the independent variable are significant. Urbanization and GDP have a positive association, with $GDP = -6.74658923771 + 7.94212785023 \cdot URB$. According to the equation, an increase of 1% of Urbanization leads to an increase of about 7.94% of the Gross Domestic Product in Albania.

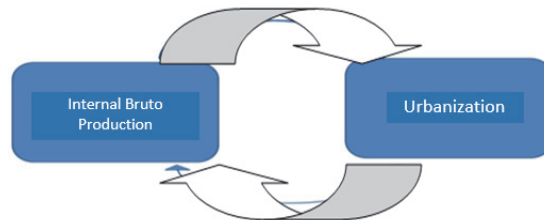


Figure 4: Figure showing the correlation between urbanism and GDP

From the chart above we can see that economic growth, in other words, Gross Domestic Product creates an attractive effect on the inhabitants of rural areas and urges them to move to cities. Domestic or foreign investments create new jobs and hence, the need for a workforce. The dominant part of investments is made in the industrial and services sector, not in the agricultural sector. These are the first reasons why new job opportunities are created in cities since investments in services and production activities are not based in villages but in urban centers.

However, their presence in cities is not necessarily a guarantee of economic growth. It is true, on the one hand, that the new location makes residents consume and perform normal activities in the city, and this increases the size of the city market and the aggregate demand stemming from the city, but on the other hand, new residents may not necessarily have professional competencies that can bring any added value and not necessarily do new residents have enough capital to invest in the city's economy where they are recently living. In this respect, Albanian cities, with Tirana topping the list, risk becoming parasitic centers and not cities that grow from virtuous cooperation, between investments that attract the population and the population that invests and creates development.

Example: The English Industrial Revolution between 1780 and 1860 created the conditions for the London population growth from 1 million to 3.4 million.

A similar process took place in Paris, the capital of France. In these cities, investments in production and services attracted hundreds of thousands of former farmers from the countryside. Professional competencies acquired in the city and a liberal economic environment gave newcomers the opportunity to shortly invest in other production and service activities, or at least to invest in housing ownership (investment which positively influences the construction industry and its sub-sectors). In these cities, a virtuous circle was created where, over the years, the new inhabitants did

not simply perform menial labor, but had the opportunity to try their luck and create new added value. The contrary happened in Naples (Italy) or La Paz (the capital of Bolivia).

From early 1550 to 1650, Naples was the largest city on the Italian peninsula, with a population of 150 to 400 thousand inhabitants. In this case, the increase in population was not due to investments in the production field, but because Naples became the capital and a series of investments were made in the royal court and in the town planning. Therefore, most of the population moved from the countryside to the city without any prior plan but just naturally, because the health conditions were better. In this case, the new residents did not have any concrete hopes to find a new job and to receive any professional training, but simply hoped to escape misery, towards better economic conditions. In conclusion, many unplanned neighborhoods were set up around the city center, where negative phenomena such as prostitution and crime were spread. In this case, the population growth did not yield economic growth and investment from the new population, but the city became less promising and notorious for foreign investors.

The case of La Paz in Bolivia does not change much, but this time the phenomenon occurred in the twentieth century. Fortunately, not all those negative phenomena were spread as in the case of Naples, but around the original city, a service center and not a production center, a series of neighborhoods were set up, inhabited by people who had irregular, little skilled and unstable jobs. These two cases clearly show that the initial investment to improve the conditions of the city and to support its urban expansion is not necessarily followed by a second wave of development caused by demographic growth.

Naturally, we pose the question: Is Tirana's development model similar to the cases of London and Paris, or to the dynamics of Naples and La Paz. From the initial analysis, it is found that, as expected, economic growth has led to an expansion of urbanization, but we cannot be sure of a mutual relationship because the second analysis shows that the sample results are not as convincing as the first analysis. During the '90s, after the fall of the communist regime, the demographic structure of Albania was deeply transformed. Residents of villages and towns regardless of the place of residence, provenance, religion, gender, or age emigrated abroad. At the turn of the millennium, a temporary balance was hardly reached, with a clear trend that shows that the population in Albanian cities, starting from Tirana, is constantly increasing, whereas in rural areas it continues to shrink not only as a percentage of the total but also in absolute figures. Over the years, the physical and IT infrastructure in Albania has improved, and therefore distances and lifestyle differences between the city and the countryside have flattened.

The claim made in this section is that, despite the narrowing of the lifestyle gap between urban and rural locations, there is still a benefit to urban people in terms of quality of life and life expectancy. In 2001, out of about 1.3 million inhabitants living in Albanian cities, only 63,500, or 4.91% of the total, were over 70 years old. The rate of the population over 70 has increased continuously in years until 2019, where out of 1.65 million urban residents, about 163 thousand, or 9.36% were over 70 years old. The growth of the elderly population from 2001 to 2019 has increased by about 100 thousand people, or 4.5% of the population.

From these data, it is clear that the number of elderly people has not only increased in absolute figures, but also in the ratio to the total population. Even without any initial analysis, there are clear data to support the fact that the life expectancy in Albanian cities is longer. An issue arises here related to the fact that, even in rural areas, an increase in the number of people over 70 years old is expected. Only if the growing life expectancy rates for Albanian cities outdo the growing life expectancy rates for rural areas, will we have proven the superiority of a better life quality in cities.

Table 5: Table showing the urbanization in Albania

Year	Urban pop.	Over 70	Rate
2001	1293549	63532	4,91%
2002	1326834	67655	5,10%

Year	Urban pop.	Over 70	Rate
2003	1355148	72463	5,35%
2004	1383149	77731	5,62%
2005	1410807	83920	5,95%
2006	1436663	90741	6,32%
2007	1460745	97456	6,67%
2008	1484218	103918	7,00%
2009	1506881	110895	7,36%
2010	1529906	118808	7,77%
2011	1552709	126730	8,16%
2012	1575566	134790	8,56%
2013	1615832	138233	8,55%
2014	1651402	138278	8,56%
2015	1654503	138388	8,36%
2016	1680247	143216	8,52%
2017	1706345	148783	8,72%
2018	1728969	155659	9,00%
2019	1747593	163509	9,36%

Source: INSTAT, 2020

In the first regression, we will relate the two variables based on their original values. In the following regression, the number of urban population will be the dependent variable (which is specified in the model by the acronym POP), and the age of the urban population (over 70 years) in Albania from 2001 to 2019 will be the independent variable.

The regression shows that the probability of the independent variable (POP) is 0.000, which is less than 5%. This result means that the variable is significant. This is an important variable to explain the dependent variable (age). In this case, the variables have a direct correlation with each other since the sign of the coefficient is positive.

Also, if we look at F-statistic, it results (686.1056) with Prob (F-statistic) = 0.00000, a p-value <5%, which means that it is significant or, in other words, F-statistic is significant. Whereas the Durbin Watson stat value is 1.722, which is quite close to the optimal value which is coefficient 2, where this value indicates that there is no evidence of autocorrelation between the variables.

Adjusted R-square results in 98% level, which means that the explanatory nature of the model is quite high.

Table 6: Table showing the equaiton

Dependent Variable:	POPOVER70			
Method:	Least Squares			
Date:	01/30/21			
Time:	08:59			
Sample:	2001 2019			
Included observations:	19			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-226540.6	11388.80	-19.89153	0.0000
POPURBANE	0.222637	0.007406	30.06242	0.0000
R-squared	0.981537	Mean dependent var		114458.2
Adjusted R-squared	0.980451	S.D. dependent var		31799.11
S.E. of regression	4446.115	Akaike info criterion		19.73675
Sum squared resid	3.36E+08	Schwarz criterion		19.83616
Log likelihood	-185.4991	Hannan-Quinn criter.		19.75357
F-statistic	903.7488	Durbin-Watson stat		0.469253
Prob(F-statistic)	0.000000			

Source: The author

The regression analysis displays the values of the constant and the independent variable's coefficient as well as the existence of a positive connection between the number of urban residents and the proportion of persons over 70 who are considered an indicator of life expectancy.

$$\text{POPOVER70} = -226540.6 + 0.222637 * \text{POPURBANE}$$

According to the equation, an increase of 1% of the number of Albanian urban residents includes an increase of about 0.222% of people over 70 years of age.

Table 7: Table showing the equation

Dependent Variable:	POPURBANE			
Method:	Least Squares			
Date:	01/30/21			
Time:	08:57			
Sample:	2001 2019			
Included observations:	19			
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1027025.	17388.28	59.06420	0.0000
POPOVER70	4.408685	0.146651	30.06242	0.0000
R-squared	0.981537	Mean dependent var		1531635.
Adjusted R-squared	0.980451	S.D. dependent var		141504.7
S.E. of regression	19785.02	Akaike info criterion		22.72254
Sum squared resid	6.65E+09	Schwarz criterion		22.82195
Log likelihood	-213.8641	Hannan-Quinn criter.		22.73936
F-statistic	903.7488	Durbin-Watson stat		0.467865
Prob(F-statistic)	0.000000			

Source: The author

The regression analysis displays the values of the constant and the independent variable's coefficient as well as the existence of a positive connection between the number of urban residents and the proportion of persons over 70 who are considered an indicator of life expectancy.

$$\text{POPURBANE} = 1027025. + 4.408685 * \text{POPOVER70}$$

According to the equation, an increase of 1% of the number of Albanian urban residents includes an increase of about 4.4% of people over 70 years of age.

4.1 Life expectancy in rural areas

In 2001 the majority of the Albanian population lived in the countryside. Out of about 1,770 thousand inhabitants, only 78 thousand people, or 4.4% of the total population were over 70 years old. There have been slow but steady infrastructural improvements in Albanian villages, such as road paving. Out of 387 communes, only 296 were connected through paved roads at the beginning of 2013, while in 2009 there were 198 communes connected by a road system.

By 2005, there were merely 145 administrative centers with paved roads. The construction of water supply systems has been another significant element that has helped and improved the cleanliness in rural areas, while the laying of optical fibers has given the chance to many households that do not live in cities to use the abundant information from the Internet and other means of telecommunication. The territorial reform approved in 2015 reduced the number of territorial units to 61, so the urban and rural population was reassessed.

The number of rural residents in 2019 had decreased to less than 1,135 thousand people, while there are almost 100 thousand people over 70. This means that about 9.15% of the Albanian rural population is over 70 years old. The increased number of people over 70 in absolute figure was 25 thousand people or, in other words, about 4.7% of the total population.

From these figures, we can conclude that the quality of life has improved in rural areas as well, but are these figures sufficient to narrow the gap between the rural and urban data? The data analysis found that in Albanian cities, the rate of people over 70 during 2001 – 2019 had increased from 4.91% to 9.36% of the total population, with an increase of 4.4%; while in rural areas the elderly population rate for the same time period had increased from 4.42% to 7.92%, with an increase of only 4.5%.

Taking these figures into account, we can say that in Albanian cities, starting from Tirana, the quality of life (expressed by the indicator of life expectancy over 70 years of age) is higher than the life expectancy in rural areas but this gap is narrowing.

Table 8: Table showing the rural population in Albania

Year	Rural pop	Over 70	Rate
2001	1769771	78166	4,42%
2002	1730184	78188	4,52%
2003	1689845	78338	4,64%
2004	1651082	78497	4,75%
2005	1608827	78290	4,87%
2006	1566666	80218	5,12%
2007	1521010	81010	5,33%
2008	1474048	81290	5,51%
2009	1429474	82328	5,76%
2010	1388768	82569	5,95%
2011	1354652	86004	6,35%
2012	1326624	85827	6,47%
2013	1282950	93551	7,29%
2014	1244544	98569	7,92%
2015	1236010	102706	8,31%
2016	1206191	102018	8,46%
2017	1177824	101694	8,63%
2018	1153771	102482	8,88%
2019	1133324	103663	9,15%

Source: INSTAT, 2020

In the second regression, we will relate the two variables based on their original values. In the second model, the number of the rural population (which is specified in the model by the acronym PRUR) will be the dependent variable and the age of the rural population over 70 (specified by the acronym MRUR) in Albania from 2001 to 2019 will be the independent variable.

The regression shows the probability of the independent variable (PRUR) is 0.0001, which is less than 5%. This result means that the variable is significant, a variable that is important to explain the dependent variable. In this case, the variables have an indirect correlation with each other, as the sign of the coefficient is negative.

Also, if we look at F-statistic, it results (32.28873) with Prob (F-statistic) = 0.000102, a p-value <5%, which means that it is significant or, in other words, F-statistic is significant.

The Durbin Watson stat value is 1,530, which, although within its range, is acceptable as an indicator. Adjusted R-squared results in the level of 70.6%, which means that the explanatory nature of the model is quite high.

Table 9: Table showing the equation POPRUOVER70

Dependent Variable:	POPRUROVER70			
Method:	ARMA Maximum Likelihood (OPG - BHHH)			
Date:	01/30/21			
Time:	09:02			
Sample:	2001 2019			
Included observations:	19			
Convergence achieved after 11 iterations				
Coefficient covariance computed using outer product of gradients				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	146204.7	22172.98	6.593822	0.0000
POPRURAL	-0.039812	0.015035	-2.648018	0.0183
AR(1)	0.856079	0.131129	6.528533	0.0000
SIGMASQ	4568826.	2526170.	1.808598	0.0906
R-squared	0.954143	Mean dependent var		88179.37
Adjusted R-squared	0.944972	S.D. dependent var		10255.10
S.E. of regression	2405.656	Akaike info criterion		18.66317
Sum squared resid	86807703	Schwarz criterion		18.86200
Log likelihood	-173.3001	Hannan-Quinn criter.		18.69682
F-statistic	104.0344	Durbin-Watson stat		1.318155
Prob(F-statistic)	0.000000			
Estimation Command:	LS(OPTMETHOD=OPG) POPRUOVER70 C POPRURAL AR(1)			
Estimation Equation	POPRUROVER70 = C(1) + C(2)*POPRURAL + [AR(1)=C(3),UNCOND]			
Substituted Coefficients:	POPRUROVER70 = 146204.691995 - 0.0398119324062*POPRURAL + [AR(1)=0.856079388506, UNCOND]			

Source: The author

In this case, the regression shows that there will be a negative correlation between the dependent variable and the independent one, i.e. between the number of rural population and the number of people over 70 (who live in villages) as a life expectancy indicator.

$$POPRUROVER70 = 146204.691995 - 0.0398119324062 * POPRURAL + [AR(1)=0.856079388506, UNCOND].$$

According to the equation, a decrease of 1% in the number of Albanian rural residents, causes an increase of about 0.0398% of people over 70.

The above results indicating that in Albanian cities life expectancy is growing faster than in villages should not be taken for granted and are not everlasting. From a theoretical point of view, it may happen that, due to the expanded urban dimensions, the quality of life takes a declining curve due to air pollution, which affects the population of cities more than that of villages, as shown in the chart below.

In the city, the increased number of cars and heavy traffic emit gases harmful to the lungs and health; the tap water can be polluted because of a wider distribution network; high decibel noises can damage human hearing and brain; currents electromagnetic communication equipment and household appliances transmit dangerous rays to humans; industrial activities (especially heavy industry) emit harmful gases; city street cleanliness and urban waste collection centers can seriously damage health.

These factors, and other secondary elements, can offset and rule out the positive effect of health and infrastructure services that cities have. Point A (in chart no. 5.8.) is not impossible to be reached where life expectancy in urban areas is lower than that in rural areas because of pollution. Point B shows the effect that pollution can have on the rural residents because certain sources of pollution cause global atmospheric phenomena, but in this case, its effects on life expectancy in rural areas would be more reduced.

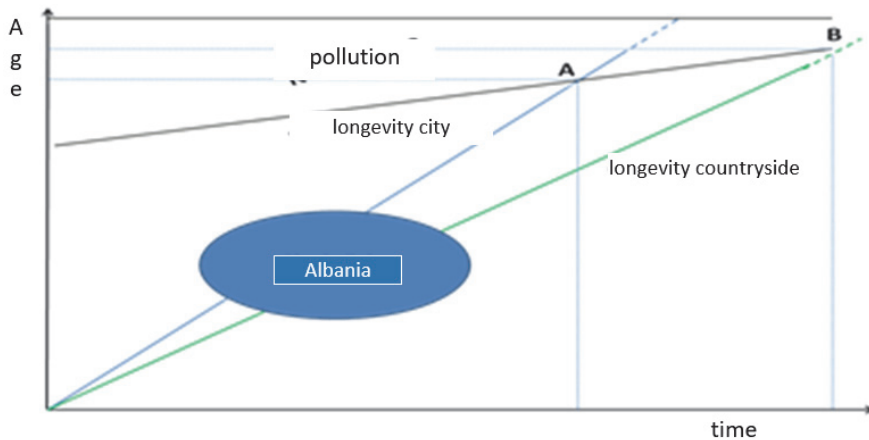


Figure 5: Figure showing the evolution of life expectancy in relation to pollution

Source: The author

Point A can be not stationary because the pollution effects can be mitigated and delayed thanks to measures taken by the local government. For example, since the road infrastructure is becoming wider, cars stay less in traffic and this reduces the emission of harmful gases. The creation of electric tram lines and underground metropolises significantly reduces road traffic and hence, gas emissions. Segregation of urban waste and its reuse significantly reduces the amount of waste at landfills. Subsidies on heavy industry cleaning filters reduce air pollution. Periodic interventions in the water supply network with new materials reduce the chances of water pollution, etc.

In the case of Tirana and other Albanian cities, most of these measures have not been taken, but it is worth noting that Albania's position in the chart shows that point A has been reached and life expectancy in urban areas does not continue to grow more than in rural areas.

5. Conclusion

This study emphasized the role of urbanization in a nation's economic development and provided a thorough overview of the literature on the idea of urbanization and development.

The empirical analysis relied on data collected from secondary sources. Based on these data, the proposed hypotheses were tested. The test results of the hypothesized correlations were further presented.

- The critical literature review showed the existence of a series of studies on urbanization and development. However, this analysis showed that the researchers have not reached any unified opinion about the concept of "urbanization" and the relationship with the economy and its determining factors.

In the analysis of the urbanization and economy determinants and factors, several elements have been analyzed simultaneously, which, to the knowledge of the author of this study, have not been analyzed in this same model in any other study.

The method used for data processing and analysis, although well-known and appreciated for years in the international scientific literature, is rarely used in research in Albania. This analysis showed the impact of each of the influencing factors on urbanization and economic growth (such as population, life expectancy in urban areas, etc.).

- According to the equation, an increase of 1% of Gross Domestic Product in Albania leads to an increase of about 0.123% of Urbanization.

- Urbanization and GDP have a positive relationship. The equation states that an increase of 1% in urbanization causes an increase of 7.94% or so in Albania's gross domestic product.

The above results indicating that in Albanian cities life expectancy is growing faster than in villages should not be taken for granted and are not everlasting. From a theoretical point of view, it may happen that, due to the expanded urban dimensions, the quality of life takes a declining curve due to air pollution, which affects the population of cities more than that of villages, as shown in the chart below. It has been established that Tirana is the fastest-growing Albanian city in terms of economic growth. The population of Albanian villages will decline and the size of the cities will increase in direct proportion to GDP growth. Gross Domestic Product creates an appealing effect for rural residents and urges them to move to the cities.

References

- Bank. World. (2004) Albania: "Decentralization in Transition", Report Nr. 32308-RU, March.
- Bank. World. (1989). Sub-Sahara Africa: From crisis to sustainable growth. Washington D.C.: World Bank.
- Bertinelli, L. and Strobl E. (2003). "Urbanization, Urban Concentration and Economic Growth in Developing Countries", Credit Research Paper, Centre for Research in Economic Development and International Trade, University of Nottingham, 3(14).
- Bertinelli, L. & Black, D. (2004) "Urbanization and growth." *Journal of Urban Economics*, 56, 80 – 96.
- Civici, (2013) "Shteti apo Tregu": 303-328.
- Czech B (2004) "Urbanization as a threat to biodiversity": Trophic theory, economic geography, and implications for conservation land acquisition. Policies for Managing Urban Growth and Landscape Change: A Key to Conservation in the 21st Century 265:: 8–13.
- Clark, Colin G.. (1960) The conditions of economic progress. London: Macmillan.
- Davis, James C. & Henderson, J. Vernon.(2003) "Evidence on the political economy of the urbanization process". *Journal of Urban Economics*, 53 (1);: 98–125.
- Faja, (2000) Urbanistika,
- Faja, E. (2008). "Kush e drejton urbanistikn shqiptare". Tirana: UFO University Press.
- INSTAT, (1990-1999) "Tregu i punës"
- INSTAT, (1999) "Vjetari i treguesve Sociale"
- INSTAT, (1998) "Disa tregues Social sipas qarqeve"
- INSTAT (2004), "Parashikimet për Popullsinë për vitet 2001-2021", Tirana
- INSTAT (2005), "General Results of Annual Structural Survey of Economic Enterprises", vitet 1998-2004, Tirana
- Johansen, S. (1995)."Likelihood-based inference in Cointegrated Vector Autoregressive Models. New York: Oxford University Press.
- Johansen, S. (1998). "Likelihood-Based Inference in Cointegrated Vector Autoregressive Models." *Econometric Theory*, vol. 14, no. 4 517-524.
- Moore M, Gould P, Keary BS (2003) "Global urbanization and impact on health". *International Journal of Hygiene and Environmental Health* 206:: 269–278. doi: 10.1078/1438-4639-00223
- Nour, A. H. El. (1989). "The relationship between urbanization and socio-economic development in the Sudan." *Geojournal* 369-377.
- Rahman. A. Ahmad N., Mohammad R. Asarzadeh, and Michael Bruce Bottomley. 2006. "Economic growth and urbanization: A cross-section and time-series analysis of thirty-five developing countries." *Rivista Internazionale di Scienze Economiche e Commerciali*, vol. 53 334-348.
- Lubonja, O. (2015)."Urbanization and it's impact on the economy" *Otjela_Lubonja.pdf (uet.edu.al)*, *dssh-9.pdf (uet.edu.al)*
- Sovani, N. V. (1964). "The analysis of over-urbanization." *Economic Development and Cultural Change*, vol. 12 113-122.
- Frederick. S.P., and Warf. B.(2005)."The World Economy: Resources, Location, Trade and Development", 4th Edition. Pearson.
- Tirana, Municipality of. 2012. *Politika e Zhvillimit të Territorit të Bashkisë Tiranë*. Tirana: JICA.
- Vlerësimi i sektorit urban në Shqipëri, 2007
- Jones. W., Jones. D. (1991). "How urbanization affects energy-use in developing countries." *Energy Policy*, vol. 19, issue 7 621-630.