Albania Residential Prices

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Abstract: The real estate market is complex and influenced by too many factors. Real Estate market in Albania has experienced a boom after the 1990. We have inherited from the communist system a very poor market of housing. The number of dwellings in 1990 in Albania was 219 dwellings per 1000 inhabitants and the useful floor space was 5 m² per person, but in Bulgaria number of dwellings per 1,000 people varies 465 and in Romania average useful floor space per person was 37 sq. The data used in this study are derived from the database of the World Bank, the Institute of Statistics, reports of Bank of Albania also from information provided individually on the ground and different sources. In this study is analyzed the relationship that exists between economic growth, remittances and the price of dwellings in Albania. The dependent variable is the average price of housing in major cities of Albania. Independent variables in the model are GDP per capita and the remittances. The Econometric model is a Linear Regress equation and the period are the years from 1998 to 2013. The model used is the statistical program EViews 6.0. Unfortunately the information let the desired, so we do not have an official detailed information on prices of Albanian real estate market. In Albania few researchers have been studying real estate market in Albania.

Keywords: housing market; economic growth; remittances; price of dwelling; linear Regress equation

JEL Classification: R2; P2

1. Introduction

Albania is a small country (28,748 square km), population 3,2 millions and it's in the west part of the Balkan Peninsula. It has a favorable geographic location because it is an intersection of the roads passing from the west Mediterranean sea to Balkan and Asia and controls the passage through the sea canal of Otranto. In 1944 after the finalization of World War II, Albania was included in the group of the communist countries of East Europe. In 1946 Albania became formally all known as National Republic of Albania, and the regime of the dictator Enver Hoxha was established and remained for 45 years in a row. Albania was the only place out of all the countries

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that went through a communist regime that eradicated all elements of private property. The state was the owner of everything. In 1945-1946 a reformation upon land property took place. Also a redistribution concerning agriculture and lands took place. The new owners of the land did not get any documentation concerning their new property. Later the same reform took place in urban areas as well. The owners lost their right upon their properties and the only legal owner from then on was the state. The owners of private dwellings that remained in their homes only had a right to that property and nothing else other than that house, not the land on which the house was built nor the yard around it. All lands belonged to the state. The real concept of property, owning and respect of that property remained in the subconscious of some owners that unfortunately were persecuted more than everybody else from the communist regime. After that long period of persecutions the idea of private property disappeared. Many owners throw away their documentations, because they were afraid that the documents may be found by the government . The communist state took away everything from the previous owners. These owners for 50 years underwent a continuous persecution that was often cruel.

Urbanization in Albania from 1945-1990 was under the state's strict control. In order to construct a modern and industrialized socialist society, till the 1960 the governing of the only state party encouraging the development of industry and constructing sector. This politic brought a rapid increase of the urban population. From 1950-1955 the state saw an annual increase of 7% of the urban population. Even though from 1961-1990 the government started to limit urbanization. The development of big cities got limited and the development of smaller cities became a priority. Big cities continued to be constructed but under the "yellow line "area – Borders of the city set by the urban master plans. The reason why it got limited was mainly because the urban area enjoyed better life conditions compared to the rural areas, which sometimes lived in really hard conditions and lacking infrastructure. The government in the period released local passports or identity cards, put employment restrictions on state enterprises on cities, in order to keep people in the village. Transferring from the village to the city would get easier only if the authorities would give you permission to transfer, this process was called at the time "pasaportizim". These politics where similar to the ones that other Soviet states followed. Before 1991 the strict legal control on local migration resulted in a non-efficient territorial distribution of the population. In the beginnings of the transition Albanian population was 75% rural- a high percentage in the end of the 20 century. The socialist regime had declined all the peoples need for accommodation. Until 1991 the people didn't have private property, they had the right to use them but they had to pay for it, and apartments which were 70%of the offers for urban accommodation. The consumption of residential area was 5m² in the urban areas. In Albania all the urban accommodations were states property. The main characteristics of requests for housing in Albania until 1990 reflected the demographic developments. In 1989 Albania had a population about 3.2 million people. In fact, the average annual growth

rate during the 80's was 2% and population growth was most rapid than in the other part of Europe, for this reason the population of Albania was relatively young and the average age reached 26 years old. Such demographic characteristics impose an increase in demand for real estate.The demand for housing was influenced by the family structure with many poeple and the impact of culture [1]. However, an increase in the number of families make it easier to increase the population that tends to create smaller families with a smaller number of people, about 4 or 5. Exactly the number of households grew 35% while the population grew only 25%. Trends of the state investment in buildings and housing completion includes several aspects. Until the 1970s it was destined to continue increasing the number of new housing. By 1970 the goal of building plan apparently was not completed. This was to reflect the decline in average age. In fact, the attention of the Albanian authorities after 1970 was focused on first, alleviate the quantitative problem of the apartments state, second needed replacement for the existing stock of housing, 20% of which were built before 1945 and third increased attention to the quality of construction, fourth of all faster methods of building. Another factor affecting the reduction of new buildings after 1970 had to do with the reduction of voluntary programs to build new housing. Sometimes individual buildings had taken an important role in the village. During the 80s it was intended as a percentage downward in state investments in general. Meanwhile the authorities where fighting for the distribution of new housing by 50% in practical terms was announced a fluctuation of age to the number of persons that will be completed with new homes. In the beginnings of the 1990 there was no new housing market due to lacking of capital. Albania came from a very difficult period and total poverty, Albanians didn't own any kind of private property or cash. With total privatization of urban houses in 1992 created a stock of existing housing, this stock together with informal constructions were a spontaneous response to market demand, between 1990 and 1994 belong to the category of "fast privatizes" as much as 67.5 per cent of the already small share of public rental stock had been privatized ,55 per cent in Croatia, 74 per cent in Romania and 98 per cent in Albania(Hegedus).

Until 1990 all agricultural land where property of the state in the form of organizations called "cooperative". In 1991 the lands were transferred in two different ways: cooperative lands were privatized by former cooperative, while former state farm workers were given only the right to use their own. The Albanian government distributed lands that in most cases were property of ex-owners. This resulted in a continuous conflict with these former owners, whose property had been stolen since 1945. In 1991, the removal of restrictions on internal migrating gave a way to a massive internal migration from rural areas and the country's northeast to western and coastal area. While socialist industry had created a small number of industries, such as mining in the northeast, most of them ceased operation in 1991,

[1] By tradition the boy would keep the apartment and will be shared it with his parents.

this region was not suitable for agriculture and job opportunities were very limited as a result people stared to move toward big cities to search for better economic opportunities. Insecurity of land tenure and the gaps in the legal framework, created by the collapse of the communist regime, made it easier for people to ask for a lot on vacant land on the outskirts of cities, in the absence of rules and laws, the only way to develop land and build houses was that they did it informally. Taken lands were owned by the former owners, former state property and other public spaces People construct wherever they find a piece of land free in a totally abusive way.

It is estimated that from 60- 70% of the dwellings made from 1990 up to now, they are 1 008 243, about 270.000 of them are illegal. ALUIZNI, investment of 3 billion $(32% of GDP) was created in 2004 to end informality in economy and to start the process of legalization of the illegal buildings and also improve the relationships between former owners, illegal builders and the state.

According to the calculations of ALUIZNI in Albania exist 681 informal zones out of which the 3/4 has become private and state property and 1/4 belong to former owners.

The legalized properties entered the National System of Property Registration through the cooperation between ALUIZNI and the National Property Registration office, this has affected the state budget significantly. Only through urban property taxes, 270000 illegal buildings give about 14 million $ or 0,15% of PBB every year, whereas the cost of transferring can give about 459 million $ or 4,9% of PBB, considering other legal payments the amount can reach 690 million $ or 7,3% of the GDP. From the legalization process 8 billion Alb Leke were cashed(1 Euro= 134 Leke). However the issue of property in Albania remains one of the most delicate matters due to the problems that it bears.

2. The Methodology and Model

This study used quantitative methods of research because it is the nature of such variables. The data are collected from many sources, because it is not easy to find reliable sources of information in the field of real estate in Albania. Econometric model is an Linear Regress equation and the period that is taken in the study are the years from 1998 to 2013. To realize econometric model is used statistical program EViews 6.0 The study was spread over a period of 15 years for the reason that there is a lack of data regarding the price of real estate in the country before the 90s did not existed a real estate market. Even in the early 90s when there was a market launch of real estate in Albania, most transactions realized in informal. To eliminate the problem of small number of observations, provided data are expressed on a quarterly basis and in total are 60 observations. General factors affecting the housing market in Albania, the most important are income per capita and remittances or incomes of

Albanian emigrants in developed countries. This is because GDP per capita is the best variable that expresses the economic increase of a country. Increased revenues increased consumption, than people will also increase their consumption of houses, increasing the demand for housing will increase their prices also. So, housing prices are highly correlated with income per capita. Remittance variable is included in the model because in the case of Albania, it represents the main income entered in Albania after 90s from Albanian emigrants,

The purpose of the regression analysis is the prediction of dependent variables values depending on the independent variables, regression analysis can also explain the variation responsible for a particular outcome and can help build predictive models (Field, 2009).

3. Development of the Housing Market in Albania

Albania inherited from the Communist system bad housing conditions, until 2011 in Albania are built 1,008,243 units, of which in urban areas 542 385 units and 465 858 units in rural areas (Census Albania)

From the year 1970-1990, in Albania is built around 2/3 of the current stock compared to about 40%, which were built in Estonia, Poland, Slovakia, Hungary. (Hegedus)

After 1990 were built about 15% of construction, but here we must say that it does not include informal buildings that have been made over the years and estimated to be around 270,000 thousand informal buildings across the country.

In Albania after 1990 until 1997 were created the first elements of the real estate market. According to Law No. 7652, in 1992, was realized the privatization of housing. Albania realized the privatization of apartments (about 98% of existing stock) in a year, being the country that has committed this privatization faster than all countries of Central and Eastern Europe (Hegedus).

In Albania, the strategy that was followed for the privatization of housing, in terms of the high level of inflation and the lack of funds of Albanian families, was "free" privatization or almost free, different from the strategies of privatization reforms that were followed in the communist countries, in Bosnia and Herzegovina was conducted with privatization coupon, in Bulgaria, Romania, Serbia and Montenegro were privatized with discount and privatization in Russia with 50% of the price of the apartment (Hegedus). The development of real estate market suffered a kink in the period 1997 to 1998. The flourishing of pyramid with interest rates, do not attractive investment in real estate. Many sold their homes to place afterwards money in pyramid schemes and so the housing market offers was great, while demand was low. (L.Sila)

The collapse of pyramid schemes plunged the economy into crisis, most of the population lost money invested in them, contributing directly to the construction and reducing demand, the housing market underwent significant changes. In this period there was a decrease in the number of apartments offered for sale.

The years from 1997 to 1998 are total crisis years, the inflation rate reached 42% and an economic recession, these factors coupled with increased exchange rate of the dollar and the devaluation of deep appreciation, purchases in real estate market paralyzed because investors owned denominated monetary assets. In 1996, the majority of the stock of other occupied buildings, only 23% consisted of the housing market.

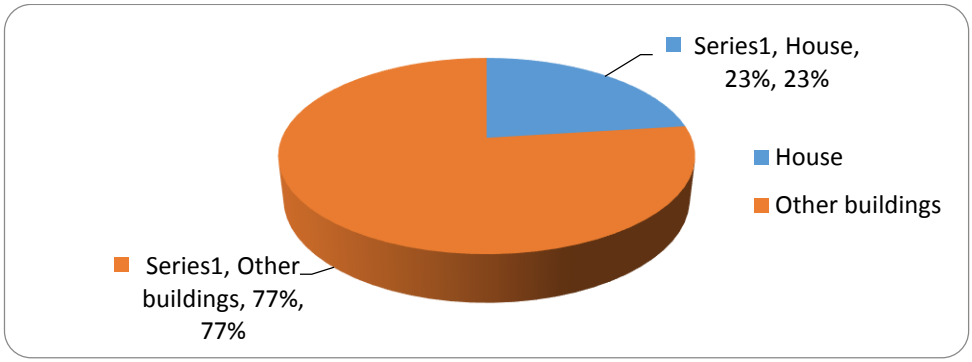

Figure 1. Structure of construction in 1996

Source INSTAT

This fund structure construction in Albania has changed over the years, in 2009, the **apartments constituted 82% of the fund while other buildings were only 18%.**

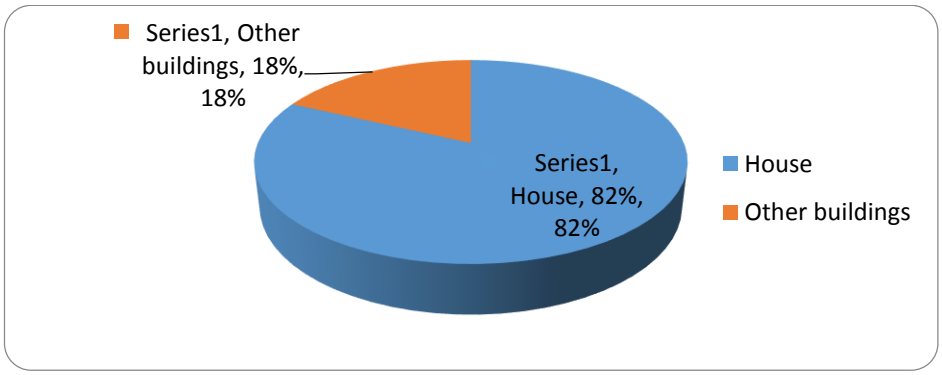

Figure 2. Structure of construction in 2009

Source INSTAT

In 2013 the structure of the real estate was 67% houses and 37% other buildings. After the 2000 s the real estate market in Albania experienced a boom. In Albania, many individuals rushed to use their monetary savings in this market, everyone in our country seemed to agree that housing prices will continue to rise. If we will try to list some of the reasons for the growth of house prices in this period can say that housing conditions, both in terms of number of dwellings for families, if floor space per person, in Albania still be far from average rates in the region or Europe, we inherited from the communist system very bad conditions of residence.

The development of real estate market in Albania change from boom to recognize other regional countries in this field, in countries such as Hungary, Bulgaria and Montenegro, the boom was caused by the desire of people to buy second homes or third, in Albania demand is high, particularly for the main dwelling.

Very young average age of our country's population (29.7 years) is another element that shows that demand for housing will continue to be higher. The most important group of people in connection with the development of residential real estate , is the group between 25 and 40 years old. The economically active age group represents greater demand at houses , in 2005 this age group accounted 601 thousand inhabitants and in 2008 accounted 674 thousand inhabitants.

Internal migration continues to be still very high. An average per year of people that have migrated to urban areas was 20300. According to INSTAT, in Tirana and Durres, in 2001 lived 22.9% of the total population, in 2006 lived 25.5%, and in 2011 lived 28%. According to the forecast in 2021 in these cities will live 32.4% of the population, or approximately 10% more than in 2001.

This period coincides, as well as increasing the level of remittances from emigrants. Remittances have increased in 30.6% in 2004 compared with a year ago. In 2008, remittances amounting a maximum of 1,495,038 million dollars, this year after growing worldwide effects of the crisis became evident in Albania, remittances have decreased every year, in 2011 they fell by 20% versus 2008.

3.1 Price / income (P / I)

This report is one of the most important indicators of market analysis of residential apartments because they cannot judge the level of housing prices, without comparing the average price of an apartment with GDP per capita, or wage levels determining so the real value of residential apartments.

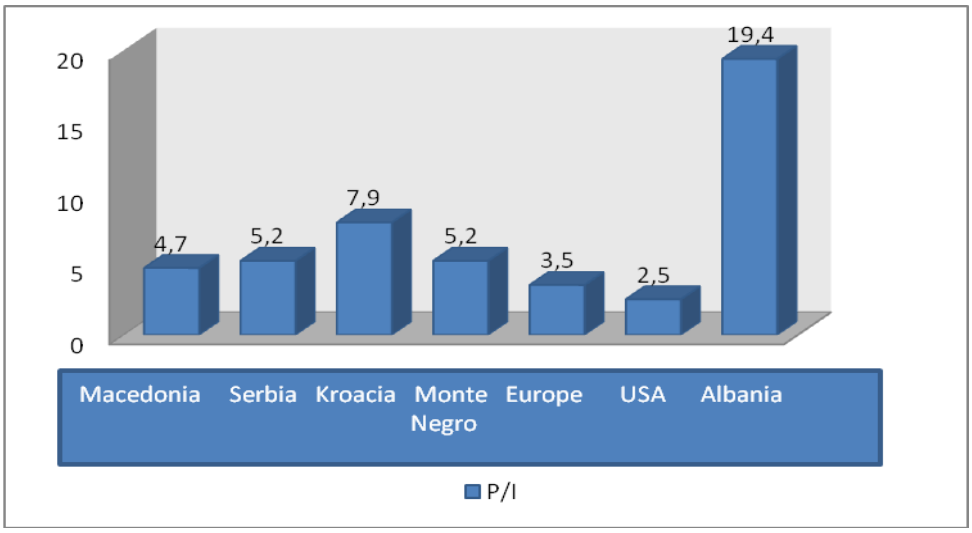

Chart 1. Price / income per capita

Source IMF

As can be seen from the graph , the ratio in Albania is very high (has a value of 19.4), compared not only with European countries (the price / income ratio is 3.5) and the US (the price / income ratio is 2.5), but also in comparison with other countries of the region.

This is not because of the level of housing prices in Albania, which nowadays are much lower than other countries including those in the region, but because we are the country with the smallest GDP per capita compared to other countries in the region.

An apartment with an area of 68 square meters in Tirana, (prices are higher in Albania), costing 76 thousand euro , while at Prague costs 169.048 euro, in Berlin 108.392 euro, 179,000 euro WARSH in Budapest 87.720 147.220 euro in Vienna and Rome 266.900 euro.

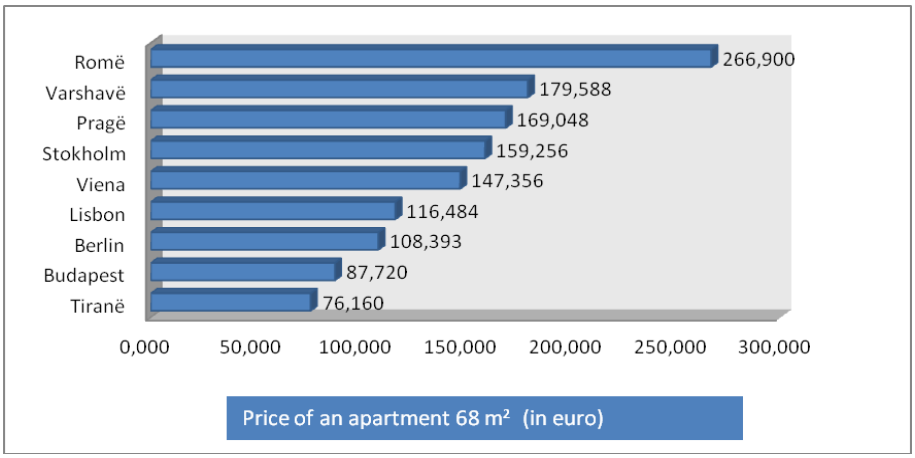

Chart 2. Housing prices in some cities of Europe

Source Tsenkova

From the chart 3, we observe that the number of salaries, which need to purchase a residential apartment in Tirana is 282, while at Prague is 191, 246 Warsaw, Budapest 129, so far from the countries of Europe, where as seen in Lisbon and in Vienna needs only 46 months salary, so it would take 3.7 years on average to buy a residential apartment in Berlin would take only 2.5 years, while in Tirana it would take an average of 23.5 year of work for an employee with average income, this is not for politicians nor businessmen.

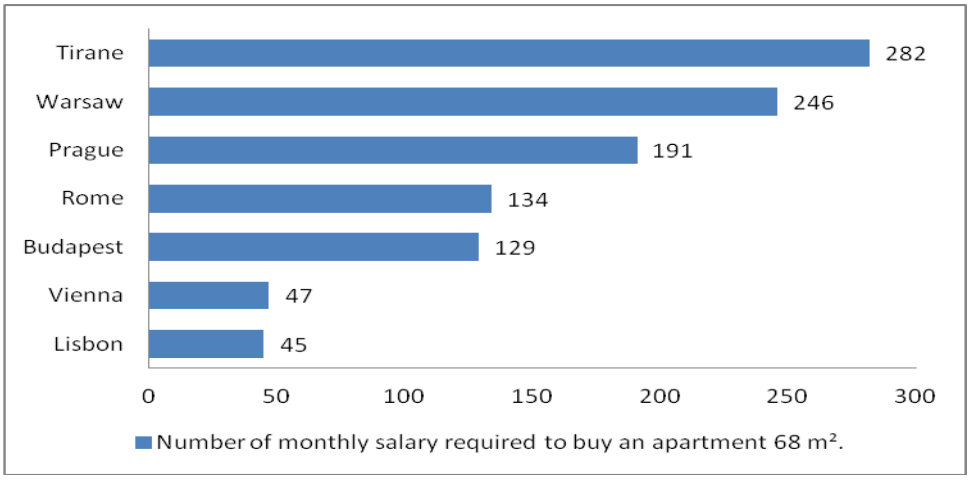

Chart 3. Number of monthly salary required to buy an apartment 68 m²

Source Tsenkova

3.2 .Number of dwellings per 1000 inhabitants

Albania is a country with less care for residents of the apartment, although after 90 years there have been some drastic improvements in comparison with the communist period. Data Comparing with other transition countries shows, the number of dwellings in Albania, is now 254 dwellings per 1000 inhabitants, and before the 90s, the stock of housing was 219/1000 inhabitants (IMF and Hegedus).

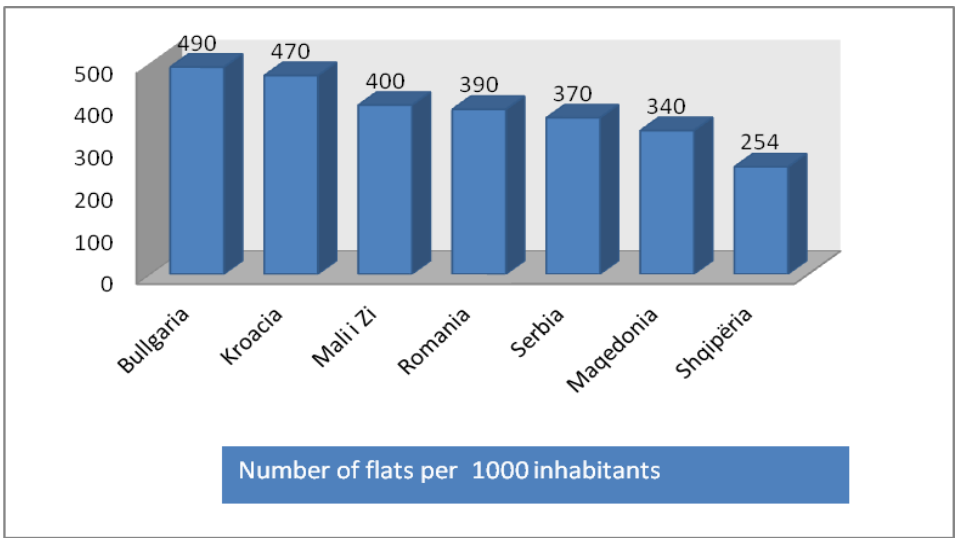

Chart 4. Number of dwellings per 1000 inhabitants

Source Jozef Hegedus

However this indicator, in Eastern Europe, is much lower than the average for European countries, this even though GDP per capita in the region, about one-third of the average GDP in the EU (Bank of Albania), which affects the amount of available investments to improve housing conditions.

Albania's accommodation rates continue to be very poor and young population is expected to bring high demand for apartments in future. Demand for apartments in Albania continues to be high even after many years of investment, but on the other hand, the construction sector fails to provide apartments for Albanians with middle income. Today, apartments in Albania cost much more than the possibilities of a family with middle income.

3.3 Econometric analyses of the most important factors affecting the housing market in Albania

Econometric model is a Linear Regress equation and the period that is taken in the study are the years from 1998 to 2013. The study was spread over a period of 15 years for the reason that there is a lack of data regarding the price of real estate in the country before the 90s did not existed a real estate market. Even in the early 90s when there was a market launch of real estate in Albania, most transactions were made in informally. To eliminate the problem of small number of observations, provided data are expressed on a quarterly basis and in total are 60 observations.

Table 1. Data of macroeconomic variables

Year	GDP(million $)	Remittance(million $)	Average price of residential ($/M²)	Gross income /capita $
1992	709,452	151,8	-	280
1993	1228,071	332	-	310
1994	1985,673	307,1	-	380
1995	2424,499	427,3	-	630
1996	3013,218	550,9	-	850
1997	2196,224	300,3	-	750
1998	2727,745	504,14	154,17	820
1999	3434,402	407,2	230,55	910
2000	3686,649	597,8	287,23	1090
2001	4091,02	699,3	312,1	1250
2002	4449,373	733,57	330,6	1320
2003	5652,325	888,748	416,7	1580
2004	7464,447	1160,672	542,7	2030
2005	8376,483	1289,704	615,7	2540
2006	9132,562	1359,467	706,17	2940
2007	10704,661	1468,02	798,9	3310
2008	12968,653	1495,038	903,03	3850
2009	12118,58	1318,476	877,37	4030

2010	11858,166	1156,021	789,2	4040
2011	12959,564	1125,784	836,66	4050
2012	12340,013	1027,546	701,8	4090
2013	12 920,59	1093	630,5	4110,25

Source Bank of Albania, INSTAT, World Bank

General factors affecting the housing market in Albania, the most important are income per capita and remittances or incomes of Albanian emigrants in developed countries. This is because GDP per capita is the best variable that expresses the economic increase of a country.

Increased revenues increased consumption, than people will also increase their consumption of houses, increasing the demand for housing will increase their prices also. So, housing prices are highly correlated with income per capita.

Remittance variable is included in the model because in the case of Albania, it represents the main income entered in Albania after 90s from Albanian emigrants,

All countries in the world have incomes from remittances, but the feature in the Balkans and in Albania is that the remittances have had a significant weight in economy balance. This phenomenon is evident in Albania and Bosnia-Herzegovina. (Doing Business). In Albania most emigrants have invested in real estate as the most secure investment.

It would be important to own info, about the proportion of remittances used in construction and in housing in all country. We have evidence that the two main cities, in our country, in the city of Durres for investments in construction uses 8% of remittances and in Vlore uses 10% of remittances for investment in this, the rest is uses for consumption, education , business and other activities (Kring 2007)

Dependent variable will be the average price of real estate in major cities of Albania, for the reason that it has a deep difference between prices in the main cities with the prices in the rest of the country.

The data for GDP per capita are provided by the database of the World Bank and are expressed in $. Remittances are also provided by the same source and are expressed in million $. Data on real estate prices are provided by the Local Offices of Real Estate, Newspaper" Celesi", database of real estate agencies as well as research in area. To adjust other variables the price of real estate is expressed in $ too.

Table 2. Average prices of real estate in major cities (in 000 ALL / m2)

Year	Tirana	Durres	Vlore	Elbasan	Shkoder	Fier	Berat	Lushnje	Kavaje
1998	37	29	27	20	21	25	20	10	20
1999	40	40	37	32	29	33,7	26	19	29
2000	51	53	50	41	38	40	31	26	41,5
2001	55	60	48	43	40	43	33	38	43
2002	58	61	49	44	42	45	34	39	45
2003	66	65	55	46	46	48	39	42	50
2004	72	71	63	51	52	54	38	45	56
2005	82,5	80	71,3	53	58	60	40,6	46	62
2006	102	86	85	55	66	67	45,9	47,6	69
2007	105	89	88	58	68	70	47,9	52,3	72
2008	112	96	94	59	70	72	50	54,8	74
2009	124	110	108	65	74	76	55	60	78
2010	122	108,2	106,3	64	73	74,8	54,1	59	76,8
2011	125,6	111,4	109,4	65,8	75	77	55,7	60,8	79
2012	113	100,3	98,4	59,2	67,4	69,2	50,1	54,7	71
2013	100,8	89,4	87,8	53	60,2	61,8	44,7	48,8	63,4

Source World Bank, IMF

3.4 Linear Regression Equation

To realize econometric model is used statistical program EViews 6.0 and data processing result was below the regression equation.

Price = -202.84 + 0.0559 * GDP / P + 0.00038 * Remittances

Test 1. Econometric Analyses

Dependent Variable: CMIM

Method: Least Squares

Date: 08/12/14 Time: 16:05

Sample: 1999Q1 2013Q4

Included observations: 60

Variable	*Coefficient*	*Std. Error*	*t-Statistic*	*Prob.*
C	*-202.8397*	*14.67808*	*-13.81923*	*0.0000*
GDPP	*0.055781*	*0.002324*	*24.00135*	*0.0000*
REMIT	*0.000384*	*1.64E-05*	*23.36644*	*0.0000*

R-squared	*0.982200*	*Mean dependent var*	*587.1558*
Adjusted R-squared	*0.981576*	*S.D. dependent var*	*233.8137*
S.E. of regression	*31.73690*	*Akaike info criterion*	*9.801544*
Sum squared resid	*57412.16*	*Schwarz criterion*	*9.906261*
Log likelihood	*-291.0463*	*Hannan-Quinn criter.*	*9.842505*
F-statistic	*157.653*	*Durbin-Watson stat*	*0.095988*
Prob(F-statistic)	*0.000000*		

In the model generated by the program we see that the coefficient R2 Adjusted , which is a better evaluated than R2, has a value of 98.15% which means that 98.15% of the price of assets in dependent variables will be explained by independent variables included in the model and the remaining 1.85% will be the remaining term that includes other factors which cannot be included in the model.

If we analyze the sign of the coefficients β1and β2 we will see that independent variables have a positive impact on the price of assets, referring values we will have this analysis.

 If GDP / P variable will change with a unit and Remittances will remain unchanged, dependent variable will change with 0559 units.

 Also if Remittances variable will change with a unit , holding unchanged the GDP / P variable, dependent variable will change with 0.00038 units.

To test the overall importance of the model we will use the Fisher test. These data indicate that the coefficient F has a value of 157.65 which is many times higher than the critical F with [2 ; 58] freedom degree and importance coefficient $\alpha = 0{:}05$ which in our case has a value of 3.15. From this comparison we refuse the zero hypotheses and accept that the model that we have built is important.

To test the importance of individual independent variables we will use the t student test. The value of t test for GDP / P variables and Remittance is specifically 24 and 23:36 and it is many times greater than the ***Critical t*** with [60-2] freedom degree and importance coefficient $\alpha = 0:05$ which in our case would be 2. From this comparison we refuse the zero hypotheses and accept that the independent variables are important.

Also if you want the model that we have built to be accurate it should fill Method of Least Squares (OLS) assumptions, that means that β coefficients are BLUE (Consistent, impartial and efficient).

Homoscedasticity Testing

To test the presence or not of heteroscedasticity in our model we will use ARCH test.

ARCH test is a procedure of auto regression on the residuals square over time:

Hypothesis:

• H0: $\varphi 1 = \varphi 2 ..... = \varphi\rho = 0$ Homoscedasticity

• Ha: At least a factor $\neq 0$: Heteroscedasticity

The test results obtained from ARCH test confirms that the value of n * R2 = 36.11 is less than the critical value $\chi 2\rho = 79.08$. So our model does not suffer from heteroscedasticity.

Testing the normality of the distribution of the residue.

To test whether the residue have normal distribution would use Jarque Berra test - which tests in general whether the distribution is normal or not.

Hypothesis:

H0: Normality (good parameters for prediction)

Ha: Lack of normality (settings are not good for forecast)

From the test results we see that the value of the Jarque-Bera coefficient = 3.21 is less than the critical value of $\chi 2$ (2) whose value is 5.99 the importance coefficient $\alpha = 0:05$. So we are within the area of acceptance of the hypothesis zero which means that the residue have normal distribution.

Autocorrelation testing

If in a regressive model residues are correlated by themselves in the past than this model suffers from autocorrelation. To test the autocorrelation of the first instance, we will use the statistic Durbin - Watson.

Hypothesis:

Ho: Lack autocorrelation

Ha: Autocorrelation (settings are not good for forecast)

Since a model does not suffer from autocorrelation, coefficient DW should be equal or close to 2. In the case of our model coefficient value of DW = 0.09, which means that our model suffers from a pronounced positive autocorrelation.

In this situation to correct the presence of autocorrelation, we will use several techniques.

 The first way to solve the problem of autocorrelation is its transformation through differentiation of first instance.

 The second way that we used is the inclusion of a term auto regression AR (1) in our equation.

Analyzing equation derived from modifications we will see that DW coefficient reached a value of 1.85 which is close to 2. In this way we have achieved through interventions to eliminate the presence of autocorrelation in our model.

Testing of Multicollinearity.

To test multicollinearity means to test if there are strong correlations between variables or explanatory or independent. In such cases should be done to eliminate these links in order to obtain a better model.

To identify the links between variables we build a matrix of correlations.

Table 3. Correlation between variables

Correlations	Price of real estate	GDP/P	Remittances
Real estate prices	1	0.901	0.895
GDP/P	0.901	1	0.643
Remittances	0.895	0.643	1

By analyzing the correlation table we will see that the relationship between GDP / P independent variable and Remittance is positive but that does not adversely affect the model and therefore we can say that the model does not suffer from multicollinearity

If we analyze the relationship of dependent variables with independent variables will have the following conclusions:

 Relationship of price with GDP / P is at a high level with a correlation coefficient of r = 0.901. This link also finds support in theory because a GDP growth in a country would lead to increasing prosperity and necessarily real price increase.

 Relationship between price and remittances is a strong positive link because the value r = 0895. This connection is supported from the theory because if we refer trend in Albania will see that the majority of remittances brought by immigrants is invested in real estate and therefore the relationship stands. The model we built satisfies all OLS method assumptions and thus it is specified model and coefficients α and β and are consistent, impartial and efficient (BLUE).

4. Conclusions

The real estate market in Albania was created after 1990, with the privatization of apartments built during communist rule, during this period residents pay a symbolic payment as rent and apartments were owned by the state. Structure of real estate has changed over the years, until 2000 other buildings occupied up to 70% of the stock of real estate, after this period the weight of dwellings has increased annually, in 2009 housing accounted for 82% of stock of real estate.

Report P / I in Albania is the highest compared to other countries, about 19.4, that for reasons of low income per capita of the population and not the high price of housing. To buy an apartment 68 m² in Albania should be 282 months of work are needed.

The number of dwellings in Albania was 219 dwellings per 1000 inhabitants in 1990 and the area was 5 m² per capita. Development of Real Estate market in Albania is different from other countries. In Hungary, Bulgaria and Montenegro, the boom was caused by the desire of people to buy second housing, but in Albania the demand was for the main dwelling.

Although linear regression model that benefited above meets the requirements to be a good model as well as meets OLS method assumptions it has its limitations.

Firstly, as mentioned earlier real price variable is an average of the average prices of the main cities of Albania. But prices inside them had a high standard deviation, which affects negatively the model.

Secondly, although data on variables that are under study are provided from World Bank statistics, data on housing price are the fruit of research in the field, because unfortunately the information on prices of real estate in Albania, leaves a lot to be desired so we do not have an official detailed information on prices of Albanian real estate market.

Finally a study to be good and reliable, its conclusions must comply with those other researchers in the field. This condition is not very applicable in our country because few researchers have been studying real estate market in Albania.

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Appendix

Heteroskedasticity Test: ARCH

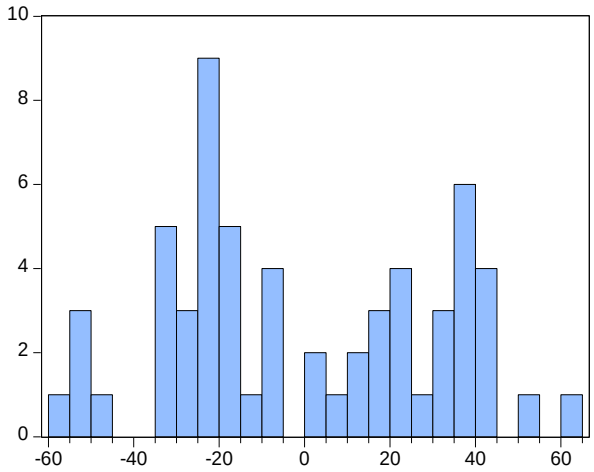
F-statistic	89.92994	Prob. F(1,57)	0.0000
Obs*R-squared	36.11154	Prob. Chi-Square(1)	0.0000

Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 04/14/15 Time: 07:59
Sample (adjusted): 1999Q2 2013Q4
Included observations: 59 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	232.5018	107.3672	2.165482	0.0345
RESID^2(-1)	0.794988	0.083832	9.483140	0.0000

R-squared	0.612060	Mean dependent var	972.6409
Adjusted R-squared	0.605254	S.D. dependent var	901.3979
S.E. of regression	566.3376	Akaike info criterion	15.54957
Sum squared resid	18282081	Schwarz criterion	15.61999
Log likelihood	-456.7123	Hannan-Quinn criter.	15.57706
F-statistic	89.92994	Durbin-Watson stat	1.310470
Prob(F-statistic)	0.000000		

Histogram, Normality Test



Series: Residuals	
Sample 1999Q1 2013Q4	
Observations 60	
Mean	-4.33e-14
Median	-5.479154
Maximum	62.34852
Minimum	-56.36866
Std. Dev.	31.19435
Skewness	0.067232
Kurtosis	1.873865
Jarque-Bera	3.215651
Probability	0.200323

The new equation to correct the presence of autocorrelation

Dependent Variable: D(CMIM)
Method: Least Squares
Date: 08/12/14 Time: 16:03
Sample (adjusted): 1999Q3 2013Q4
Included observations: 58 after adjustments
Convergence achieved after 7 iterations

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-11.41646	3.174607	-3.596181	0.0007
D(GDPP)	0.139786	0.014743	9.481258	0.0000
D(REMIT)	0.000244	4.61E-05	5.282875	0.0000
AR(1)	0.744151	0.090639	8.210017	0.0000

R-squared	0.929311	Mean dependent var	7.740345
Adjusted R-squared	0.925384	S.D. dependent var	18.96069
S.E. of regression	5.179301	Akaike info criterion	6.193690
Sum squared resid	1448.559	Schwarz criterion	6.335789
Log likelihood	-175.6170	Hannan-Quinn criter.	6.249040
F-statistic	236.6359	Durbin-Watson stat	1.854575
Prob(F-statistic)	0.000000		

Inverted AR Roots	.74