

# A NEW PERSPECTIVE FOR UNDERSTANDING REAL ESTATE MARKET IN ROMANIA

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# **ABSTRACT**

This paper introduces an analysis of the factors influencing the real estate market participants' purchase decision, focusing on the residential segment study, on grounds of its visibility. A good knowledge of the set of intertwined factors leveraging the buyer's behavior can provide an explanation to the way the buyers act. The key concept underpinning the study draws on Philip Kotler's classification regarded as one of the most relevant.

In order to better highlight these factors and the way they act, a whole theory has been developed around this analysis – The theory of mono-centered and poly-centered cities. The most interesting part of the article comes with its case study, shifting from theory to practice. The graphs therein illustrate the behavior and perception of the buyers of residential real estate properties in the capital city during the period 1990-2014. The work goes on to present forecasts and general conclusions to the residential real estate property demand.

The article provides answers to key questions for the real estate professionals. However, since the answers and the analysis actually impart the authors' own interpretation, they can be viewed in a different light as well.

This article builds on both accurate and intuitive information, the latter not lending itself to mathematical demonstration.

# **KEY WORDS**

real estate analysis, demand analysis, forecasts

JEL Classification: D70, E20, J10, J60, O52

# INTRODUCTION

People are created to react differently under similar circumstances, as a result of the rich diversity of their physical and behavioral characteristics, values and options. Human behavior comes as a synthetic, functional, decision-making, unitary and individualized pattern of the biological, psychical and psychosocial elements, thus triggering each individual's specific response to the environment. People may be different from each other, but there are some individuals who, in terms of behavior and decision-making, act

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in a quite similar way in some cases, as a result of the factors impacting them and of their options.

We, people, are those who have created, invented and developed all the economic markets/ environments, based on our needs and social background, to subsequently interact there according to individual needs.

A market is a system of aggregate interactions whereby buyers and sellers engage in order to exchange goods and services. The parties involved perceive it as an economic meeting space for buyers and sellers to set up the milieu where demand and supply are expressed, which triggers pricing for a given product and service in the process. Competition is considered to act as a market regulator, as a result of the market players' drive to carry out their activity and reach their aims.

The case study showcased in this article is aimed at providing an answer to the questions raised by real estate experts (investors, developers, builders, advisers, brokers, valuers etc.) and not only. Thus, the article answers to key questions of the experts in the industry, yet the answers and the analysis provided stand for the authors' own interpretation, therefore they can be viewed in a different light as well.

The guiding lines set throughout this study and the way it has been conducted demonstrate its usefulness to the experts in the real estate profession. Starting from a key concept, set forth in section one, the article focuses on the analysis of the real estate actors' behavior and of the purchase decision leveraging factors. In order to explain the involved players' behavior, section two of the study focuses solely on the residential segment of the real estate market for which the analysis theory, the case study and the interpretations have been specifically developed.

The novelty, as compared to other studies, lies in the theory of urban environments classification, as put forth in section three, the end user oriented analysis and the data interpretation modality.

# 1. PREREQUISITES

According to the idea enounced in the Introduction, people are different from one another, yet there are some individuals who, as a result of various influencing factors and options, act in a similar way in terms of behavior and decision making.

The consumer/buyer behavior can be understood only after one has got to know the system of closely intertwined interacting factors influencing it. The modality they act and particularly the place and role they hold in the decision making process are viewed in different ways. The specialized literature provides various classifications of these factors, one of the most relevant being Philip Kotler's (1999). He carries out an in-depth analysis



of the consumer/buyer behavior, starting from the analysis of the factors influencing it. The key concept of the study is based on Philip Kotler's classification (see Figure 1).

SOCIO -**PSYCHOLOGICAL PERSONAL CULTURAL** - perception - age - family - motivation - sex - learning - occupation - status - social classes - attitudes - lifestyle - reference groups - beliefs - personality - life-cycle stage - culture **SOCIAL FACTORS** Decision adopting **ECONOMIC DEMOGRAPHIC FACTORS** process **FACTORS BUYING**/ **DECISION** 

Figure 1. Factors Influencing Consumer Behavior

Source: Kotler, Ph. (1999) Principles of Marketing



# 2. ANALYSIS OF THE FACTORS INVOLVED IN THE DECISION MAKING PROCESS

Human nature has proved that each cause has its effect and entails a series of events leading to a final outcome. Any decision regarding the purchase of a real estate property, as made by an individual or a group of individuals derives mainly from economic, demographic and social factors.

# 2.1. Economic Factors

Economic factors play a key role in the decision making process, because at a macroeconomic scale, they are indicative of the buying capacity the society, namely the market participants dispose of at a given moment. Economic factors are interconnected with consumption size and evolution in all domains.

At a macroeconomic scale, economic factors are manifest through the dynamics and level of the synthetic indicators (for instance gross domestic product, per capita income, minimum salary etc.), the evolution of the main activity domains, as expressed through indicators specific to the industrial and agricultural production, the transports, constructions etc., through the change in the population's actual incomes and level of indebtedness, through the level of inflation, of unemployment etc., expressing in fact the desire to buy.

The consumer/buyer income is the essential factor representing, through its size, form, dynamics, distribution in time, destination etc. the material prerequisite of consumer behavior and the main restriction imposed to it.

An example of the influence of these factors would be the way a reduction in an individual's income affects mostly the sums allocated for durable goods and for leisure, respectively. Since real estate fall into the durables category, we can say that the most important criteria underlying the buying decision are its functionality and price, particularly when income safety is rather doubtful.



-2 -4 -6 -8 → GDP annual evolution (%) Inflation evolution (%)

Figure 2. Romania's Macroeconomic Evolution (2006-2016)

Source: The National Bank of Romania (2014-2016 Forecast)

Considering that the proposed dimension under the study refers to Romania, the analysis of the main economic indicators and their historical evolution is of utmost importance. Figure 2 shows that time period 2008-2012 featured a major economic unbalance which Romania managed to set right at the end of 2012. 2013 was the first year of economic balance to be hopefully maintained in the following years.



At a microeconomic scale, the main "barometers" of economy are:

- A) Minimum wages per economy (or other forms through which purchase power can be determined) – an indicator reflecting the minimum purchase power or the cost of labor.
- **B)** Unemployment rate an indicator which may mirror the economic health of an area or of a state and its capacity to generate jobs (see Figure 3 Unemployment rate by counties).
- **C) Direct foreign investments** their evolution practically stands for a vote of confidence in a country's or a region's administrative system (see Figures 4 and 5).
- **A)** The minimum wages per economy is the lowest value of the hour, daily or monthly pay an employer is allowed to grant an employee according to the respective country's law.

In the sense an investor may consider the notion, the minimum salary per economy (of an approximately EUR 205 share in Romania today) can be one of the main criteria when deciding to enter a certain market. A low value of this indicator is indicative of a low purchasing capacity, while on the other hand, an advantage when it comes to the labor cost. For instance, a low labor cost favors companies relocations in the EU (as it is the case with Nokia), reduces unemployment rate in the respective area, while still keeping a low purchase power and the respective state's low capitalization. On the long term, relocations may have a bad influence on the Gross Domestic Product.

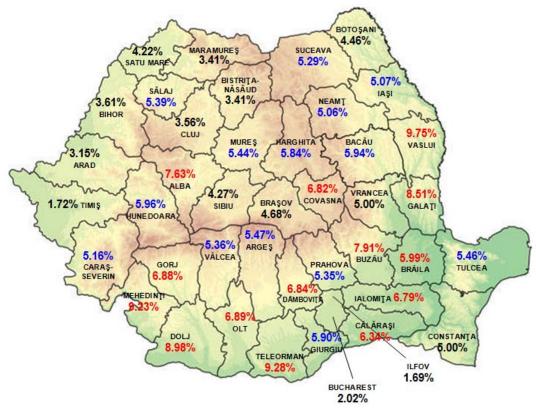
To outline a picture of the potential EU member states that could be considered Romania's competitors in terms of the cost of labor, we introduce the classification below made according to the minimum wages per economy:

- Below EUR 300 per month: Latvia (129), Lithuania (159), Slovakia (183), Estonia (192), Poland (234), Hungary (247) and the Czech Republic (261).
- Between EUR 400 and EUR 700 per month: Portugal (437), Slovenia (512), Malta (580), Spain (631) and Greece (668).
- Over EUR 1.200: France (1.218), Belgium (1.234), the UK (1.269), the Netherlands (1.273), Ireland (1.293) and Luxemburg (1.503).

The countries in which there are no law imposed minimum wages, namely Austria, Cyprus, Denmark, Finland, Italy and Sweden are excluded.



Figure 3. Unemployment Rate per Counties



Source: The National Agency for Employment (A.N.O.F.M.) - May 2013



**B)** Unemployment rate is an indicator by means of which unemployment intensity is measured, calculated as a ratio between the number of unemployed and the reference population (the active population).

Romania features a low unemployment rate as compared to other EU member states, namely approximately 5% (and an average figure of 500,000 unemployed in the last 7 years). However, the low value of this indicator reflects neither the economic health nor Romania's capacity to generate employment. What actually accounts for the relatively low unemployment rate is the population's migration abroad. But for the migration phenomenon in Romania, to be dealt with in the next chapter, we would have most likely been faced with an unemployment rate six times higher and impossible to cope with (approx. 30% spelling an approximate figure of 3,000,000 unemployed, out of whom approx. 500,000 are those registered with the National Agency for Employment – A.N.O.F.M.).

**C)** Foreign Direct Investments stand for concrete occurrences of the market globalization process boosting at least a series of endogenous economic growth factors as well as financial flows between states.

The National Bank of Romania understands foreign direct investment as a long-term investment relationship between a residential and a non-residential entity; as a rule, it involves the investor's exerting considerable managerial influence over the enterprise he has invested in. Foreign Direct Investments components are equity capitals and net credit.

*Equity* stands for the subscribed and paid capital, both cash and through in-kind contributions, held by non-residents in resident companies, as well as the related share from reserves; in the case of subsidiaries, the endowment capital at their disposal shall be considered accordingly.

The Net Loan stands for the totality of the loans received by the foreign direct investment enterprise from the foreign direct investor or from the group of non-resident companies he belongs with, less the loans secured by the foreign direct investment enterprise to the foreign direct investor or to another company within that particular group of companies. The subordinate loans between intermediate affiliated financers (banks, Non-Banking Financial Institutions) are no longer considered as pertaining to direct investments.

The Foreign Direct Investments (differentiated with respect to the flow of foreign equity ownership contributed to the foreign direct investment enterprises) fall into several types, namely: greenfields, fusions and acquisitions, business development and/or restructuring.



The upward trend of foreign direct investments in Romania (see Figure 4) between 2003 and 2008 is indicative of the extent to which foreign investors trust Romanian economy (with a peak value reached in 2008).

Intra-group loans Equity 

Figure 4. Foreign Direct Investments Flow in Romania (2003-2013)

Source: The National Bank of Romania



The investors' reaction to the unfavorable national and international economic context is mirrored in the difference in the flow value as registered between 2008 and 2009. The downward trend of the foreign investments was furthered (2009-2011) against the background of the uncertainty entailed by the conflicts at the national political level and in the global economy. Then economy stabilization following the restructuring policies adopted and the political relaxation in Romania impacted investors in a positive way, boosting investments to an upward trend. 2014 will certainly mark a reference point in the European Union's financial/banking history following the adopting of the negative deposit rate. This policy was to have a positive impact on all the EU Member States, Romania included, in the years to come.

At the end of 2013, there was a major discrepancy between the capital city and the rest of the regions in terms of foreign direct investments (FDI) flow distribution. Comparatively to the other regions in Romania, the capital city seems to draw by far most investors, while the South-Western (Oltenia) and North-Eastern (Moldova) regions were at the opposite end, with 3.5% and 3% respectively. The development of the national high roads and roads network may bring about a possible change in this distribution.

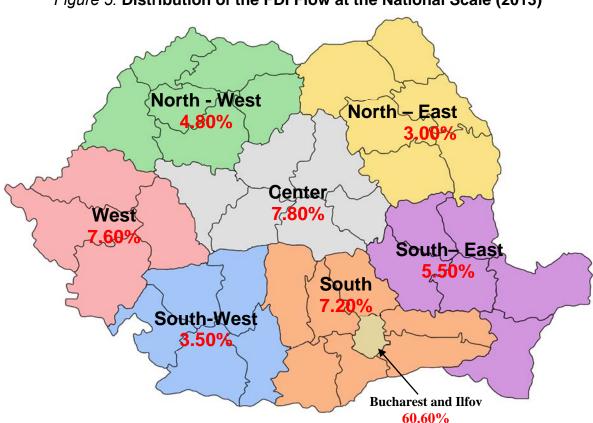


Figure 5. Distribution of the FDI Flow at the National Scale (2013)

Source: The National Bank of Romania



#### 2.2. Social Factors

Social factors feature a dual and subjective character. Through their nature, they have both an exogenous and endogenous influence upon the individual. Exogenous factors are of socio-cultural nature, while endogenous ones are personal and psychological.

**Socio-cultural factors** exert a deep and vast exogenous influence over an individual and his or her behavior, as they define his or her scale of moral, material and cultural values, beliefs, attitudes and customs. Therefore, on the one hand there are the family, social groups, social classes and social status generated influences, and on the other hand, the assimilated elements, such as values, perceptions and preferences gradually acquired as generated by the environment the individual has interacted with.

**Personal factors** are important variables defining the individual's buyer and consumer behavior, engendering his or her deep inner belief. This set of factors includes:

- <u>Age</u> has the capacity to change people's consumer behavior. Thus, as one grows older, they change the structure of the products and services they consume according to both their needs and incomes.
- <u>Occupation</u> will always influence the goods and services one consumes/buys, hence reflecting not only their education level, but also their hierarchical position.
- <u>Lifestyle</u> people's way of behaving in society, of determining and selecting their range of needs according to their ideals is different, even if people come from the same subculture or social class and have the same occupation, as they have several income sources, different personality types, a life generated strategy, a model determined by a certain social background, types of carrying out various activities making up life.
- <u>Individual personality</u> is a factor accounting for an individual's distinct buyer and consumer behavior, as determined by his or her specific characteristics, beliefs and habits. Of course, the wide diversity of characteristics makes it difficult to structure them. Personality defining traits influence both the perceptive mechanism and the motivational and therefore behavioral one. However, neither the nature of these connections, nor their succession can be clearly explained yet.

**Psychological factors** are the endogenous variables accounting for consumer behavior through their multiple incidences on the individual. However, since they cannot be observed directly, they are usually inferred. Among the numerous psychological variables having a major influence on the consumer behavior, mention should be made of: perception, motivation, learning and attitude.

# 2.3. Demographic Factors

Demographic factors reflect population structure and the processes affecting it. At a macro economic scale, the main variables are: number of population and geographical distribution, natural increase, structure per age brackets, occupation, education level,



number of families and households, size of a family and household, population mobility, type of habitat (urban, rural).

From the consumer/buyer point of view, variables like age, gender, marital status, physical characteristics etc. are important. Thus, mostly as a result of social norms, women buy types of products different from what men will buy and select them according to different criteria (we will refer only to real estate). Based on the individual behavioral differences, developers can specifically approach their target market segment. Practically, it is the age that makes a difference in purchase decisions, and age advancing comes with changes that must be considered, as it changes the consumer/buyer behavior.

Awareness of these variables is important, as it makes it possible to predict some consequences in terms of investments in the real estate segment, trends of the demographic variables that may modify the mid- and long-term results of an investment.

With a total registered population of 20,121,641 (the source: the 2011 census), Romania ranks seventh in Europe in terms of a stable population, with the following distribution per residence environments:

- Urban environment 54.0% of the entire stable population.
- Rural environment 46.0 % of the entire stable population.

The counties featuring the highest percentage of the stable population living in the urban environment are: Bucureşti - Ilfov area (90.2%), Hunedoara (75.0%), Braşov (72.3%), Constanţa (68.8%), Cluj (66.3%), Sibiu (66.2%), Brăila (62.5%) and Timiş (61.8%).

In 11 counties, large villages register over two thirds of the stable population in the county. This is the case with the following counties: Dâmboviţa (71.1%), Giurgiu (70.8%), Teleorman (67.6%), Neamţ (64,0%), Vrancea (63.8%), Călăraşi (63.8%), Bistriţa-Năsăud (63.3%), Buzău (61.4%), Vaslui (61.3%), Olt (60.9%) and Sălaj (60.7%).



The closest difference between the shares representing the stable population living in municipalities and cities on the one hand, and in large villages, on the other hand, was recorded in the counties Mureş, Bihor and Prahova (50.2%, respectively 49.2% and 49.1% of the stable population in these counties live in the urban area).

Population migration is engendered by the economic and social factors, as they have a wave- like effect on the individual. People's decision to migrate is generally triggered off by the economic factors existing in their living environment; it is only seldom that social factors should trigger off such a movement (for instance, family integration after settling abroad).

In Romania, population migration tends towards a polarization from the rural to the urban area (see Figure 6), aiming mainly the cities (Timişoara, Cluj-Napoca, Bucureşti, Constanţa, Braşov etc.), with the exception from the polarization rule of those towns which, as a result of the people flow, develop in the suburban and periurban area.

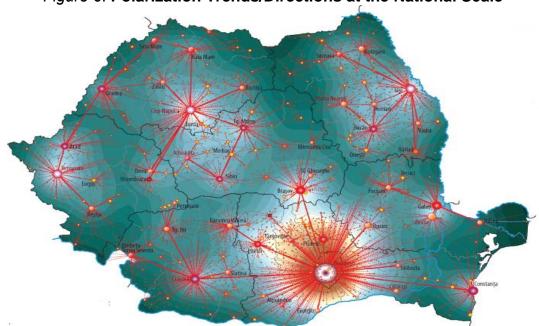


Figure 6. Polarization Trends/Directions at the National Scale

Source: National Institute for Statistics

Approximately 2.5 million Romanians are estimated to be living and working in various European Union countries in search of a better living standard (see Figure 7).

Labor migration to the UE has economically assisted Romania, as the country was not thus faced with a catastrophic unemployment rate. Moreover, the Romanians who have been employed abroad have contributed to a higher living standard in those places they originate from. The structure of the population who have decided to migrate generally includes qualified people or people capable of adapting to another environment, mostly youth (according to National Institute of Statistics, the average age of the people who



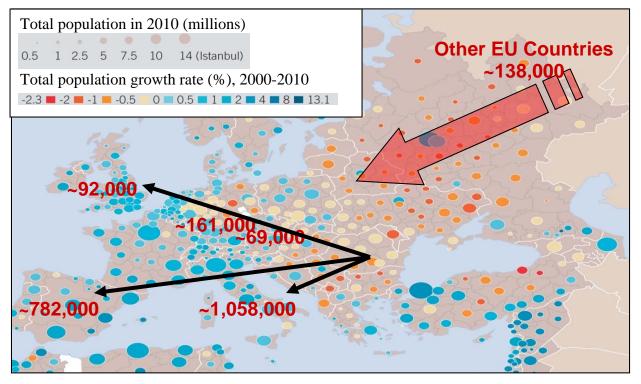
have been employed in the EU is 33 years). The phenomenon was made possible by the free circulation agreement signed between Romania and the European Union at the beginning of the 2000s. The mass migration process between 2000 and 2012 is currently considered completed. Reverse migration does not enter the scope of this article, since the number of citizens coming back to Romania and of the immigrants still registers non-significant values.

The population home migration will keep on with its tendency of polarization from the rural to the urban area. While this migration trend is generative of abandon in the rural area, in the cities drawing population it leads to the emergence of three urban development phenomena: agglutination, densification and gentrification.

The agglutination phenomenon practically consists in the development of a locality as a result of adding new buildings to the already existing ones, irrespective of their destination. For instance, the localities (villages) situated in the suburban and periurban area tends to develop through agglutination towards the cities in their vicinity, and the cities tend to polarize through agglutination in their limitrophe area.



Figure 7. Population Migration from Romania towards the EU States in Hope of a Better Life



Source: ESPON – Available data regarding year 2010

Densification is the phenomenon consisting of land development within cities, thus agglomerating the urban back cloth. At the national scale, residential and commercial buildings within cities are the most obvious example of this phenomenon. For instance:

- Residential redevelopments Bordei Park, the French District (Bucharest), Băneasa Forest (Bucharest), Făget Area (Cluj), Schei Area (Braşov) etc.
- Commercial redevelopments Orhideea Commercial Centre (Bucharest), Domus Bussines Centre (Cluj) etc.

The green spaces or fields adjacent to the districts of blocks provided the main source of unbuilt land within the cities.

Gentrification signifies turning an aged urban area into a district aimed at a more financially potent population, with a certain social status, by restructuring and extending buildings, leading to an increase in the values of those properties (land and buildings in the area), as well as to the displacement of the former poor residents.

Agglutination and densification are phenomena merging with the city centre-outwards development trend or appearing where urban regulations are modified. Gentrification as a phenomenon manifests in the opposite direction of city development.



There are also cases in which all three phenomena took place, are taking place or will take place in rural environment localities, following the appearance of an important centralizing factor in the area. For instance, the determining factor may be a company opening up a factory whose labor demand cannot be met by the already existing local labor force, being thus forced to draw it from farther areas (e.g. Nokia in Jucu, Daw Benta in Sâncraiu de Mureş, or in a near future, possibly in Roşia Montană). However, these cases are few and far between, so they cannot be considered as a reference mark within this analysis.

As an example, Figure 8 schematically shows the previously mentioned demographic phenomena – gentrification, agglutination and densification. Bucharest agglutination, with the suburban locality Popeşti Leordeni [1] and a possible future agglutination [2] are shown in red. The densification we considered feasible is shown in yellow (Vitan-Bârzeşti Road and Popeşti Leordeni Farm area). Having in view the area covered by the picture, it was considered relevant, for instance, to exemplify the gentrification phenomenon (in orange) in the area covered by Blvd. Constantin Brâncoveanu, Olteniţei, Drumul Găzarului and Giurgiului roads.



In the previously described area, a large number of both single family houses and new blocks of flats have been built lately on the grounds resulted from older buildings demolishing.

Figure 8. Exemplification of the Gentrification, Agglutination and Densification Phenomena



#### 3. ANALYSIS THEORY

Considering all the above mentioned prerequisites and study elements, as well as the necessity of an applicable exemplification, conducting a study theory has been decided on. The theory is aimed at classifying the cities into two categories – mono-centered and poly-centered – according to the above listed factors (economic, demographic and social).

What are mono-centered cities? These are cities whose economic activity and population are at a standstill or on a down grade, and which fail to stand for a demographic polarization point out of economic and social reasons. As a rule, these cities feature a number of inhabitants between 60,000 and 200,000 and an aged population structure.

In terms of real estate, they feature a low activity as a result of the young population's migration to other areas, of the low demand and of the limited supply of residential property. No significant residential developments have been undertaken locally, as there are no buyers. The real estate market participants view such a town as following a rather simple pattern, with a relatively linear downfall of prices along the centre – suburbs direction (see Figure 9).



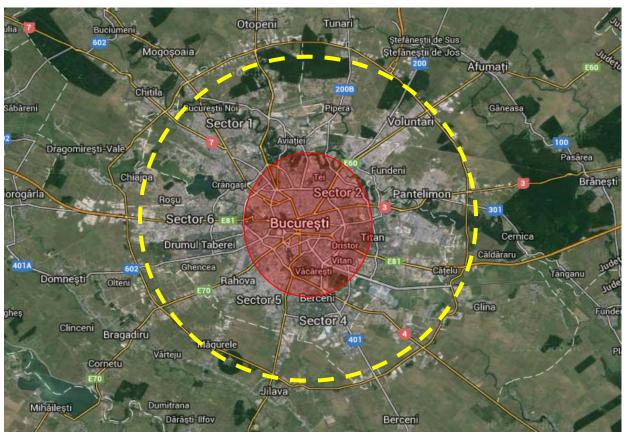
What are poly-centered cities? These are cities whose economic activity and population are at a standstill or on the upgrade, and which stand for a demographic polarization on economic and social grounds. As a rule, these cities feature a number of inhabitants ranging between 200,000 and approx. 2,000,000 (the figures are referring only to Romania). These cities are characterized by a medium and intense activity, with their population continuously in migration/on the move, yet arrivals are approximately counterbalanced with departures (e.g. Bucharest, Cluj, Timişoara etc.), and there is a fair balance between the youth and the elderly in the population structure.

For instance, quite a large number of people have emigrated from Bucharest lately (according to the censuses of 1992-2002-2011), yet the number of population has stayed approximately the same as a result of the internal migration. The data underpinning this statement are as follows: 1992 - 2.354 million inhabitants, 2002 - 2.226 million inhabitants, 2011 - 2.247 million inhabitants.

The real estate market participants view such a city as highly complex, with various poles of interest showing variations, either increasing or decreasing, along the centre – suburbs – metropolitan area direction. The residential real estate demand is oscillating as a result of the population flow, while the offer is either in a precarious balance or very large, according to the previous development and sale periods.



Figure 9. Residential Real Estate Market Participants' Perception According to Prices and Areas of Interest (1990-2000)



The reasons for providing such a classification:

- Identification of the main cities which may provide future development opportunities.
- Analysis of the evolution and provisions of the urban environment, which reduces the risks of an investment, irrespective of the domain it may be made in.
- A good knowledge of the market participants' behavior, which maximizes and anticipates an achievable investment cash flow.
- Creation and grounding of analysis theories for future business plans.
- An alternative for checking the hypotheses in the marketability studies.
- A practical demonstration achievement of the economic, demographic and social phenomena acting at the level of the individual.

#### 4. CASE STUDY

In order to show the modality of applying the theory of mono-centered and poly-centered cities, Bucharest was considered the most representative example. Three illustrations and three explanations were made use of to present the evolution of the way the



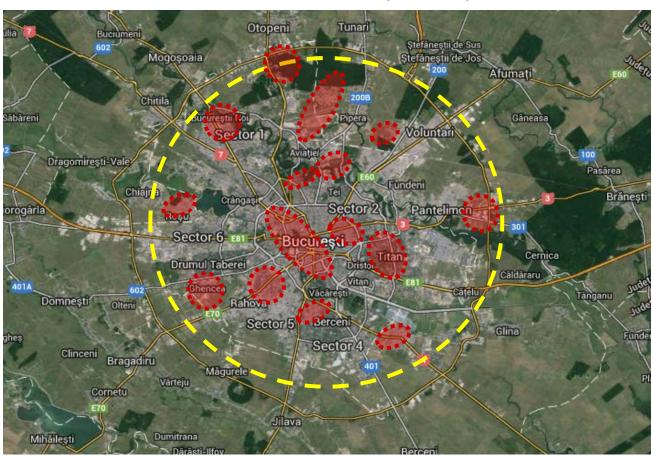
residential real estate market participants perceive the prices and areas of interest.

As a rule, during the period 1990-2000 (see Figure 9), on the residential real estate market of Bucharest, real estate transactions were made with "cash" payment out of two reasons. The former, and the most important, was the relatively low value of the real estate marketed; the latter was the lack of financial products offered by the banks, products which would have fostered price rise by stimulating purchase power through loans. Following the above reasons, the market participants' view of the house price distribution was a unitary mono-centered type one, with a linear decrease of the property value from the town center to its periphery. At that time, buyers were not interested in the suburban and periurban areas. For instance, if an owner had sold his or her two-room flat situated in the central area, the price received would have been bought a four-room flat in the suburbs.



The early 2000s (see Figure 10) was marked by the beginning of the mortgage loan granting to the population, with a peak of real estate market prices in year 2008. While referred to as the real estate "boom", these years are certainly those of utter confusion with buyers as well — a confusion brought about by the lack of experience in decision making, the strong wish to purchase and the ease of getting a loan contract (see the history of the National Bank of Romania's regulations regarding population's degree of indebtedness). Following the confusion created, the participants did not take into consideration certain essential criteria that would normally underlie any reasonable decision. Here are some of these overlooked criteria: access to public means of transport, road and urban infrastructure of a particular area, existence of education institutions, distance to markets and supermarkets, quality and legal status of the buildings etc.

Figure 10. Residential Real Estate Market Participants' Perception According to Prices and Areas of Interest (2000-2008)



After 2008, the national and international economic deadlock brought about a so-called maturation in the real estate market participants. The market maturation had several stages, namely: the loan blocking reduced market liquidity, the lack of liquidity in turn, dimmed demand (the wish to purchase) and changed perceptions with individuals; the demand blocking reduced the residential real estate prices; perceptions made the difference in terms of marketability.



Market participants, or in other words, the people we provide consultancy, are currently much more educated and careful when buying a house. For instance, one thing that the real estate crisis and the market participants adjusted is the price of the houses in not easily accessible areas, or in areas with deficient infrastructure, the values of these units recording a subsequent decrease by approximately 40-60% in the last 6 years. The Bucharest residential real estate market participants' perception during this time period (2008-2014) is shown in Figure 11.

To be noted that, at a given time period equivalent with the time needed for the development of an area, the poles of interest as perceived by the market participants are changing, a fact demonstrated by the case study. The conclusion reached following the three time periods analyzed is that buyers' perception changes approximately at every 8 to 10 years.

Otopeni Tunari Ștefăneștii de Sus Ștefăneștii de Jos Mogoșoaia Afumati Chitila Gäneas äbäreni Voluntar ctor 1 Dragomirești-Vale Pasarea Fundeni Brănești Pantelimon Bucuresti Titan Drumul Taberei Cāldāraru Domnesti Rahova Sector 5 Berceni Glina Sector 4 Clinceni Bragadiru Varteju Jilava Dumitrana Mihăileşti

Figure 11. Residential Real Estate Market Participants' Perception According to Prices and Areas of Interest (2008 -2014)



# 3. INTERPRETATION, FORECASTS AND CONCLUSIONS

Although it may be considered a demographic factor, birth rate is very important when referring to population for the simple fact that the demand for residential properties will come from the young population in the future. Consequently, may we bring to your attention the demographic phenomenon known as "baby boom".

The "baby boom" phenomenon is actually a marked increase in birth rate. As a phenomenon, it naturally appears as a rule following armed conflicts, entailed by poverty and the lack of sexual education with people, or during crises (according to the latest Eurostat information). Throughout the history, several such phenomena were recorded. However, the most representative occurrence globally was that in the '50s which brought about a series of transformations, for instance both parents' employment market, an increase in the number of the population aged between 25 and 30 in the '70s and the '80s and generation determined consumption preferences, among others. All those changes led to a higher appreciation of urban life, which generally spelt a higher demand of houses.

This is one of the numerous demographic changes which determined the residential restructuring in the urban environment, a change with women playing an important part. Besides the changes within the family and the household, namely woman's employment, there appear phenomena such as delayed marriage and child birth.

In Romania there were registered two important "baby boom" type phenomena, one in the '50s, triggered by WW II (a natural one), and one as a consequence of the Decree of 1967 (a forced one) based on which the communist regime forbade abortions. The Decree was abrogated in 1990, thus putting an end to approximately 22 years during which abortion was forbidden.

As stated earlier, age is one of the main criteria determining purchase. It has been statistically proved that, in most cases, an individual or a couple decides on purchasing a house at the age of 35-55, as that is considered the time when they have the due maturity as well as the emotional and financial stability to make a long-term investment.



If we compare the influence of the two "baby boom" periods, we will get the following results:

The '50s "Baby boom": 1950 + 35 = 1985 (beginning of the impact on house demand)  $1985 + 20^* = 2005$  (end of the impact on house demand)

The '68 "Baby boom": 1968 + 35 = 2003 (beginning of the impact on house demand)  $2003 + 22^{**} = 2023$  (decline of the impact on house demand)

The calculations before have in view the age bracket statistically considered to be valid in the developed states. In Romania's case, this calculation is infirmed by the statistical data shown at the end of the article.

In Romania, according to the statistic data (see Figure 13), an individual or a couple decides on purchasing a house when aged between 26 and 35 in 70% of the cases. When remaking the calculations above by using the mid age bracket, we will get:

The '50s "Baby boom": irrelevant in this case.

The 68 "Baby boom": 1968 + 30 = 1998 (beginning of the impact on house demand)  $1998 + 22^* = 2020$  (decline of the impact on house demand).

The '50s "Baby boom" phenomenon reaches maturity at the beginning of the '80s and is considered to have ceased its effect before the real estate boom period, the demand being met at that time by a rapid development of the locative fund, a development that came to an end at the end of the '80s. The "baby boom" phenomenon number two, entailed by the Decree of 1968, was to reach maturity in 1996. During the time period 1990-2000 the supply of new houses was not enough as compared to the number of the population who was to reach maturity. The lack of loan products for the population contributed to the 2000-2008 boom as well.

<sup>\*</sup> the result of the difference between 55-35 years standing for the effect period – to be mentioned that this Baby boom triggered demand was mostly met before the end of the '80s.

<sup>\*\*</sup>the result of the difference between 1990-1968 = 22 years – is the period during which the decree was in force.



45000 43.300 42.700 40.900 40000 39.300 37.800 37.950 40.652 41.250 38.947 35000 37.407 36.122 35.854 30000 27.000 24.500 25000 23.000 20.500 20000 19.000 15000 12.000 10000 2009\* 2010 2012 2014 2011 2013

Figure 12. Statistic Data of the Governmental Programme in Support of Demand

- First Home -

Number of credit agreements

Average value contracted (euro)

Source: National Loan Guarantee Fund for Small and Medium Sized Enterprises (FNGCIMM)

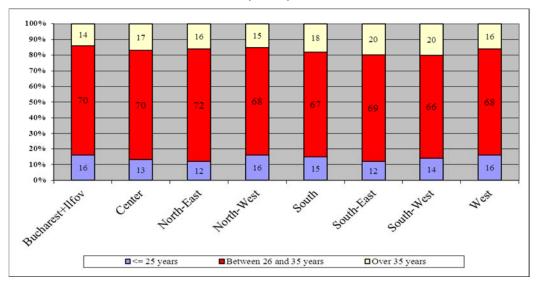
Average transaction value estimated assuming a minimum down payment of 5%

In 1996, C.E.C. Bank made an attempt at preventing this problem by releasing a financing form for house purchase. This approach was subsequently supported by a law package at the end of the '90s (the law on mortgage loan), so that the first real estate mortgage loan in Romania was granted in 2001, that is about 3-5 years later than the start moment. Most probable, a few more years had passed before the population properly understood the products. Practically, it was in 2001 that all the conditions were met to stimulate the purchasing power. The excess demand, generated by this delay, was felt at the end of 2008.

<sup>\*</sup> Time period July – December;



Figure 13. Distribution of the Beneficiaries Number per Age Brackets and Regions (2013)

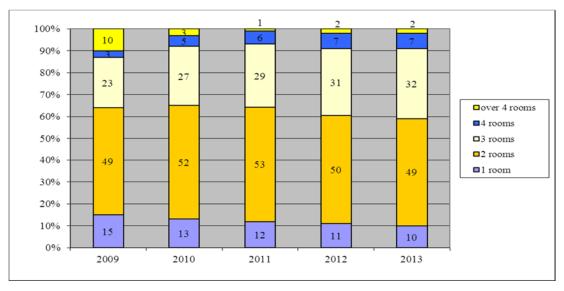


Source: National Loan Guarantee Fund for Small and Medium Sized Enterprises (FNGCIMM)

The year 2009 was characterized by a transaction deadlock against the background of the economic context put forth above. In order to revive certain branches of the industry involved in the residential area, the Romanian Government launched the programme "First Home" aimed at supporting the housing demand. This programme has held, since the very beginning, an important share in the overall number of transactions, a share which still accounts for over 55% of the overall housing transactions recorded at a national scale. That entitles us to consider the statistic data under the programme "First Home" representative for the home real estate market (see Figures 12, 13 and 14).



Figure 14. Distribution Beneficiaries Number per Number of Rooms of the Purchased House



Source: National Loan Guarantee Fund for Small and Medium Sized Enterprises (FNGCIMM)



Based on the statistic data recorded by the governmental programme, the following statements can be outlined:

- The housing market prices are still following a slightly downward grade, a fact pointed out by several sources.
- The number of transactions will go on ranging between 20,000 and 30,000 per year.
- The most residentially active areas in Romania are Bucharest and Ilfov (approx. 36%), Cluj- Napoca area (7%), Timişoara area (6%), and then Braşov, Constanţa, Sibiu and Iaşi areas following with percentages ranging between 3 and 5%.
- The "First Home" programme has modified the minimum purchase age by approximately 10 years, a fact which is to negatively affect demand in the future.
- The demand is oriented towards the purchase of two and three roomed flats.
- The majority of secured funding, about 32% have a value of up to 30,000 euros, 25% are between 30,000 to 40,000 euros, 24% had a value of 50,000 euros and 19% are between 40,000 and 50,000 euros. Relative to the number of the rooms of the purchased real estate, there is a tendency to increase the weight of the properties with 3 rooms at the expense of one room properties. Statistically, the situation indicates a 51% preference for properties with two rooms and 30% for properties with 3 rooms. The studios and properties with 4 rooms and more were preferred in a percentage of 11% and 6% respectively. Of all properties purchased under the program, 69% were built before 2008 and 31% are new buildings built after January 2008.

Nationwide, during the next period, it is envisaged the fact that towns/cities which do not represent an attraction pole for the population shall face a more emphasized degree of depopulation.

Cities behave as living organism and react in a dynamic manner in based on the factors which influence them, they go through stages of birth, development and abandon/disappearance. In Romania, we have witnessed all four evolution stages, but the forth one has taken place up until present times solely in the rural environment and it seems that in the future it shall develop in cities as well. Still, the areas most affected by the internal and external migration shall be the localities found in the rural environment and cities inactive from an economic point of view.

Recent statistic data show the decreasing external migration of the population and the intensification of the internal migration from the rural environment to the urban environment, fact which indicates a surplus of faith granted towards the national economy and a future pile for the request of homes in big cities.

In the next three-five years we shall not face major changes on the demand level and perceptions of the consumer, but on a medium and long term it is possible that the request shall be diminished by the natural factor and by the change of consumer's options with respect to prolonged use goods.

The residential properties developers and salesmen shall continue to keep up with the trend dictated by the buyers and their preferences even though there shall be



transitory exceptions under which the trend shall be dictated by the salesman/developer based on a context generated by the synergy of factors. On a long term basis, the capacity to adapt to new conditions and the flexibility of developers/salesmen shall represent their success and vice versa.

Table 1 presents a "pessimistic" projection of the population in the year 2030, to be mentioned that it was chosen due to the fact that projections do not take into consideration any possible changes of the external migration of the population.

Table 1. Evolution of Stable Population in Romania and its "Pessimistic" Projection at Year 2030 Horizon

1948	1956	1966	1977	1992	2002	2011	2014*	2030
15,874,572	17,491,406	21,401,319	21,561,887	22,812,027	21,682,976	20,121,641	19,942,642	17,777,600
					-			
Variation	1,616,834	3,909,913	160,568	1,250,140	1,129,051	-1,561,335	-178,999	-2,165,042

<sup>\*</sup> Preliminary data on January 1, 2014

Figure 15 presents the overlapped evolution of population projections on age groups performed based on statistics registered in 2002, respectively in 2011, and estimated statistics for the year 2030.

60 - 64 55 - 59 50 - 54 45 - 49 40 - 44 35 - 39 30 - 34 25 - 29 20 - 24 15 - 19 10 - 14 5 - 9 0-40 200000 400000 600000 800000 1000000 1200000 1400000 1600000 1800000 2000000 **2002 2011 2030** 

Figure 15. Projection of Population by Age 2002-2030

Source: National Institute of Statistics



The corroborated analysis of Table 1, Figure 15 and of a future possible variation of the age interval when in present times the majority of transactions take place, variation which might be generated due to the suspesion of the gouvernment program "First Home", lead to the following conclusions.

Nationwide, the request shall continue its descending trend, but it shall have either positive or negative variations based on regional evolutions. In the present, the positive evolution cannot take place but only in the following conditions: Romania's transformation in to an economic pole, a devastating natural calamity or by destruction following a military conflict.

At a regional and local level, the request shall be charactarised by an intense variation and shall evolve based on the economic context in the respective region or locality.

The fluctuation of the request at a local level does not represent a major danger for the developers who have analysed the market and who activate in polinuclear cities. Cutting down profits and increasing the exposure period in the residential property market represent situations which are cannot be avoided as long as the market is dominated by the buyer.

In addition, the natural potential and the membership in the European Union shall force Romani to adopt economy relaunching measures in the near future.

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#### About the Author



Vlad M. Poenaru is certified in both Real Estate and Business Valuation (EPI, EI) in ANEVAR (National Association of Certified Appraisers in Romania). Vlad started in 2005 as a real estate consultant and evolved due to his passion for the art of appraisal into a certified member of ANEVAR. Before his appraiser qualification, he was carrying out researches and initial preparation of valuation reports. As an appraiser, he gave more than value to his work by combining classic models with practice experience and individual study. His experience had an upward path because of his ambitions that helped him earn the necessary skills to work for affiliated companies of N.A.I. Global and

American Appraisal. His contact with the academic community occurred as a result of a market survey conducted on the top 17 cities in Romania that treats real estate price trends and whose primary objective was to provide information to the bank management for which he works. The study was submitted to the attention of professor Ion Anghel (MAA, FRICS, REV) from the Academy of Economic Studies-Bucharest who shared Vlad's vision. Mr. Anghel which is also the coordinator of the article you've read, believed in Vlad and his beliefs by encouraging him to write down his ideas.

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