

The CEE housing markets before, during and after the transition: an overview of property prices and home ownership rates

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Abstract

The purpose of this research is to investigate relevant economic aspects, which characterized housing markets from Central and Eastern European (CEE) countries, to identify the factors which determine the house prices and to find the economic implications of property investments, under an international micro and macroeconomic environment. Methodological, the article uses the deduction and comparative analysis of collected statistical data, and strategic reforms in post-communist countries are qualitatively explored through content analysis. In the case of CEE region, fundamentals determinants, such as real income, real interest rate, demographic factors, play an extremely important role in explaining house price distortions. The principles of communist ideology added a special note in the evolution of prices, so the home ownership rate, the housing quality, the financial housing system, European integration represent a number of traditional factors with significant impact.

Keywords: CEE countries, housing prices, home ownership, privatization

Introduction

The process of transition, embedded in the paradigm of transition from centralized to market economy, triggered turbulence and tangible adjustments in the housing systems of the post-socialist states. Despite all historical and cultural differences between states, the Central and Eastern Europe (CEE) is often perceived as homogeneous due to the presence of the ideology of socialist regimes being in power (Tsenkova, 2009, p. 2). In the CEE, economic, political and social restructuring, with democratic and capitalist orientation, directly affected the housing sector, emphasizing the significant differences of the way of applying the communist system, as the living conditions from one country to another (Clapham *et al.*, 1996). Thus, through the general process of transition from communism to democracy, the performance of the housing sector reflects the legacy of socialist principles and the political approach. These results lead to the evocation of a hypothesis of divergence in the development of residential systems from Western Europe and CEE, as well as in the group of post-socialist states, since the theories of convergence are not enough adequate in the conceptualization of housing.

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The major economic reforms implemented at the end of 1980s outlined important steps related to the residential domain by reducing government control, subsidizing housing, and increasing the quality and guidance of residents in housing choices (Banks *et al.*, 1996, p. 137). In the development of the private residential sector, each country acted independently through the approach of three main strategies: decentralization, privatization and rental reform. Decentralization involves the transfer of ownership and financial responsibilities for the state-owned housing stock to local governments, with corresponding reductions in the grant of construction, utilities and maintenance grants. The basic strategy in developing reforms is represented by housing privatization, by transferring state-owned property rights, former tenants, under extremely favourable conditions (under-market prices, minimum interest rates, long-term payment stagnation). The rental reform consists in the allocation of dwellings in the form of rents, the establishment of housing allowances, but the diminishing the tenants' rights. The formation of residential markets in the post-communist countries was largely correlated with privatization, which subsequently contributed substantially to the increase of the home ownership rate.

The CEE countries explored in research are grouped and analysed by participation in European integration, thus outlining the two big groups – member countries of the EU and non-EU countries. To provide an overview projection about residential sector features from this European region by identifying determinants that influence the evolution of housing prices and home ownership rates, it is opportune to explore, theoretically and empirically, the impact of reforms practiced by the post-communist countries in transition process on the economic, financial and social environment. Methodological, research paper analyses residential market specific in Central and Eastern Europe, in terms of housing price developments and home ownership rates, through an adequate methodological triangulation. The quantitative approach supposes a general direction type positivist – explanatory using methods and techniques like deduction and comparative analysis of statistical data obtained for indicators. Specific strategic reforms applied in post-communist countries analysed is explored qualitatively through a content analysis of the literature – country monographs on housing reform, published reports and research papers.

In this context, the paper provides an overview, built in a systematic and descriptive way, on the evolution of residential markets in CEE countries, starting with the transition from centralized to the market economy. The results of previous research and the collected information about housing price trends and tenure structure, in a cross-country perspective, allow the observation of the complexity and diversity of the region. The article covers theoretical aspects in an interpretative way, relying on a mix of the quantitative and the qualitative approach applied to the economic and social context of housing system. Theory has become for research papers the deepest form of expression

and definition of the housing sector. Jim Kemeny (1992) criticized the empirical approach to real estate research during the transition period, which was overly dominated by political concerns. He thought that a type of this research was not supported by epistemological and ontological elements, isolating social problems.

A first step in structuring research is the review of literature in order to identify the essential papers supporting the great ideas that define and describe the features of housing markets in the emerging countries of the CEE region. The period of communism occupation has left one of the profound and oppressive marks on the organization of the housing stock, which has become a shadow over the years, following the overall development of these states. A general overview of historical, economic, social and cultural evolution is outlined in the second chapter, in order to highlight the defining aspects of the transition period and the causes that have pushed these exponential changes. The CEE region is characterized by a large number of home owners, compared to Western states, which present a much more diversified tenure structure. In this context, the time approach of tenure concept explains the fluctuations of these housing organization and allocation. The basis of these forms of ownership is the way of assigning and acquiring residential properties, focusing in particular on price or rent, which has led to the shaping of some distortions in economies. The convergence and divergence theory is used to appreciate the specific of the formation and development of CEE residential markets, based on the premise of the communist ideology and the results of the applicability of its principles.

1. Literature review: a historical and empirical overview of housing market in CEE countries

The fall of the Berlin Wall in 1989 marked the end of the communist regime and the beginning of the period of transition of the countries under the socialist domination to democracy and capitalism, becoming an extremely exciting subject for researchers. In the last 25 years, numerous articles have been published about the transformation of the housing system in Central and Eastern Europe. The first studies made, just after the end of the socialist system, concentrate on assessing the visible progress of housing reforms applied in transition economies, focusing on housing stock privatization, decentralization of the residential market and restructuring the housing construction (Baross and Struyk, 1993; Hegedüs *et al.*, 1996; Renaud, 1995; Struyk, 1996; Tosics and Mayo, 1996; Turner *et al.*, 1992). Other researches, comparatively, explore the application of policy instruments in the context of the implementation of a housing system oriented to the market economy. Lux (2003) shows interest in the economic and social reforms developed in the public housing sector. Clapham (1995) and Roland and Verdier (1994) analyse the reform of privatization of living spaces, Hegedüs (2002),

Renaud (1995), Struyk (2000) and UNECE (2005) examine the ways how to finance dwellings. Most studies realized aim to surprise the importance of the transition process by investigating trends and relationships between changes in housing supply, the structure of property rights and their financing.

Even though there is a great diversity in the development prospects of post socialist countries, a consensus has been reached on indicators for measuring progress on restructuring residential systems based on market economy principles, defined by international and national commitments between public and private institutions. In 1990, the United Nations Centre for Human Settlements (UN-Habitat) and the World Bank, with the support of the United States Agency for International Development (USAID), have developed the Housing Indicators Program to provide an analytical framework for assessing the performance of the residential sector based on data collected from 53 states on each continent in different stages of economic development (Hegedüs *et al.*, 1996, p. 3). The set of descriptive elements of residential markets refers to: forms and property rights, housing prices and accessibility, quality and quantity, production and investment, financing, granting subventions, policies and institutional arrangements. In literature, we find various combinations of indicators for assessing and evaluating the performance of residential markets, focusing on efficiency and effectiveness. The diagnosis, materialized in a study realized by Hegedüs *et al.* (1996), provides the first quantitative and comparable results on the residential market performance in CEE. The authors argue that the experience of the first 4-5 years of transition is manifested in the majority of countries by the development of highly decentralized housing systems and the creation and application of an informative system for assessing the sector performance based on a system of relevant indicators at the regional level, is extremely necessary (Hegedüs *et al.*, 1996, p. 53). In 2001, Buckley and Tsenkova (2001, p. 7) developed a model for assessing political reforms and residential market performance, taking into account three of the most important political areas affecting the housing sector in reforming the socialist economies, namely: fiscal policy, financial policy and real estate policy. Significant constraints of information, limited data on the housing system, the dynamic nature of the transition process, combined with the differences between real estate market actions and related policies make difficult the complex analysis and interpretation of the indicators.

The housing tenure structure in the post-communist countries has suffered major changes after 1990. The share of rented dwellings in the public domain has strongly diminished, compensating by the increasing the occupancy rate of the dwellings by the owners (Hegedüs and Tosics, 1998; Lux, 2003; Struyk, 1996), the cause being the large-scale privatization and the properties restitution of the former tenants. Large fluctuations of the residential property prices in developing European countries recorded over the past two decades have increased the interest in analysing real estate market developments. The empirical literature regarding the dynamics of housing prices in CEE countries is

limited, as compared to achieved studies concerning the developed or developing countries from other regions of the world. Recent studies provide an image, in empirical data, about the determinants of prices from the residential markets in CEE countries (Ciarlone, 2015; Égert and Mihaljek, 2007; Hildebrandt *et al.*, 2012; Huynh-Olesen *et al.*, 2013). The research made by Égert and Mihaljek (2007) is the first that analyses the decisive factors of housing price developments in the CEE region, taking into account besides the specific empirical variables, such as available income, interest rates, credit forms and demographic factors, and the specific features of the transition from the planned economy to the market economy. The price distortions, the diversity of tenure structure and the different policy outcomes have led researchers to approach the convergence and divergence theory in the analysis of residential property markets. Hegedüs and Struyk (2005) follow to appreciate the forms of financing sector in CEE countries by establishing the elements of divergence and convergence.

The complexity and internationalization of the economic environment, the evolution of the macroeconomic determinants justify the orientation of the scholars towards the integrated approach of the analysed subject (economically, socially and environmentally) (Mironiuc and Bedrule-Grigoriuță, 2007). The transition from the planned to the market economy has been an important prerequisite for expanding housing studies as an academic field. The research of house prices determinants is limited to several empirical studies that analyse the effect of the conventional fundamental determinants and some transition specific factors.

2. The CEE housing markets before and during the transition

The historical evolution of the housing sector from the CEE countries was largely determined by the “role of the sector in the socialist orthodoxy of the region – designated rather as a social than an economic” (Hegedüs *et al.*, 1996), but which, however, requested a significant demand of resources from the state, as housing was an eligible right for all citizens. The transition to the market economy was the main development goal of the 1990s, whereas almost one third of the world's population lived in the socialist countries, dominated by centralized planning, as well as the fact that most of them have implemented institutional reforms and economical restructurings since 1989, absorbing large amounts of resources for technical, political and social assistance from the European Union, the USA, Canada, Japan and other developed countries (Renaud, 1995, p. 35).

The process of developing and implementing economic reforms is not a new aspect for the socialist economies before the collapse of the communist regime, as the history of these countries is marked by numerous attempts to revive the economy and to remedy the secular decline. The transition

process of the housing system in CEE countries has been implemented in two consecutive phases, with a focus on reforming and restructuring. Firstly, the first political and regulatory changes since 1989 aimed the consolidation of the market forces, by reducing the state intervention and the privatization of public assets. Privatization in post-socialist countries was achieved through the sale of assets, restitution and transformation of cooperatives in condominiums. The second phase of the transition from the mid-1990s was manifested by “trial and error”, due to excessive concentration on the problems that needed remediation and less on effective strategic interventions. Political incrementalism has evolved into complex relationships, bureaucracy and interest groups.

“The practical implementation of housing reforms in the different countries is directly related to the new directions in housing policy, the process of economic restructuring and the wider context of social and political change” (Tsenkova, 2009, p. 65). Thus, after 1989 the aims of the adopted reforms proved to be differentiated, from one country to the other, in response to the transition to democracy and market economy. The states in transition had to implement macroeconomic stabilization programs, microeconomic liberalization and, at the same time, to be engaged in major changes of the political institutions and economical system. In this situation, radical reforms had proved to be more effective, unlike to their gradual application. Balcerowicz (1994, p.52) defines the shock-type or radical transition to the market economy and the private system as being a “transition whereby all the constituent processes are implemented with their maximum possible speed”, an example being Poland in the 1990-1991 years.

This “shock therapy” or “big bang” of post-communist transformation has affected the effectiveness of economic, political and social development in a different way, and the first negative effects have been felt immediately. With the limitation of state control, there were also interruptions of trade agreements between these countries, which led to significant decreases in production. The initial liberalization of prices, after decades of control, was reflected in the sharp increase of inflation (Table 1). The transition consequences from the centralized economy to the market economy were remarked in the transfer of resources between the economic sectors, affecting, especially the energetic sector housing construction and the exploitation, due to the distortions created between the socialist prices and the current market prices. The residential sector suffered an extremely severe decline, as the state was dominating through absolute control the access to housing finance and land acquisition, the supply and price of building materials. A brief appreciation of the residential sector performance during the communist and transitional periods, relied on the indicator system developed by Hegedüs *et al.* (1996) is presented in Annex 1. This form of presentation puts the market economy principles in front of those specific to the socialist economy, taking into account the following key areas:

- Housing tenure and property rights;

- Housing prices and affordability;
- Housing quality and quantity;
- Production and investment;
- Finance;
- Subsidies;
- Policies and institutional arrangements.

Table 1. Inflation rate in CEE countries, 1992 – 1996

	1992	1993	1994	1995	1996
Armenia	1241.2	10896.1	1884.5	32.1	5.8
Belarus	1557.8	1994.0	1959.5	244.2	39.1
Estonia	942.2	35.7	41.6	28.8	15.0
Georgia	1178.5	7484.1	6473.6	57.4	13.9
Latvia	958.2	34.8	26.2	23.3	13.2
Lithuania	1162.5	188.8	45.0	35.5	13.1
Moldova	2198.4	836.0	116.0	23.8	15.1
Russia	...	841.6	202.7	131.4	21.8
Ukraine	2001.0	10155.0	401.1	181.4	39.7
Average	1405.0	3607.3	1238.9	84.2	19.6
Median	1209.9	841.6	202.7	35.5	15.0

Source: IMF (1997)

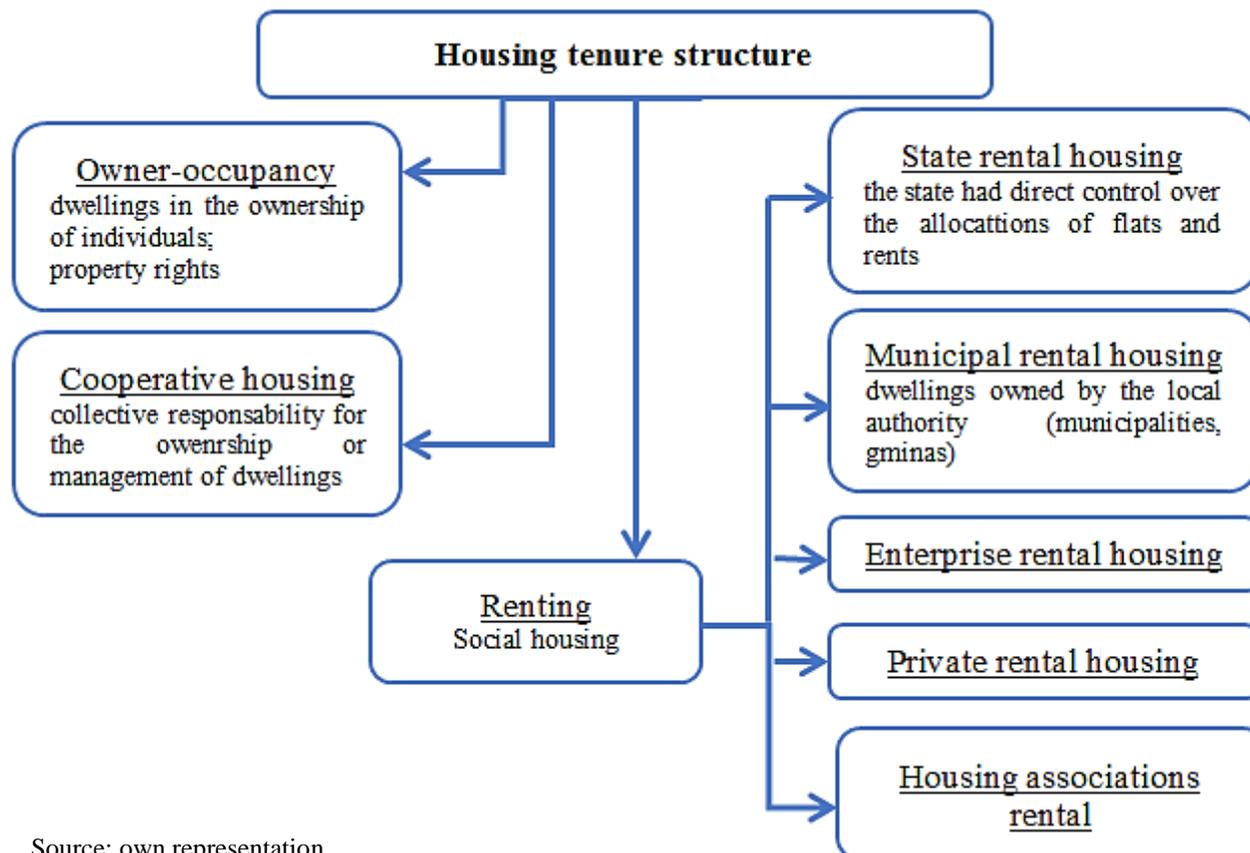
The housing system in the CEE countries was different from that in the West, determined by extremely limited and regulated tenure structure and property rights, limited options in choosing the type and location of the dwelling, low mobility and housing turnover, monopoly and inefficiency in the construction industry, underdeveloped financial institutions and instruments, inefficient targeted subsidies, regulatory framework that did not meet consumer needs and environmental sustainability.

3. The concept and role of tenure structure in CEE countries

Tenure structure varies from one country to another, both through the way of defining and regulating legislation, and by the influence of specific cultural factors. The tenure concept derives from the ownership right, originated in feudal system, and which was subsequently taken over by the housing market regulation policy, to distinguish between the properties occupied by the owners and the tenants in the private or public environment (local authority, association of tenants). From a certain perspective, social phenomenon has outlined the concept's size, assigning its practices and rules, which were later institutionalized as a guideline in the residential sector. The complexity of this framework defines the housing sector through a three-dimensional vision - properties are assigned a monetary value that can increase or decrease, constitute consumer goods that are used to meet needs

and, finally, acquire emotional value. Thus, as a whole, tenure structure refers to the legitimacy of how people get possession of residential homes as consumer goods.

Figure 1. Housing tenure structure in CEE countries



Source: own representation

Peter Kemp (1987, p. 4) argues that the property forms must be regarded as a historical complex of rights and obligations, “the precise mix of which is liable to some important variations, albeit within limits”. The complex core of rights and duties define the two major forms of ownership: home ownership and renting. National history and specifics give them the defining features, but by juxtaposition, the two forms can be viewed in a general way. Under the control of the communist regime, the right to private property, according to Marx and Engel's aspirations, has become a common property right for social well-being.

The tendency towards decentralization, privatization and liberalization has emphasized the transition from the centralized economy to the market economy of CEE countries. Policies that were applied in the residential sector, through social housing projects in the public domain, in the form of privatizations or refunds, have been the measures for the majority of European governments in recent decades. The tenure structure in post-communist countries has undergone major changes since the 1990s, marking the deviation from the command system in housing insurance, through the real estate

markets liberalization and public housing privatization, which are considered to be emblematic in initiating the reforming process. The property forms during the communist regime were among the most diverse (Figure 1), which were reflected in the variation of the occupancy rate of the living spaces in the CEE countries. The state exercised a greater control over the residential systems in the Czech Republic, Poland, Romania, the Baltic countries, unlike Bulgaria, which owning in the private system more than 90% of the total housing at the end of the communist era (Annex 2). The discrepancies between rates were reflected in the investment projects, the organization of production and the support offered by each state in the development of the housing stock. The socialist policy was pointed towards the population's concentration in large industrialized urban areas, giving jobs, and at once apartments for rent.

The privatization of state enterprises and housing cooperatives has expanded the number of owners, contributing to the creation of “nations of homeowners” (Tsenkova, 2006). The reform of privatization has manifested itself in various forms, namely by the transferring rents at market levels, the contracting services by agencies, and the transferring property rights to former tenants. In the international literature are discussed two approaches of housing privatization: the Great Britain's policy “Right to Buy” and the initiated policy by the CEE countries – the massive sale of social housing. If in the Anglo-Saxon countries, the role of reform has developed from ideological and electoral considerations of the neoliberal agenda in order to encourage the private properties, then in the post-communist countries – the privatization represents the result of changes in political regimes in the late 1980s to re-establish the principles of market economy (Aalbers, 2012, p. 433). The demarcation between ownership and rent, both private and public, was often vaguely established within the socialist systems. During the 1991-1999, about 28% of the housing stock in transition countries from Eastern Europe and the former Soviet Union was privatized, ranging from 7% in Georgia to over 60% in Estonia (Yemtsov, 2007). Shortly after the collapse of the communist regime, it became very clear that these states, being in transition, have inherited a highly inefficient managed residential system and that the main problem they faced was not the shortage of housing, but in poor quality, their localization and wrong allocation (Hegedüs *et al.*, 1996).

In the socialist period, the CEE countries were introduced the socialist housing model, based on absolute state control over all aspects of housing policy. During the transition period from the centralized to the market economy, the housing sector was not a precursor for free market forces. As a result of the privatisation, transition countries citizens became homeowners, public dwellings became residual, and renting was no longer a viable alternative for public. Reducing the responsibility of the state for housing has contributed to the development of a housing system without social

protection from the state. Thus, the residential sector in post-socialist countries remained as different from the European housing sector as in the socialist period.

4. Housing price distortions in CEE emerging countries

Starting with 1990, the initiation of the transition process from planned economy to a market economy, the residential prices of the countries CEE have recorded significant fluctuations, causing most of the devastating effect on the financial market. A specific trait of the residential boom- consists in the appearance of some fundamental factors, describing movement upward in house prices, such as increased revenue, which provides an opening wider access to credits. However, the uncertainty and the safety of these developments, at the moment lead, to a final, toward recession. The evolution of the residential property prices, which constitutes one of the most important sources of wealth of households, is located in close connection with the real economy and the financial sector. The fluctuations of house prices directly influences the consumption and investment decisions, but the most is affected the transactions with real estate that involves the credits of the banking, where property is used as guarantee. Through this mechanism, the price changes and affects the net debt of households and future capabilities for the reimbursement of loans. In the long-term, financing of the residential property could have an impact on the financial stability and on the economic sectors, how is construction.

4.1. Housing prices during the transition period

The residential markets are the least transparent markets, taking into account the characteristics of the private individuals, involving the difficulties in the collection of comparable data. During the transition period, the prices established for the sale of the socialist dwellings and the value of the rents have very distorted, in comparison with the resources concerned cost. For the planned economy, prices were not the primary mechanism of the allocation resources, which emphasizes the both significant distortion (Renaud, 1991, p. 22):

- The politics practiced were facing toward the values of the rents below the level of the market, being the direct cause of the demanded excess of the expenditure lifted with the maintenance of existing stock. The value of the rents recorded is covering a total of more than 25% of the necessary funds and in 1990 was 5.7% of total revenue recorded in Eastern Europe, unlike Western Europe, where the actual rents had a percentage of 15.9% (Hegedüs *et al.*, 1996, p.

104). These differences reflect the presence of state control over the management of the rents in the countries dominated by the communist regime;

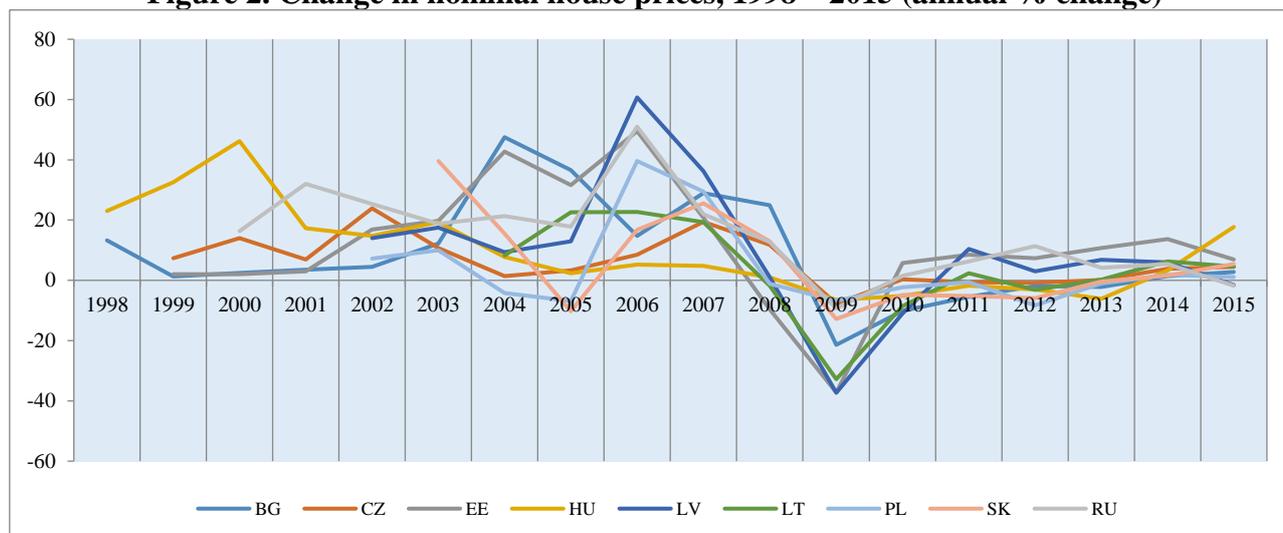
- The price-to-income ratio, calculated by reporting average transaction price to average household income in a given location, recorded extremely high values ranging from 10% to 20%, subsequently becoming an impediment to privatization reform.

With the transition process, the prices established at the administrative level were determined by inflexibility and a continuing imbalance between supply and demand, regardless of production costs. As a result of the disturbances on the official markets, for which no reforms were directed towards flexible prices interventions in adjusting production quantities, the transition economies focused on the formation of grey and black markets. The tolerance of the second economy, the size and its contribution to the revenue of the population varied from one country to another. The lack of consumer goods has led to a change in individual and household behaviour, labour supply and savings. All of these aspects, combined with market imbalance of consumer goods and rising inflation rates, have generated effects in the inside of the markets and on the relationships between them, making it difficult to monitor and manage housing reforms.

4.2. Determinants of residential property prices – the transition specific factor

In the most countries of CEE, the residential property prices were in a continuous increase from the years 2000 up to the outbreak of the economic and financial crisis in 2007 (Figure 2), when have fallen by more than 30%. The increases prices in the preceding years of crisis reflect, to a certain extent, the status of the recovery of post-communist countries. Improving living conditions, economic growth and real wages, combined with residential properties demand and lending diversification have contributed to rising property prices before the crisis (Égert and Mihaljek, 2007).

Demographic factors also influenced property price increases as a result of the new generation born in the 1970s and 1980s, which led to an increase in real estate demand. After the crisis, nominal prices continued to decline, especially in Bulgaria, the Czech Republic, Hungary, Poland, Slovakia, and the first slight increases were registered starting in 2013. The decline was a secondary product of unbalanced macroeconomic evolutions that have affected the conditions of supply and demand on the real estate market (Hildebrandt *et al.*, 2012).

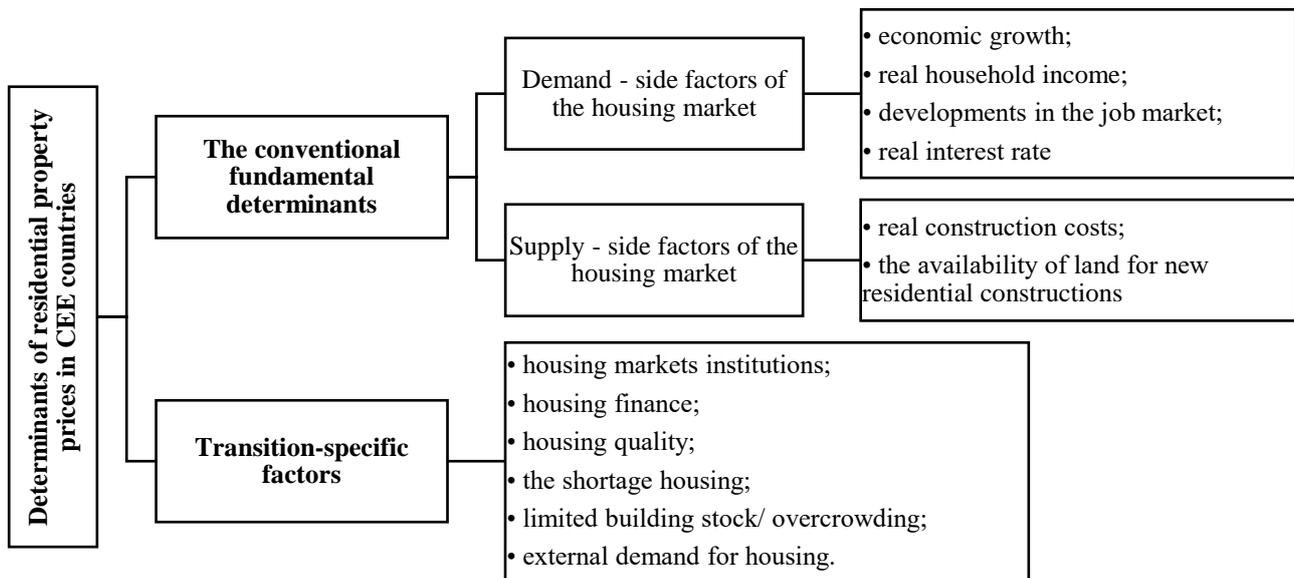
Figure 2. Change in nominal house prices, 1998 – 2015 (annual % change)

Source: EUROSTAT

Housing prices determination takes into account two fundamental theories – one overseeing an adjustment mechanism for bringing demand and supply into equilibrium and the other is based on the finance functions for the arbitration and the adjustment of the prices and rents. In both approaches, interest rates as well as population access to bank loans provide an important link between macroeconomic determinants and housing prices (Muellbauer, 2012). In the case of the CEE countries, it is also important to be taken into account certain transition-specific factors, such as “profound transformation of housing market institutions and housing finance in CEE, improvements in the quality of newly constructed housing, and growing demand for housing in this part of Europe by residents from other parts of Europe” (Égert and Mihaljek, 2007, p. 2). Ciarlone (2015), in addition to these determinants, pays attention to the analysis of emerging property markets and the prices of other types of assets, such as equities.

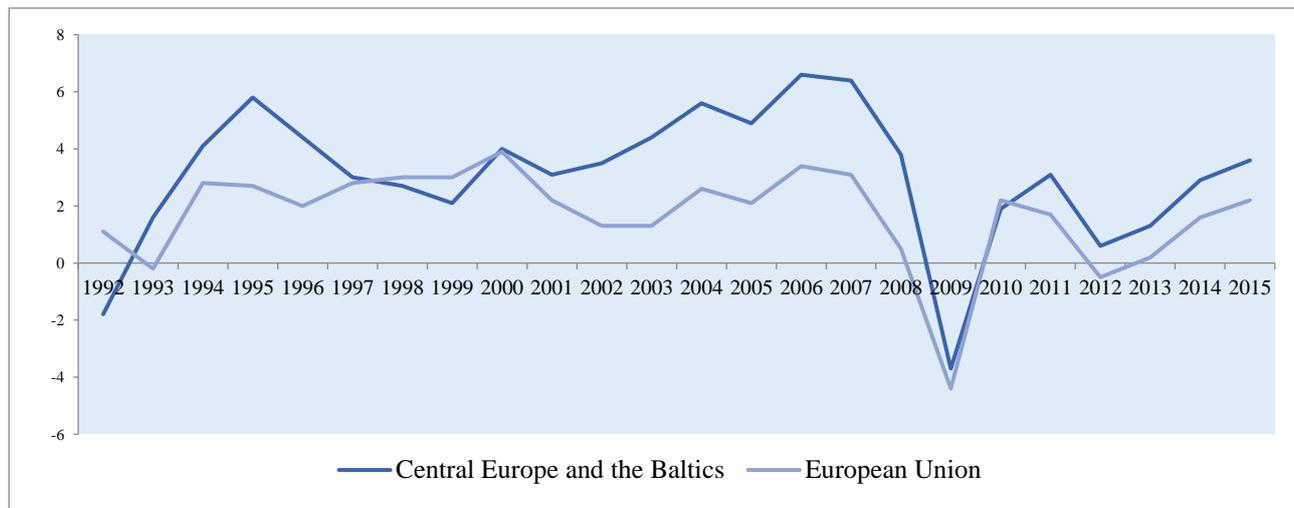
The conventional fundamental determinants are divided in demand and supply – side factors of the housing market (Figure 3). In terms of demand, in the CEE countries, between 1995 and 2005, the residential property prices increased due to the evolution of GDP. The real GDP grew by about 50%, so the post-socialist states recognized a strong development from year to year, more than average growth from UE countries (Figure 4) and during the crisis a sharp decline and then a return after 2010. Several authors indicate that the main influential factor of housing prices is represented by the economic growth (Ciarlone, 2015; Égert and Mihaljek, 2007; Glindro *et al.*, 2008; Huynh-Olesen *et al.*, 2013).

Figure 3. Determinants of residential property prices in CEE countries



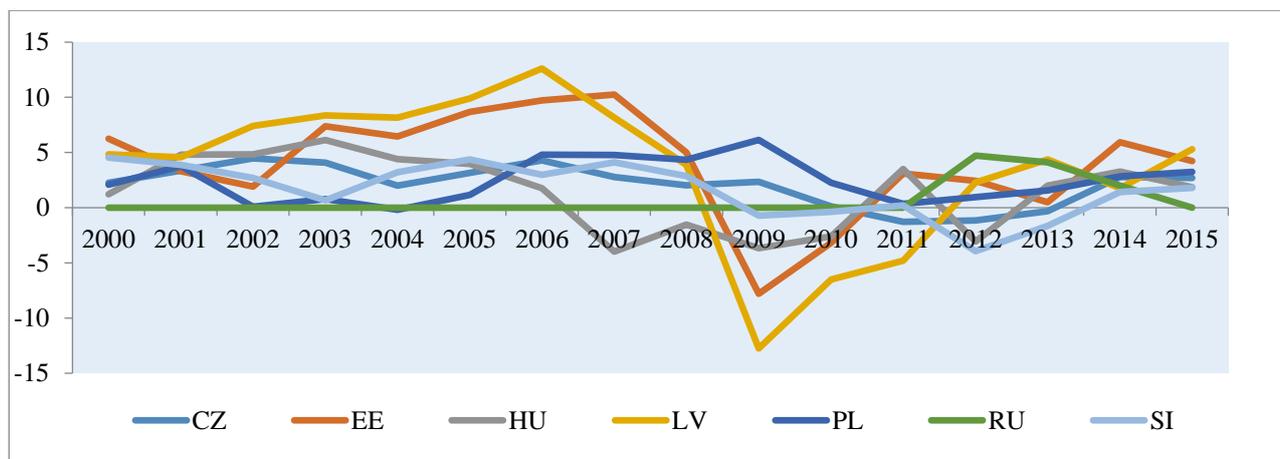
Source: own representation

Figure 4. GDP growth (annual %), based on constant local currency



Source: The World Bank

The increase of household income generated the rising prices for housing, thus encouraging housing demand. Since 2000, CEE household have recorded high income, focusing on expanding consumer spending and savings (Figure 5). The development of the labour market, through a low rate of employment or a high occupancy rate of the population, is expected to generate a positive effect on demand and prices. Nominal interest rates on bank loans granted on long-term basis declined on average from 30% in 1995 to 13% in 2000 and to around 6% in 2005 (Égert and Mihaljek, 2007). This favoured access to bank financing.

Figure 5. Household disposable income, 2000 – 2015 (net, annual growth rate %)

Source: OECD

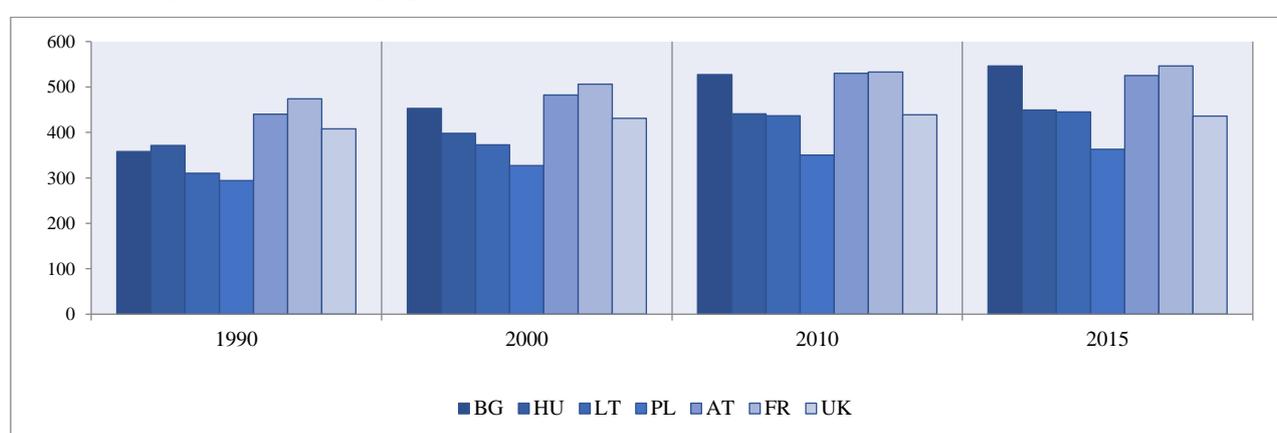
In terms of supply – side factors, increases in construction costs are transferred by real estate developers to buyers, leading to higher prices. The orientation of the post-socialist countries towards the development of the private construction sector resulted in size modification, quality and new types of buildings. Since 2000, there has been a considerable increase in construction costs and number of private of private construction companies (Tsenkova, 2012, p. 208). The availability of building permits is reflected by the level of regulation and institutionalization, and tends to reduce housing prices. However, the expansion of the residential market in 2000-2007 and the availability of construction land have led developers to price increases.

Until the early 2000s, real estate markets regulators in most CEE countries were poorly managed, and housing finance was almost non-existent. The EU integrated process has motivated countries to improve the regulatory and institutional framework necessary for real estate development in line with market principles. The restructuring of the banking sector and foreign investments in local banks, through strategic expertise, stimulated the development of real estate markets and the expansion of housing financing. However, the absorption rate of mortgage loans in CEE countries is much lower than in Western countries, being limited by household income. The development of regulatory and financial institutions correlates positively with rising house prices. Theoretically, in the case of deregulated markets, asset prices tend to increase.

The poor quality of construction during the communist regime is reflected by the reduced number of rooms, the provision of one bathroom and toilet or even the lack of these, the small area inhabited. This phenomenon has fallen steadily since 2005, but compared with average of EU countries, lack of basic amenities is still a problem for CEE countries. The quality and structure of the housing stock are considered as the main indicators for measuring the quality of life and regional development, which is reflected directly in their price. The shortage housing, limited building stock,

overcrowding are specific factors for transition countries. These elements further define the low quality of living space in the former socialist countries. The average overcrowding rate for the EU has increased from 19.5% in 2005 to 17.1% in 2013. The CEE countries have a large share of the total population living in overcrowded dwellings compared to the EU average. The average housing stock in the EU increased in 2015 to 487 apartments per 1.000 inhabitants, Poland having the smallest stock in recent years (Figure 6). Even though the capacity of the construction sector has expanded lately, architectural plans have been inefficiently achieved, causing further problems for localization. The concentration of the population in urban and attractive economic areas leads to regional differentiation, from an economic, social and cultural point of view.

Figure 6. Dwellings per 1.000 inhabitants in CEE and EU selected countries



Source: New OECD Affordable Housing Database

External demand is in form of foreign investments made by large real estate companies in CEE region. Extending the migration phenomenon from the East to Western jobs generates a higher demand for housing by residents.

At the beginning of the transition, housing price misalignment was highly distorted by the initial undershooting, which was not corrected immediately. This caused very low turnover in the real estate market, while the home ownership rate was very high.

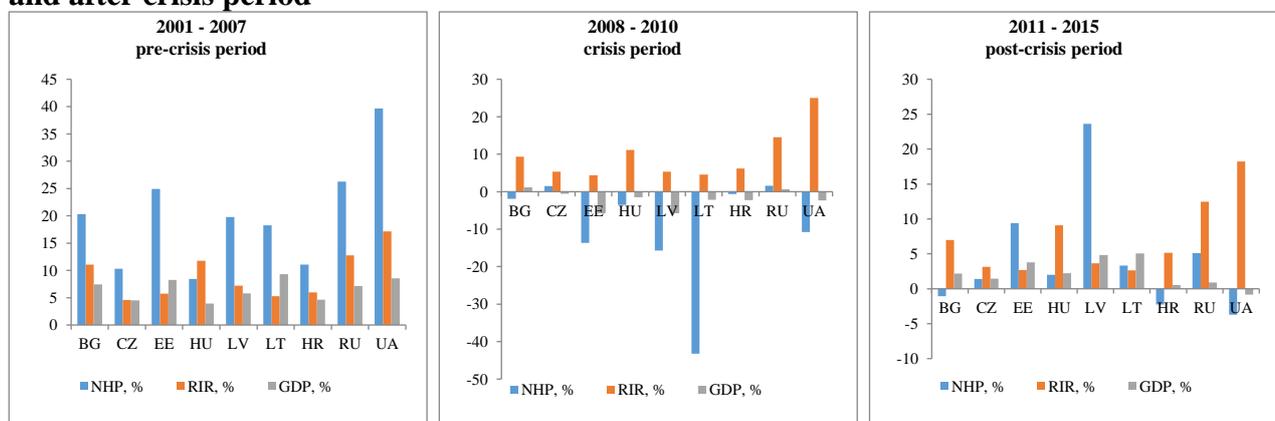
5. Divergences and convergences in housing markets of European transition countries

The specific of the social housing system from Europe refers to the social conflicts which were caused by the urbanization in the 19th century, becoming a determinative factor after the First World War, due to the regulations introduced for the rents administration. The housing sector has developed in accordance with the political and historical traditions of the country. The formation of the European

Union has highlighted the aspects related to convergence and divergence, although housing doesn't represent a definitive objective of the EU (Hegedüs, 2013, p. 3). The post-socialist countries have gone through a radical process of transition, indicating both convergence and divergence, due to the communist ideology that has dominated more decades.

Looking back, the privatization didn't represent a reform for a perspective development, but a way of extending the socialist ideology in the 1990s through the elaborated policies to support the housing stock, which had irrevocable consequences for the purchasing behaviour of the population. Thus, the housing owner has become a "social norm" in the privatization trap, which has contributed to the formation of a homogeneous housing system (Lux and Sunega, 2014). The divergences between transition policies from the planned economy to the market economy have merged into a convergence of all residential systems. The direction of orientation was the same in all post-socialist countries, but the design and the implementation of reforms led to different results, which outline the divergence of reality. As a result, convergence is not the most appropriate definition for the conceptualization of post-communist systems, the differences interfering in the divergent scenario of the future development.

Figure 7. House prices and macroeconomic fundamentals of CEE countries before, during and after crisis period



Source: EMF Hypostat 2003 – 2016; National sources, BIS Residential Property Price database, <http://www.bis.org/statistics/pp.htm>

Note: NHP, % - change in nominal house prices;

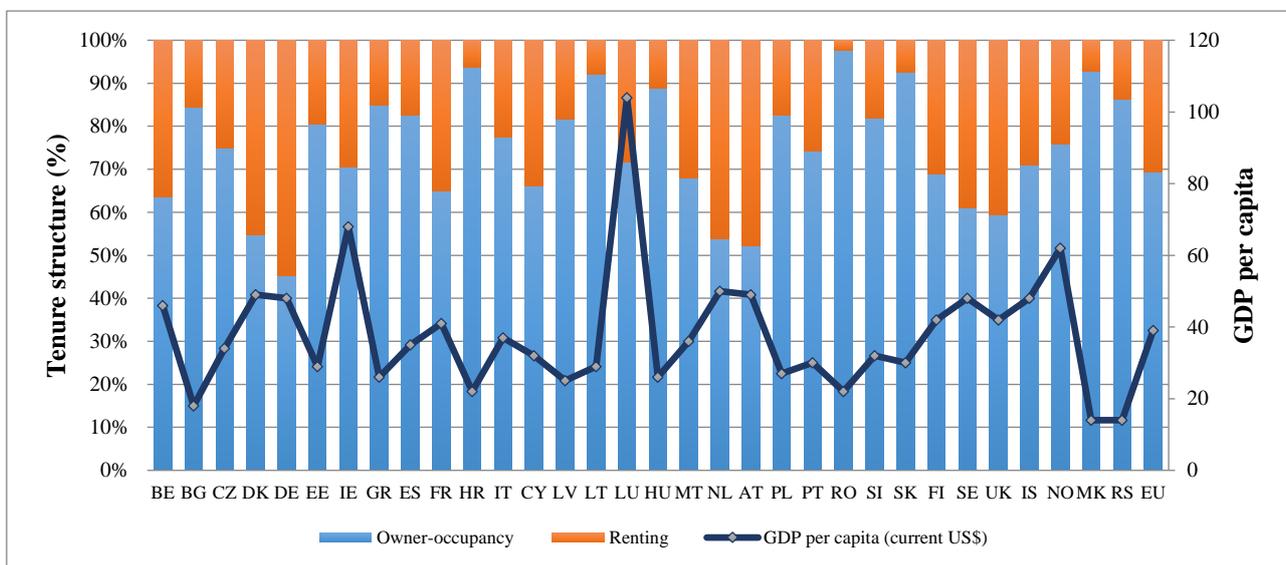
RIR, % - representative interest rates on new residential loans;

GDP, % - GDP per capita growth (annual %).

The specific diversity of the CEE region contributes to the complexity of residential property price developments. Figure 7 shows the housing price evolutions in several CEE countries determined by the influence of GDP and by the representative interest rate for the new residential loans granted, before, during and after the economic and financial crisis. The evolutions of these indicators fluctuate

differently in each of these analysed countries. The fundamental differences related to economic activities, the employment opportunities, the income levels and the demographic structure highlight the divergences that appeared in price fluctuations between urban and rural regions. The policy of the communist regime has provided the relocation of the population in industrialized areas that stimulated urbanization (Palacin and Shelburne, 2005). Decentralization, which has allowed regional authorities to implement different policies, the shortage of transparency in transactions, the poor development of legislation on the planning, registration and execution of real estate contracts - all of which have caused distortions at the price level and have increased the owners' number.

Figure 8. Home ownership in selected European countries, 2015



Source: Eurostat, OECD

The CEE countries are characterized by high rates of occupation of residential property by owners compared to rental rates (Figure 10). The official data provided by Eurostat reflects the fact that the countries with a lower GDP per capita have the largest share of home ownership in all forms of ownership. The main cause, which explains this phenomenon, is due to mass privatization in 1990, which has transferred the public sector housing to the private sector. The implementation of this reform was a way to offset the extremely low wages from the socialist period, but also as an “absorbent for social shocks, improving the high unemployment and lessening the costs supported by the society during the transition period” (Augustyniak *et al.*, 2013). It is important to mention that the percentage of over 90% for the employment rate also contains some misunderstandings, taking into account that there are a large number of people who live unofficially in rented apartments in urban areas with a high economic potential, continuing to be registered as residents in their family homes.

Conclusions

The purpose of this research is to investigate relevant economic aspects, which characterized housing markets from Central and Eastern European (CEE) countries, to identify the factors which determine the house prices and to find the economic implications of property investments, under an internationalized micro and macroeconomic environment. Residential market analysis from CEE countries is performed based on the essential considerations: transition from a planned economy to a market economy through deregulation, privatization and financial stabilization, and participation to the European integration process.

Formation housing markets in post-communist countries was linked with privatization in 1990s, which later significantly increased the home ownership rate, unlike other European countries, which are more oriented towards dwelling rent. In the transition years to the market economy, the high rate of home ownership was determined by state's involvement through the reforms that were adopted, but with the development and integration of these states in the European context, market prices led the residential property system. After privatization, housing prices were below the market, and then economic development has oriented households to higher income for housing acquisition. Recent macroeconomic studies claim that the main source of household wealth is represented by residential property and mortgage loans constitute the main form of leverage. Other researches notice that housing demand is sensitive to population income and to market prices, and that housing offer is elastic in the long run.

After more than 25 years of change of the communist regime, the most CEE emerging countries have not developed and implemented efficient housing fund financing and management systems, as the residential sector has grown as a consequence of the economic transition and not as a natural development of economy. In the restructuring process, the adopted policies such as privatization, decentralization, banking reforms have served as "shock absorbers" for economic shocks and less as strategies for developing an example of a residential system. All these radical state interventions have polarized the region with a set of private property that was determined by low incomes. The image inconsistency transmitted by the mixed society interferes with elements of divergence in all areas of the economic system.

The inherent limitations for a thoroughly study at the level of the CEE countries which are not members of the EU were due to the lack of official data. Housing statistics from post-communist countries are not sufficiently developed to reflect reality, with some insignificant deviations, being necessary a harmonization and normalization of the calculation and registration methodology, at least at European level. The continuity of research into the analysis of residential property price

developments and the diversity of tenure structure through a comparative approach among CEE countries consists in the development of an econometrical model that will empirically support the results and correlations established between the fundamentals. Continuing research of residential property prices and property ownership diversification, through a comparative approach among CEE countries, consists of developing an econometric model that empirically supports the results and correlations established between fundamentals.

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Annex 1

Annex 1 presents, in comparison to the 1990s and 2000s, the structure of home ownership in the CEE countries according to EU.

Table A1. Change of the tenure structure in CEE Countries – EU Members

CEE Countries - UE Members						
	Year	Public rental	Cooperative	Private rental	Owner occupied	Other
Bulgaria	1990	6.6	1.5		91.7	0.2
	2001	3.0		1.9	94.6	0.5
Croatia	1990	24.0		3.5	67.5	5.0
	2001	2.9		10.8	82.9	3.4
Czech Republic	1990	39.1	20.4		40.5	
	2001	29.0	17.4	6.7	46.9	
Estonia	1990	61.0	4.0		35.0	
	2001	5.2			94.8	
Hungary	1990	23.0		3.0	74.0	
	2001	4.0		4.0	91.0	1.0
Latvia	1990	59.0	5.0		36.0	
	2001	16.0	2.0		82.0	
Lithuania	1990	60.8			39.2	
	2001	2.4			94.5	3.1
Poland	1990	31.6	25.4		43.0	
	2001	16.1	28.6		55.3	
Romania	1990	32.7			67.3	
	2001	2.7		1.1	96.2	0.0
Slovakia	1990	27.7	22.1		50.2	
	2001	6.5	15.6	4.1	73.8	
Slovenia	1990	31.0		1.0	68.0	
	2001	3.0		7.0	82.0	8.0

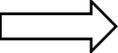
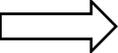
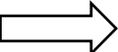
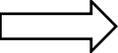
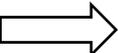
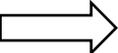
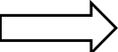
Source: Eurostat; (Hegedüs *et al.*, 2013)

Table A2. Change of the tenure structure in CEE Countries – Non-EU Members

CEE Countries – Non-UE Members						
	Year	Public rental	Co-operative	Private rental	Owner occupied	Other
Albania	1990	35.50			64.50	
	2001	1.00		5.00	94.00	
Armenia	1990	49.00			51.00	
	2001	3.90			96.00	0.10
Belarus	1995	32.10	5.30		62.60	
	2001	19.70	4.70		74.80	0.80
Republic of Moldova	1990	21.00			79.00	
	2001					
Russia	1990	67.00	4.00		26.00	3.00
	2001	29.00			66.00	5.00
Serbia	1990	23.00		3.00	64.00	10.00
	2001	2.60		4.40	81.60	11.40
Ukraine	1990	47.30			52.70	
	2001	20.00			80.00	

Source: Eurostat, (Hegedüs *et al.*, 2013); UNECE; National Statistical Committee of the Republic Belarus, National Bureau of Statistics of the Republic of Moldova

Annex 2. Transition in the housing system in CEE countries

	Socialist system Before the transition		Market-based system During and after the transition
<i>Housing tenure and property rights</i>	<ul style="list-style-type: none"> – property rights withdrawn; – social and public housing dominate urban areas. 		<ul style="list-style-type: none"> – significant increases in home ownership rate of private dwellings after mass privatisation and process of restitution to former owners.
<i>Housing prices and affordability</i>	<ul style="list-style-type: none"> – controlled and uniform prices; – criteria for housing allocation according to the socialist administrative method; – housing shortage effect. 		<ul style="list-style-type: none"> – development of the financing system; – the price explosion due to a poorly developed institutional framework; – the price reflects the location, size, quality and type of dwelling; – adjusting public rents.
<i>Housing quantity and quality</i>	<ul style="list-style-type: none"> – housing conditions are defined by inadequacy, overcrowding and limited access to utilities; – bigger and less crowded housing in rural areas, but total lack of utility facilities, unlike urban areas. 		<ul style="list-style-type: none"> – state policies oriented to development and expansion of peripheral regions of urban areas with an effect on population density; – increase living standards and housing quality.
<i>Production and investment</i>	<ul style="list-style-type: none"> – most urban dwellings are built by state enterprises according to predefined standards; – the level of residential investment as percentage of GDP is very low. 		<ul style="list-style-type: none"> – the presence of private construction companies; – real estate developers and families are directed to residential complex, taking into account the amount of income.
<i>Finance</i>	<ul style="list-style-type: none"> – home loans are granted with low fixed interest rates and on long-term, allocated by state-owned banks, which are not collateral based. 		<ul style="list-style-type: none"> – loans for housing financing are granted by commercial banks; – high interest rates are practiced, which causes declining demand for bank loans.
<i>Subsidies</i>	<ul style="list-style-type: none"> – regulated and uniform subsidies for housing and maintenance; – social rentals did not adjust and did not recover housing costs. 		<ul style="list-style-type: none"> – the subsidies are only granted, under certain conditions, for mortgage loans.
<i>Policies and institutional arrangements</i>	<ul style="list-style-type: none"> – supreme state control, according to centralized planning. 		<ul style="list-style-type: none"> – market oriented reforms.

Source: own representation, adopted by The performance of the East European Housing Model (Hegedüs *et al.*, 1996)