Abstract
In this paper the authors perform an extensive analysis of the housing situation in Romania in relation to other EU countries. The following indicators, and others, are examined: the number of dwellings per 1000 inhabitants, the average number of rooms per dwelling, overcrowding, the degradation rate of housing, the rate of utilities. The type of ownership of the buildings is also analyzed. The implications of the fact that Romania has one of the highest percentages of private homes in Europe are also discussed. In order to highlight these issues and others (which have been the subject of the authors’ previous studies), in the present work, the dynamics of housing construction in Romania are studied over a long period – namely the period between 1950-2011 – with the aim of highlighting the present position of Romania compared to other EU countries in terms of housing. The analysis leads to the conclusion that on most housing indicators Romania occupies lower ranks compared to other EU countries.

Keywords: habitation, housing, private ownership, overcrowding rates.
1. Introduction

The right to housing is part of the human rights law and is stipulated in six conventions/treaties which were ratified by Romania (Dan, 2003). Numerous documents submitted by international bodies, such as the UN, UNECE, UN-HABITAT and the Council of Europe, point out that the fundamental right to housing is not just the possession of a home; it includes many other rights, primarily the right of nondiscrimination – because homeless people are heavily discriminated against and marginalized. In addition, the right to housing requires access to utilities and basic services such as water, sanitary conditions and neighborhood safety, which are the fundamental conditions of a normal social life. Looking at those who live in urban areas UN-Habitat estimates that over 1.1 billion people live in inadequate conditions. If those in rural areas are also taken into account, it is likely that this number will be doubled (UN-Habitat, 2004). It is crucial to note that the poorest are the approximately 100 million homeless people (Marin, 2012).

At the informal meeting of ministers responsible for housing in the EU member states (which took place on the 21st of June 2010, in Toledo, Spain) in addition to the fact that important housing policies which are subject to European legislation in this sector were highlighted, it was decided, among other things, to pay particular attention to the situation faced by social groups who do not have access to housing and those who live in very difficult conditions. Besides that, at this meeting, it was decided to ensure an integrated approach so that the rehabilitation and renovation of dwellings and residential buildings would not be implemented in a unitary strategy but in an integrated urban strategy (MDRL, 2010).

In the Romanian legislation, the right to housing is regulated by the Law no. 114/1996 and the Law no. 116/2002 on preventing and combating social exclusion. Housing law also stipulates the minimum standard acceptable comfort for a house, homes for rent, social housing, and so on.

The quality of housing is a disadvantage for Romania as access to drinking water, hot water, sanitation, provision of durable goods, overcrowding and fitness area suitable to the needs of the household, all record averages well below European standards (Voicu, 2005; Rybkowska and Schneider, 2011). General trends and specific problems of living in our country will be better understood in the context of studying and understanding the specific problems of the European continent (Alpopi, 2007). Kabisch and Grossmann (2013) argue that the housing situation in Europe differs greatly between Western European countries and former communist countries in Eastern Europe, both in terms of quantity and quality. There are big differences regarding ownership of dwellings in the EU countries. Recently an increase in private ownership of housing in most European countries has been observed (Andrews, Caldera and Johansson, 2011; Pittini and Laino, 2011).

This study points out that differences are major between Romania and most developed countries, regarding development standards and therefore quality of life, especially housing issues (Vâlceanu and Tămîrjan, 2011).
2. Quantitative aspects

The existing housing stock in Romania, according to the Population and Housing Census of October 2011 (preliminary results), was about 8,450,942 in total, of which 4,583,045 were urban houses, representing 54.2% of total housing (Figure 1a). The number of residential buildings was 5,104,662 (with an increase of 5.3% compared to the 2002 census), of which 1,364,897 were urban buildings, representing 26.7% of all buildings (Figure 1b). The total population was 20,121,641\(^1\) in 2011, and a total of 22,741,372 rooms (50.2% in urban areas), with an average of 1,193 dwellings to 1,000 households\(^2\), 420 dwellings per 1,000 inhabitants, 2.7 rooms per household, 2.4 people per household, and 0.9 people per room.

Comparative analysis with other European countries helps us to understand the housing situation in our country in the European context. As for housing availability, currently the number of dwellings per 1,000 inhabitants is comparatively high in several European countries (for example, Spain, Finland and France), while in some Eastern European countries (for example, the Slovak Republic and Poland) it is lower (Figure 2).

It should be noted that these data do not necessarily reflect housing needs because they do not take into consideration the actual number of households and household formation patterns; these latter would give a better indication about the comparison of the supply and demand. Regional imbalances exist even in countries that overall have a sufficient stock of housing, where growth areas are characterized by a shortage of housing.

\(^1\) Population and Housing Census, 2011 (final results)

\(^2\) The household, as a unit of observation, is defined as a group of two or more persons, who usually live together, have family ties, in general do housework in common, consume and use together the products obtained, and participate fully or partially in obtaining and using the revenues and expenditures of the household. Households can also consist of a group of two or more persons, with or without children, who do not have family ties, but who live together and have a common budget. People who live and keep house alone, and do not belong to another household are considered households consisting of one person (NIS).
In Romania, the number of dwellings in 2011 was 8,450,942, and the number of households was 7,086,394, resulting to an oversupply of available housing (in any civilized country there must be a surplus of dwellings in relation to the number of households). But this balance is misleading, since it hides a mismatch of supply and demand for housing in terms of households and geographical distribution. A surplus of available housing could be considered a favorable factor, which would facilitate mobility in a stable market environment, but this is not the case of Romania, where most of the houses are unoccupied, represent holiday homes (residences), are located in places where housing markets do not work, are substandard (in most cases) or unfinished housing.
In terms of the average number of rooms in a house, there are large variations between EU countries (Figure 3). The fewest rooms in houses are in Latvia (2.5), Romania (2.6) and Hungary (2.6). The largest number of rooms in houses is recorded in Spain (5.1), United Kingdom (4.7) and Belgium (4.7). In Romania the distribution of dwellings by number of rooms in 2010 was 12.1% in the houses with a room, 40.6% with two rooms, three rooms 30.5%, 16.8% four or more rooms. The largest share of housing in Romania belongs to those consisting of two rooms, and the lowest percentage is in homes with one room and those with 4 or more rooms. Compared to the 2002 census, the percentage of houses with 4 or more rooms increased from 15.6% to 16.8%.

Large differences between different EU countries are manifested in terms of the average living area per capita. The evolution of the indicator average living area in square meters/inhabitant, in some EU countries, is shown in Table 1. Values recorded in 2004 and the latest values taken from statistics for these countries are indicated in the table.

<table>
<thead>
<tr>
<th>Country</th>
<th>The latest values (sqm/inhab.)</th>
<th>2004 (sqm/inhab.)</th>
<th>Country</th>
<th>The latest values (sqm/inhab.)</th>
<th>2004 (sqm/inhab.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td>30.77</td>
<td>-</td>
<td>Average</td>
<td>30.77</td>
<td>-</td>
</tr>
<tr>
<td>Luxemburg</td>
<td>65.9</td>
<td>65.9</td>
<td>Estonia</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Denmark</td>
<td>53</td>
<td>53</td>
<td>Poland</td>
<td>22.9</td>
<td>22.9</td>
</tr>
<tr>
<td>Austria</td>
<td>50.37</td>
<td>50.37</td>
<td>Lithuania</td>
<td>21</td>
<td>-</td>
</tr>
<tr>
<td>Sweden</td>
<td>43.6</td>
<td>43.6</td>
<td>Hungary</td>
<td>20</td>
<td>-</td>
</tr>
<tr>
<td>Germany</td>
<td>41.3</td>
<td>-</td>
<td>Czech Republic</td>
<td>19</td>
<td>-</td>
</tr>
<tr>
<td>Spain</td>
<td>36.37</td>
<td>36.37</td>
<td>Slovakia</td>
<td>17.6</td>
<td>-</td>
</tr>
<tr>
<td>Belgium</td>
<td>33.7</td>
<td>-</td>
<td>Latvia</td>
<td>15.3</td>
<td>15.3</td>
</tr>
<tr>
<td>Greece</td>
<td>32.03</td>
<td>32.03</td>
<td>Bulgaria</td>
<td>14.6</td>
<td>-</td>
</tr>
<tr>
<td>Slovenia</td>
<td>29.149</td>
<td>29.149</td>
<td>Romania</td>
<td>14.09</td>
<td>14.07</td>
</tr>
</tbody>
</table>

Source: statinfo.biz

It should be noted that, in most countries, this indicator has remained constant, but there are countries where the value has increased, for example, in Denmark, Spain, Slovenia and Poland. The highest value is registered in Luxembourg, followed by Denmark. In Romania there was a slight increase from 14.07 square meters per inhabitant in 2004 to 15.8 square meters per inhabitant in 2012. As a whole, in our country at the end of 2012 the living area was 336,521,976 square meters. This gives an average of 39.6 square meters per dwelling or 15.1 square meters per living room, 15.8 square meters per inhabitant. In urban areas there are 39.3 square meters per dwelling, and 15.9 square meters per living room; the differences between urban and rural areas are not significant (INS, 2013).

Compared to an average value of 30.77 square meters per inhabitant in Europe, Romania occupies the last place in the rankings related to this indicator, although a slight increase has been noticed from the 2002 census (14.0 square meters per inhabitant).
3. Ownership form and the dynamics of housing construction

As a form of property, private homes in Romania represent 98.2% of total housing (8,301,476 homes) of which 97.5% are in cities and towns, and 99.1% in villages. State-owned dwellings are 1.4% of all households (or 122,538 homes) of which 2.1% are in cities and towns and 0.7% in villages. Figure 4 shows that Romania has a high percentage of private houses, and is leading in Europe, along with Estonia, Hungary and Slovakia for example. This situation is explained by the massive privatization that former socialist states adopted after the fall of the communist regimes (Dol and Haffner, 2010). Privatization of housing, namely the transfer of property rights from the state to the population, has enabled citizens to buy homes at prices much lower than the market price (Pittini and Laino, 2011).

Countries with a smaller percentage of private housing, that is between 40% and 60%, are France, Germany, Netherlands, Austria, Denmark and Sweden. Consequently, these countries have a large percentage of social housing, being able to afford decent housing for disadvantaged people. The ‘other’ category also includes the category of ‘cooperatives’, which in some countries is counted as private property, while in other countries as public property.

Although there are large differences between countries in the European Union regarding the type of property, the general trend is a growth in privately-owned housing because of policies adopted by various countries that encourage access to private property (mainly through tax incentives for home buyers but also with schemes encouraging the sale of social housing, such as the introduction of Right to Buy in the UK in the 1980s) (Pittini and Laino, 2011).

![Figure 4: Housing distribution by ownership in several European countries](image)

**Source:** Dol and Haffner (2010)
After the Second World War, Romania’s political leadership has initiated a program of rapid industrialization, a process that has generated an increased demand for housing, especially in urban areas. As the demand was high and the possibility to satisfy them was limited, but imperative to be satisfied, a compromise was made: a lower quality of newly constructed housing leading to the benefit of the number, speed and registration costs as low as possible in the construction process. In 1950, the issue of dwelling was declared a state problem and the form of residential organization with fewer levels became accepted, according to the ‘Athens Charter’.

![Figure 5: Housing dynamics during 1951-1989 in Romania](image)

**Source:** National Institute of Statistics, Statistical Yearbook of Romania from 1981 to 1990

During 1951-1965 the largest share in household was built using private funds (83.15% of the total, most of it in rural areas). Starting with the period 1966-1970 a relative equilibrium occurred in the ratio between housing built with public funds (by the State, approx. 333,177) and those built by the population with its own funds (314,491). After this period the Romanian state house building policy focused specifically on building houses with public funds (especially apartments in blocks). There was a severe deterrent campaign regarding individual house construction, leading to an almost total prohibition of such buildings during the last 3 to 4 years of the regime. It can be observed (Figure 5) that between 1971 and 1975 one house in three was built by private funds (of the population), and then the trend changed as follows: from 1976 to 1980 – one house in 10, from 1981 to 1985 – one house in 14, and from 1987 to 1989 – one house in 8. This was a consequence of a decrease in the number of houses built using public funds, while the pace of construction using private funds remained similar to that between 1981 and 1985.

The period from 1971 to 1982 coincided with the relative momentum of the Romanian economic development and the ‘socialist welfare status’. At that time, the build-
ing rate was about 160,000 houses per year. After 1982, with the Romanian economy debacle, there was a decrease in the ‘houses policies’ too (especially in building houses), but still the pace in building new houses remained relatively high, paying more attention to the number of houses built rather than their quality.

In the period from 1970 to 1980, the rate of building houses in Romania was at comparable levels with the highest rates in the European Union (for example, in the Netherlands, between 1971 and 1982 the average rate of building houses was about 8.1 dwellings per year per 1,000 population, and in Italy, between 1971 and 1981, the average number of houses built was about 7.1 per year per 1,000 inhabitants) (Balchin, 1996). In Romania the average construction pace between 1970 and 1980 was about 7.1 dwellings per 1,000 inhabitants. However, the quality of new housing in Romania was incomparably worse than homes built in the EU.

Making buildings almost entirely with state funds allowed rigid control of the execution technologies and the consumption of materials and manpower. They promoted especially simple architectural solutions, coupled with overall dimensions of the interior at the lower acceptable limit. Plan forms with rigorous geometry predominated (most sections are rectangular). The withdrawals for upper floors and bow window sites have almost completely disappeared. Another factor that favored the imposition and adoption of regular shapes in plan was the location of buildings on vacant land (big residential neighborhoods outside the central perimeter of towns or areas with extensive demolition) thus avoiding the constraints of plot of land form, or the form of inter-war buildings in city centers.

In 1990, the mass privatization of housing began in Romania, which has reduced public ownership housing from 1,634 million in 1990 to 220,856 in 2002 and increased the share of private sector housing stock from 67.35% in 1990 to 97.2% in 2002. Almost all privatized houses are apartments in buildings, which are in many cases overused. Housing transfer is considered a fair way to promote property rights, but it has led to a decrease in the stock of social houses, and also to a number of difficulties for the new owners to ensure the management and maintenance of the newly acquired houses. The transfer of state property by the tenant housing was based on a calculation by age, category and size of dwelling. Growth was 10% and the remaining instalment payments were made from a state loan. The high inflation of the early 1990s has eroded the loan, providing additional benefits to buyers (Iacoboaea, 2006).

The main problems that this massive transfer of property raises are:

– poor physical conditions of the housing stock that was transferred to private ownership;
– difficult socio-economic conditions for the new owners, especially in terms of their ability to invest in their homes; and
– low-ability of the government to provide social houses for disadvantaged groups because of the fund reduction.

After 1990, the state withdrew almost completely from the financing and construction of housing, from 8.7% investment from the state budget in 1989 to less than 1%
in the coming years. Most of the houses made in the period 1990-1994 (about 70%) were completed investments started before 1989. We remark (Figure 6) a significant decrease in housing built with public funds after 1990, registering a low in 2000 of only 1,160 homes, compared to 42,820 homes built in 1990. The number of homes built with public funds recorded a steady growth in 2001-2008, reaching 6,084 homes in 2008. The economic crisis influenced public funds housing to reduce the number in 2009-2011, reaching 2,357 homes in 2011.

![Figure 6: Housing dynamics during 1990-2011](image)

**Source:** National Institute of Statistics, Statistical Yearbook of Romania from 2007 to 2011, for 2011 provisional data

Regarding housing from private funds, their number increased in 1990-1994 and 2005-2008 periods, but during 1995-2004 the number has remained approximately constant at 25,000 dwellings per year. The recent financial crisis has reduced the number of housing from 61,171 dwellings (in 2008) to 43,062 dwellings (in 2011).

Increased economic difficulties and high cost of land in urban areas are two of the factors that led to the vast majority of homes built from private funds, in the countryside or on the outskirts of cities, fact confirmed by the number of building permits given for residential buildings (Mihăiescu, 2009). Traditionally, materials used in many cases have low resistance and the suitability of constructed housing is low from the point of view of public utilities.

According to the Government Decision no. 2139/2004, the depreciation period of residential buildings is established between 40-60 years. This interval can be interpreted as the time period in which the building is functional and valid. After the depreciation period, the building could be dangerous for those who use it. Therefore, buildings built during 1950-1960 are depreciated and there are serious problems to be
solved. The analysis of each building is required for the retrofitting, with financial repercussions on the owners due to the house depreciation. There are 2.3 million buildings built until 1960, and during 1950-1960 1,293,913 dwellings were built, of which 150,147 from public funds, the vast majority of them being collective houses.

The period when residential buildings were built is important from the point of view of structural engineering and thermal protection. During 1900-1950, masonry and reinforced concrete structures were designed based on technical regulations of some advanced European countries that are not exposed to earthquakes. The seismic code from 1943, created after the strong earthquake from 1940, is the first seismic zoning of our country. Because of the war and the economic recession, this code practically was not applied. In the following seismic code from 1952, the country territory was divided in seismic zones from V to IX (corresponding to Mercalli scale), important differences being introduced between different areas, especially in extra-Carpathian region. In 1963, this code was replaced and significant reductions of seismic intensity have been introduced in several areas, compared to the previous edition. Effects of the severe earthquake of 1977 led to substantial modifications of the code, important cities being included in higher seismic zones. Subsequent research justified the higher markers – with generally 1 degree or in some cases even 2 degrees (on MSK scale, similar to Mercalli scale) – for many areas of the country, which are founded also in the code of 1991 which was revised constantly in recent years, in agreement with the Eurocodes. Technical expertise of the buildings is required for the seismic risk assessment. 1,760 buildings have been subject of this process, of which 189 have been placed in the first class of seismic risk, representing public danger, and 184 in the second class of seismic risk. 39 buildings have been strengthened and rehabilitated in the last 18 years.

In terms of thermal protection, there were no regulations in this area before 1973, and façade elements had low thermal resistance. Until 1984, solutions for the protection of exterior walls were low due to thermal bridges. In 1994 a new set of technical regulations was developed based on research programs conducted in the past 10 years, which have been improved in recent years. The thermal rehabilitation program started nationwide includes about 3 million dwellings built between the years 1950-1990. 176,000 dwellings were thermally rehabilitated in the period 2009-2012 (Build up skills, 2012).

4. Quality of dwellings and housing conditions

To describe the quality of housing conditions we have used overcrowding rate as an indicator, which assesses the proportion of people living in a dwelling, as defined by the number of rooms available in the household, the household’s size, as well as its members’ ages and family situation (Eurostat, 2013).

On average, 16.9% of European population lived in overcrowded dwellings in 2011 (Figure 7). Romania recorded the highest rate of overcrowding (54.2%), followed by Bulgaria (47.4%), Poland (47.2%), Hungary (47.1%), and Croatia (45.1%). The lowest
rates of overcrowding were registered in Netherlands (1.7%) and Belgium (2.2%). The overcrowding rate is higher for those who are at risk-of-poverty (i.e., people living in households where equivalised disposable income per person was below 60% of the national median), the average for EU 27 being of 29.0% in 2011, about 12.1% above the rate for the whole population. The highest overcrowding rates among the population at-risk-of-poverty were registered in Hungary (71.0%), Romania (66.0%) and Poland (62.5%), while the lowest were recorded in the Netherlands (4.7%), Cyprus (5.7%), Malta (6.9%), Belgium (8.4%) and Spain (8.7%).

The greatest differences in the overcrowding rates between the two groups were observed in Hungary (a difference of 23.9%), Norway (a difference of 20.0%) and the Czech Republic (a difference of 19.9%). On the other hand, the smallest differences were observed in Cyprus, Malta, the Netherlands, Spain, Croatia and the United Kingdom (each with percentage differences of lower than or equal to 4%).

![Figure 7: Overcrowding rate, 2011 (% of specified population)](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Housing_statistics)


The technical infrastructure is an important aspect of the assessment of housing quality. People living in accommodation without basic amenities (a bath or shower, hot running water and central heating) are considered to be affected by housing deprivation.

On average, more than 80% of homes in the European Union have both a bath and a shower, and hot running water and almost 70% of homes have a central heating system (Table 2). The endowment rate of the basic facilities is the most critical aspect of the quality of the housing stock in Romania.
Table 2: Dwellings with bath/shower, running water and central heating (% of dwelling stock)

<table>
<thead>
<tr>
<th>Countries</th>
<th>Bath/shower</th>
<th>Hot running water</th>
<th>Central heating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>99.2</td>
<td>n/a</td>
<td>92</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>95.5</td>
<td>95.1</td>
<td>81.7</td>
</tr>
<tr>
<td>Denmark</td>
<td>96</td>
<td>n/a</td>
<td>98</td>
</tr>
<tr>
<td>Estonia</td>
<td>67.1</td>
<td>68</td>
<td>59</td>
</tr>
<tr>
<td>Finland</td>
<td>99.1</td>
<td>97.1</td>
<td>93.4</td>
</tr>
<tr>
<td>France</td>
<td>98.5</td>
<td>98.5</td>
<td>93</td>
</tr>
<tr>
<td>Hungary</td>
<td>91.3</td>
<td>91.5</td>
<td>56.7</td>
</tr>
<tr>
<td>Italy</td>
<td>99.4</td>
<td>99.6</td>
<td>94.7</td>
</tr>
<tr>
<td>Latvia</td>
<td>60.3</td>
<td>61.6</td>
<td>61.2</td>
</tr>
<tr>
<td>Lithuania</td>
<td>71.1</td>
<td>61.6</td>
<td>73.5</td>
</tr>
<tr>
<td>Netherlands</td>
<td>100</td>
<td>100</td>
<td>94</td>
</tr>
<tr>
<td>Poland</td>
<td>86.9</td>
<td>83</td>
<td>78</td>
</tr>
<tr>
<td>Romania</td>
<td>58.8</td>
<td>57.2</td>
<td>51.9</td>
</tr>
<tr>
<td>Slovakia</td>
<td>92.8</td>
<td>90.5</td>
<td>74.3</td>
</tr>
<tr>
<td>Sweden</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>U. K.</td>
<td>99</td>
<td>100</td>
<td>94</td>
</tr>
</tbody>
</table>

Source: Pittini and Laino (2012)

Table 3: The endowment of housing in Romania, 2011 (%)

<table>
<thead>
<tr>
<th>Housing endowment with:</th>
<th>Total</th>
<th>Urban</th>
<th>Rural</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water (in the house)</td>
<td>66.7</td>
<td>91.6</td>
<td>37.2</td>
</tr>
<tr>
<td>Sewage wastewater (the public network or system of its own)</td>
<td>65.1</td>
<td>90.8</td>
<td>34.8</td>
</tr>
<tr>
<td>Power supply</td>
<td>96.6</td>
<td>98</td>
<td>95</td>
</tr>
<tr>
<td>Central heating (heating or central heating)</td>
<td>44.4</td>
<td>73.2</td>
<td>10.3</td>
</tr>
</tbody>
</table>

Source: Population and Housing Census 2011 (preliminary results)

There is a large discrepancy between urban technical infrastructure of housing in urban and in rural areas (Table 3). Differences between localities are largely related to their size. Large cities tend to have far more access to housing technical infrastructure (water supply, sewerage, heat, gas). In addition, the smaller the area is, the higher is the share of those who provide, by their own, access to utilities, facilities without using the public supply system.

Blocks in urban areas benefit from public utilities by construction. The problems that occur are caused by age or poor quality pipes, high cost of service and owners being unable to pay their bills, which has led to the forced disconnection of some blocks. Increasing prices for public utilities caused the population to disconnect, due to the inability to pay or late payment for services associated with the dwelling by the supplier, which also led to the disconnection of the entire block in which the respective dwelling was located.

During 2002-2012, 1.11 million dwellings were disconnected from the centralized heating system, most of them in Brașov (78,344 dwellings), Cluj (68,396 dwellings), Iași (66,654 dwellings), and Bacău (55,558 dwellings) counties. There are 4 counties (Alba, Ialomița, Satu Mare and Bistrița-Năsăud) where for many years a central heat-
ing system no longer exists: most owners chose their own heating systems. The most common solution was gas boilers. There are approximately 1.5 million dwellings that use this type of heating (Ariston Thermo Group, 2013).

According to the 2011 census, 4.7 million dwellings do not have central heating and are not connected to the central heating system, using other methods for heating and the production of hot water. The worst case is in rural areas where 89.7% of dwellings do not have central heating (centralized heating system or own heating systems) (see Table 3).

The issues identified in the qualitative analysis are supplemented by water quality, water heaters and heat. This is related to the frequent cases in which the water or hot water get colored when entering in contact with rust or other materials. The causes are multiple, but are largely generated by nonexistent state of water installations, or pipeline condition from the distribution network.

It is estimated that water losses in the distribution network are between 30% and 50%, but there are localities where this value is greater (for example, Călan 64%, Hațeg 63%, Turnu Severin 49%, Piatra Neamț 54%, Odobești 74% and Sibiu 55.8%) (UTCB, 2013). A large part of distribution pipes are unprotected steel pipes, so changes occur in the water quality (the most known phenomenon is red water – colored water due to the corrosion of pipes). Also, much of the distribution pipes are asbestos pipes which can put asbestos fibers in the water which generate carcinogenic diseases; these must be replaced entirely. There are localities where the proportion of steel and asbestos pipes exceeds 70% (for example, Târgu Mureș, Buzău, Turnu Severin, Adjud, Zimnicea and Videle) (UTCB, 2013). Also, the National Report of the Environment 2012 shows that 69.5% of the investigated treatment plants are inadequate (UTCB, 2013).

According to the European Commission, the issue of deprivation of a house is the main cause of poverty and social exclusion in society today. But a serious problem is daily living in squalid conditions too. For example, in 2009, approximately 30 million people in the EU-27 were affected by deprivation of decent housing problems such as overcrowding, poor quality of construction, lack of sanitary conditions, lack of bathrooms inside the house, lack of natural light, and so on (Rybkowska and Schneider, 2011).

In order to examine these aspects a ‘housing deprivation rate’ indicator has been developed that measures the quality of human living conditions. A severe ‘housing deprivation rate’ is defined as the percentage of population living in dwellings which are considered overcrowded, while also exhibiting at least one of the housing deprivation measures. Housing deprivation is a measure of poor amenities and is calculated by referring to those households with a leaking roof, no bath or shower, and no indoor toilet, or a dwelling considered too dark (Eurostat, 2013). It expresses the percentage of those affected by the problems mentioned above. In 2011 in the EU-27, on average, 5.5% of the population faced severe problems of degradation of the home, compared to the 5.7% in 2010 (Figure 8). In five member states, one person in 10 is living in a seriously degraded home, in Latvia it is 17.9%, while in Romania more than one person in
four faces such problems – the housing deprivation rate being 25.9%. On the contrary, in Finland, Sweden and Denmark, in 2011, the rate was just 1%, down 0.2% from the level recorded in 2010. The most significant decreases in housing deprivation rates were registered in Slovenia (6.7%), Estonia (6.5%), Lithuania (5.9%) and Latvia (4.7%). On the other hand, the largest increase was reported in Italy (+2.2%) (Eurostat, 2013).

![Figure 8: Severe housing deprivation, 2010 and 2011 (% of population)](source)

Severe housing deprivation is very likely to have negative economic, social and health consequences. Therefore, it should be monitored by governments.

5. Social housing

Ensuring access to housing is a precondition for the exercise of fundamental rights that every person should have. Not having a home is synonymous with extreme poverty, which is a manifestation of severe social exclusion (Dan, 2003).

The study of the status of social housing in Romania, in all aspects, requires the approach of various content elements of its definition – generally speaking – through the European regulations, given that EU countries understand it differently (Iacoboaea, Luca and Gaman, 2012).

Depending on the social circumstances, and on the historical and economic contexts specific to the countries of European Union, social housing may include:

1. the social rental sector (state, local authorities, non-profit associations), which is very subdivided and, in many cases, reserved to certain socio-economic categories;
2. the private sector (funded by the public sector), in mixed forms of property;
3. the private rental, generally governed by state law.

CEDODHAS (European Federation of Social, Cooperative and Public Housing) formulated a definition in 1998 for the social housing: ‘housing where the access is
controlled by the existence of allocation rules favoring households that have difficulties in finding accommodation in the market’ (UNECE, 2003).

The comprehensive definition of the notion of social housing must take into account a number of criteria common to all EU member states, namely:

a) the allocation and access criterion (definition of target groups and of the allocation procedures plus the set of sub-criteria and secondary criteria established by the government and enforceable by the local authorities based on a set of local priorities and minimum check-ups);

b) the accessibility criterion (such as low prices or low rents for low income groups);

c) security of tenants/owners (long term rental contracts and security for the owners from the social sector area) (UNECE, 2003).

In Romania, social housing, according to the Housing Law no. 114/1996, is a home that is rented and subsidized (by the State) to be allocated to individuals or families whose economic situation does not allow access to their own home or to renting a home under market conditions. Rents will not exceed 10% of monthly net income, calculated on the last 12 months, per family. The difference to the nominal value of the rent will be subsidized by the local budget of the administrative-territorial unit where social housing is located.

In Romania, Bulgaria, Estonia, Hungary, Lithuania, Latvia and Slovakia the local authorities are the only ones who provide social housing for people in need. In recent years, in many countries (for example, Austria, Greece, Germany, Italy, Spain and U.K.), there are other actors who provide social housing: commercial developers and private owners, and in other countries there are public companies or non-profit or limited-profit associations, companies and cooperatives.

In fact, as explained in the Housing Europe Report 2007, social housing was created in most European countries at the initiative of the private sector (charitable institutions and some private companies that build housing to accommodate their workers) as a response to the emerging housing needs brought about by massive industrialization and urbanization in the early 20th century (Czischke and Pittini, 2007).

Yet, another situation exists in some Mediterranean countries such as Greece, Spain and Cyprus, where social housing is provided only or mainly in the form of low-cost housing for sale. In other countries it is an increasingly widespread practice to set a minimum percentage of social housing in new developments. For example in England, local planning authorities have adopted statutory policies that develop plans to assess the need for new affordable housing in their districts, and they may require private developers to contribute to meeting this need. Similarly, in Spain, following the establishment of regional legislation on urban planning, in each new urban development a minimum of 30% of the land must be used for protected housing. Also, in the Flemish Region of Belgium, a decree law established the involvement of the private sector in social housing provision in the sense that in each new estate development (consisting of over 10 houses or 50 apartments) at least 20% has to be social
housing and 40% if the land belongs to the public sector. In France, the law sets the obligation to have at least 20% of social housing in every municipality which consists of more than 3,500 inhabitants (Pittini and Laino, 2011).

The analysis made showed that in Romania public owned dwellings are only 1.4% of all dwellings and not all are necessarily social housing (in the sense of the Law no. 114/1996).

Some European countries (Netherland, Austria, UK, France etc.) have a substantial stock of social housing representing between 10%-30% of the total housing stock (Figure 4). Analysis of the ownership of the population in the European Union (tenure status) shows that in Romania 2.5% of the population lives with subsidized rent, unlike the UK, France, Austria, where about 17% of the population receives subsidized rent (Figure 9).

![Figure 4](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Housing_statistics)

**Figure 4:** Ownership of the population in the European Union (tenure status), 2012

To receive a social housing, any person may address to the City Hall from the locality where he or she resides. Applicants obtain the approval and receive social housing, to the extent of available stock, based on the hierarchy of criteria approved by the Local Council. Rights established by law shall be effective only to the extent that Local Councils owns such houses and there are funds in the local budget to subsidize the rent. There are no recent data on the percentage of social housing applications approved, but older studies (Constantinescu and Dan, 2005) have shown that half of the City Halls that answered the questionnaire approved about 165 applications out of 1,000.

From the point of view of housing deprivation rate and overcrowding rate, Romania is ranked in the first places in the European Union (Figures 7 and 8), which shows that housing ownership situation is not very good, some families needing social housing.
Law no. 114/1996 proposes only two choices for Local Councils to provide social housing stock: either building new housing or rehabilitation of existing buildings owned or acquired and that belong to public domain of the administrative-territorial units; these housing units cannot be sold. Sources of funding for this program come from local budgets and state budget.

Besides the social housing program, according to the Law no. 114/1996, the Ministry of Regional Development and Public Administration oversees the following programs of building houses from public funds:

1. Houses building program run by the National Housing Agency (ANL), through which houses are built to be rented by young people. The homes can be sold to holders of leases, only on request, after the expiration of at least 1 year of uninterrupted lease;
2. Social houses building program for tenants evicted from nationalized houses;
3. Program on state insurance premium savings and loan banks; and
4. Houses building program through mortgage credit.

For an improved quality and quantity of social housing in Romania, trends at European level should be taken into consideration for improving the Romanian law:

1. enlargement and diversification of the social housing concept so as to cover notions related to all forms of housing subsidies;
2. provision of economic facilities for stakeholders (public, private, NGO, inhabitants, other stakeholders) in order to create a pool of social housing which is quality-wise and quantity-wise adequate for low income individuals;
3. increased preoccupation to avoid social and spatial segregation of communities, to avoid the formation of disadvantaged areas;
4. the need for a better economic efficiency of social housing investments achievable through the adoption of constructive solutions in line with the concept of sustainable development and through the use of the newest projects/technologies/materials which can insure low operation prices and low energy consumption; and
5. the adoption of an efficient social housing management, considering the number of homeless people and of those with seasonal social housing based on a computer application (Iacoboaia, Luca and Gaman, 2012).

6. Conclusions

The results of this study show that there are large differences between Romania and most developed countries of the EU in terms of quality of living and therefore quality of life. Housing situation in Europe is very different from one country to another; for example, Western European countries differ greatly from those of the former communist countries of Eastern Europe, both in terms of quantity and quality.

Based on the developed study, it is ascertained that the present housing stock in Romania meets the quantitative population requirements. Between 1950-1989 there were a lot of construction works done, especially with public funding, but with poor quality (smaller flats having minimal accepted surfaces). This fact is illustrated by the
comparison between the number of rooms per dwelling and living area per capita made through all European countries. In both cases Romania is situated on the last place. Housing privatization, respectively passing the property titles from the state to the population, brought Romania on the first places in the European Union, having 98.2% private properties houses out of total number of houses. The problems are now linked to the state of the houses, the depreciation period, the improvements required and the lack of financial resources of some owners in making these investments.

The transition to a market economy has led to a dramatic decline of public housing construction funds. Social housing stock is insufficient to meet the required needs. It was found that Romania has a very low housing quality and we refer to: access to drinking water, hot water provision, sewerage, electricity etc., which are far below European averages. Overcrowding indicator rate and housing deprivation rate offer us a glance over the situation of housing quality showing that Romania has the highest percentage of people living in overcrowded dwellings through over entire European Union. Approximately 1 of 4 persons in Romania lives in overcrowding conditions and faces one of the following problems: the lack of a bath or a toilet, a leaking roof in the dwelling, or a dwelling considered as being too dark. Given that not only the possession of a home is a basic human right, but also access to basic utilities and services, such as water, sanitary conditions, technical equipment and adequate housing space, adequate lighting, security and safety of citizens, depriving them of these rights determine undermining the notion of human dignity.

It is well known that housing conditions influence the essential components of the population’s biological and intellectual potential, its exercise capacity, health status, growth conditions and education of children, elderly people peace and life safety, and demographic evolution too.

There are many causes for all the serious problems encountered in the housing sector in our country but certainly the most important of them are lack of money, lack of interest from the authorities, non-involvement and mismanagement. The simple fact of knowing the actual state is not sufficient, but it is an important part in elaborating a coherent strategy in housing, adapted to existing factors and current and future financial resources. A major role is played by the local authorities who have to be able to meet all requirements of the actors involved in the development and modernization of the housing sector (public sector, private sector, non-governmental organizations and inhabitants). In conclusion, we can say that acting on housing conditions can led to improvement in life quality and therefore economic growth.

References:

