

The Analysis of Investments in Constructions in Romania during 2001-2012

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Abstract

The aim of this article consists in making an analysis of investments in the area of constructions in Romania during 2001-2012 based on the information provided by the National Institute of Statistics. Investments are analyzed distinctly during: 2001-2012. Further the results obtained in the area of constructions in the period are also presented, but also some considerations on the development and tendencies in the constructions market in Romania. The article ends with the authors' conclusions about the future developments of constructions in Romania, and proposals for adopting measures of redress for this important segment of Romanian economy.

Keywords: constructions industry, analysis, economy, evolution, crisis

Introduction .1

In the current situation where most European countries and not only them, face a financial and economic crisis, the construction industry is in the center of many specialists' analysis, a reason why we will bring it to the attention of interested people a few milestones in the evolution of this sector in Romanian economy. Constructions occupy a significant place in the national economy ensemble and having in view the transition process Romania is going through, it is normal that the proportion of these activities, especially in constructions area, moves toward the private sector sphere and population. Under these circumstances, the state

sector has limited activity in constructions, with the direct effect of reducing the contribution of this branch to the generation of the Gross Domestic Product.

Another adverse effect in the constructions sector is the fact that investments in this area have decreased from year to year, until 2000, and during 2001-June 2012 have maintained at an insufficient level. In the period 2010-June 2012 investments decline was particularly accentuated, compared to 2009. Investments started before 1990 in the constructions activity were neither continued nor fully harnessed from the proceeds of privatization. In many cases, the practical value of the works already carried out decreased and the process of their continuation imposed additional work that led to increased production costs.

The construction works undertaken by some trade companies with private capital were put into conservation, and the activities continuation pace being too slow and all this being achieved amid shortages of housing for the population. Before 1990, most of these housing units were privatized under not very clear circumstances, due to the loopholes in the legislation on this matter. In the period 2001-2012 the program of housing for the population was launched, made by mortgage. These are not available exactly to those who most need them, such as: young couples, employees with a low income, people with various disabilities etc. Although the amount of private investments was particularly high in 2008, the unleashed economic crisis powerfully hit the constructions sector, and the mortgage loans, as the main source of funding, led to increased prices of housing building and paradoxically, to the inability to sell at the level of contemplated costs.

2. Literature review

The National Institute of Statistics has an important contribution to the study and analysis of macro and micro-economic status in Romania, providing information required for the drawing up the comparative analysis and forecasts for the various sectors of Romanian economy. The largest contributions brought to the segment of macroeconomic and microeconomic status analysis are owed to great specialists, economists who have studied investments made in various industrial sectors (including the constructions one) in Romania (Anghelache, 2000-2012; Capanu Wagner, Mitruț, 1994, 2000), and who have highlighted the importance of the constructions sector in the national economy and the role it plays in the Romanian society's development and modernization (Prisecaru and Budica, 2009). A part of specialists have analyzed the concept, mechanism and achievements obtained by the constructions - real estate sector's restructuring (Morariu and Crecana, 2009), while another part of the specialists have identified correlations between the national and international conjuncture and performances of companies in the area of constructions (Oancea-Negescu and Anica-Popa, 2009) or the evolution of constructions and real estate sector in Romania, in the conditions of the financial crisis, with the stress on the domestic economic and international climate (Mocanu, 2009). Different studies carried out by independent institutes whose results have not been made public yet, being used only for internal analyses at sectorial or inter-departmental level can also be mentioned.

3. Research and Methodology

3.1. Research Questions

This article attempts to make an analysis of investments in the constructions sector in Romania during 2001-2012. To this effect, the reasoning of the specialists in the economic area has been measured, trying to find answers to the following questions:

- 1. How have investments in constructions developed in Romania during 2001-2012?*
- 2. What were the favorable or unfavorable causes of their development?*
- 3. What is the evolution and tendency of investments in constructions in Romania for the following period?*

3.2. Instrumentation

Research design is focused on theoretical tackling of the implications arising from development in the issues described by the questions launched at study's beginning. For the relevance of the study, instruments such as: induction, deduction, and documentation have been used.

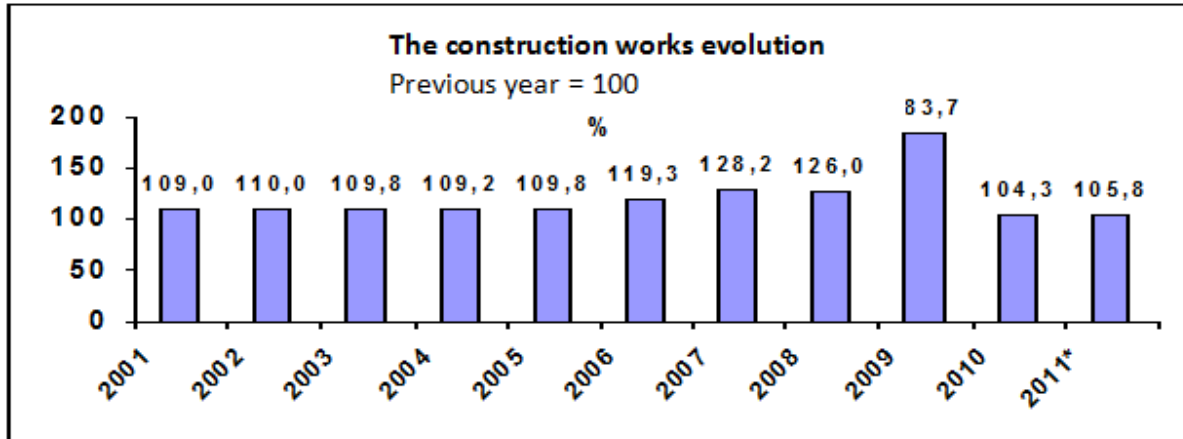
3.3. Data Collection and Analysis

For data collection and analysis, the statistical yearbooks of the National Institute of Statistics for the period 2001-2012 have been used, also detailed studies conducted by various experts in the area of constructions, on-line archives, articles and specialized books devoted to this branch of Romanian industry.

3.4. Analysis of Investments in Constructions during 2001-2012

During 2000-2008, investments followed an upward tendency, recording growths of over 9% from one year to another. Since 2009, investments and production have marked a downward tendency, with large declines in 2010, 2011 and the first half of 2012. For example, in 2001 there was a 9% increase in investments and constructions, and during 2002-2008 the growth rate was almost identical. However, after 2009, large reductions occurred. The same tendency was recorded in the number of homes built that grew up until 2009 when the investments decline was established (figure no. 1).

The year 2006 was the year when the net gain obtained was higher than in the previous years both in terms of housing for flood victims and of civil constructions erection, residential buildings, homes under construction and so on, where the growth were steady but safe. Most of the investments were from entirely private funds, an important advantage owed to the civil constructions, including the facility of housing credits lending. Investments were also made for the construction of new buildings, purchase of equipment and vehicles or repair and modernization of currently existing fixed means.

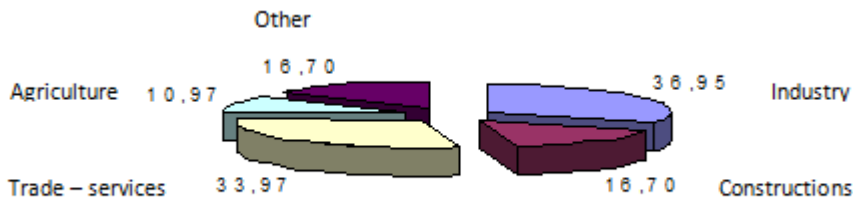


*) Provisional data

Data Source: The National Institute of Statistics

Figure 1. Evolution of construction works during 2001-2011* (Anghelache, 2012, pp. 294)

Targeting investments in industry was directed to replace old equipment, increase production capacity, modernization of technologies, environmental protection, labor safety and other sectors requiring investments. Most market operators focused particular efforts to increase production capacities and to replace old equipment, but in terms of harmonization with the European Union requirements, significant amounts shall be allocated, especially for environmental protection and labor safety. In a preliminary study (figure no. 2) it is shown that the privatization contracts of some companies and autonomous administrations, plans and investment obligations in the field of environmental protection are not in line with those agreed.



Data Source: The National Institute of Statistics

Figure 2. Investments - Constructions (%) (Anghelache, 2012, pp. 295)

From this point of view of investments, the environment is affected and their consequences on the general natural state will have special effects.

Analyzing the results obtained by Romania during 2010-June 2012 we find out that the total investments in machinery and vehicles decreased significantly compared to 2011. Investments in industry made in 2011 consisted in the replacement of old equipment, increase of production capacities, modernization of technologies, environmental protection, labor safety and investments in other areas. This means that was achieved capital goods were completed and increase of companies' assets was ensured through capitalization by imports of capital goods. In all the three elements of the investments structure (new constructions, equipment and other

expenses) tendencies are identical to those overall recorded, noting that construction works have surpassed the one related to equipment in all periods (table no. 1). Constructions have been long characterized as the most dynamic sector of economy, for its fulminant evolution recorded, followed by a fall commenced in January 2009 and then continued in 2010-June 2012 (table no. 2).

Table no. 1. Indices of investments achieved in the national economy during 2008-2012 (Anghelache, 2012, pp. 394)

Index	Years	In % compared to the corresponding period of the previous year			
		q.l		q.l	
Investments - total	2008	134.3	Investments - total	2008	134.3
	2009	102.7		2009	102.7
	2010	72.0		2010	72.0
	2011	96.3		2011	96.3
	2012	118.8¹⁾		2012	118.8¹⁾
out of total , by structure elements:			out of total , by structure elements:		
- new constructions	2008	132.5	- new constructions	2008	132.5
	2009	106.6		2009	106.6
	2010	70.6		2010	70.6
	2011	93.4		2011	93.4
	2012	114.9 ¹⁾		2012	114.9 ¹⁾
- equipment (total)	2008	134.7	- equipment (total)	2008	134.7
	2009	95.0		2009	95.0
	2010	96.2		2010	96.2
	2011	96.2		2011	96.2
	2012	120.8 ¹⁾		2012	120.8 ¹⁾
- other expenses *P) ^P	2008	146.7	- other expenses *P) ^P	2008	146.7

* This includes expenditures for geological and drilling works, vineyards, orchards, reforestation, livestock purchases, purchasing household inventory items of fixed means type and so on, at the end of each reported quarter.

Data Source: The National Institute of Statistics

Analyzed data reveal developments with about the same tendency, both in terms of work categories (new constructions, general overhauls and operating repairs), provided that the overall dynamics is given through its being surpassed by the new buildings and by construction types (residential, non-residential, engineering constructions) where, like in previous years, a type of constructions, residential buildings, prevalently gives the production amount. After January 2009, there was a slight decrease and then accentuated in 2010-2012, as a result of the economic-financial crisis. The named decrease can be attributed to settlements recorded with more difficulty (Anghelache, 2012). Investments made on the main structure elements highlight in particular in 2011 compared to 2010, an increase of investments proportion in construction works.

Table no. 2. Indices of construction works by structure elements and by types of constructions
- Gross series – (Anghelache, 2012, pp. 165)

Index	Corresponding month of the previous year = 100					
	2011			2012		
	Jan	Sep	Dec	Jan	June ²⁾	1.I-30.VI 2012 in % compared to 1.I-30.VI 2011
Construction works – total	90.0	104.2	101.8	103.1	99.2	107.5
out of total, by structure elements:						
- new construction works	87.9	94.4	104,8	146.7	101.0	118.0
- general overhaul works	73.1	131.4	95.3	70.7	115.3	91.4
- maintenance and operating repair works	110.0	119.2	98.8	54.4	86.1	89.2
out of total, by types of constructions:						
- buildings	83.4	97.9	100.8	90.5	93.8	93.6
out of which:						
- residential buildings	55.8	98.5	121.0	66.2	92.6	86.5
- non-residential buildings	109.2	97.6	90.5	107.8	94.4	97.5
- engineering constructions	95.8	108.7	102.5	112.2	103.2	118.7

¹⁾ Data recalculated as per CAEN Rev.2 and as a result of changing the base year and weighting system; see Methodological Notes

²⁾ Provisional data.

Data Source: *The National Institute of Statistics*

After growths in the first half of 2011 compared to the fourth quarter of 2010, both as gross series and as adjusted series, construction works marked a rebound in the second half of 2011 compared to the first quarter of the same year and especially in 2011.

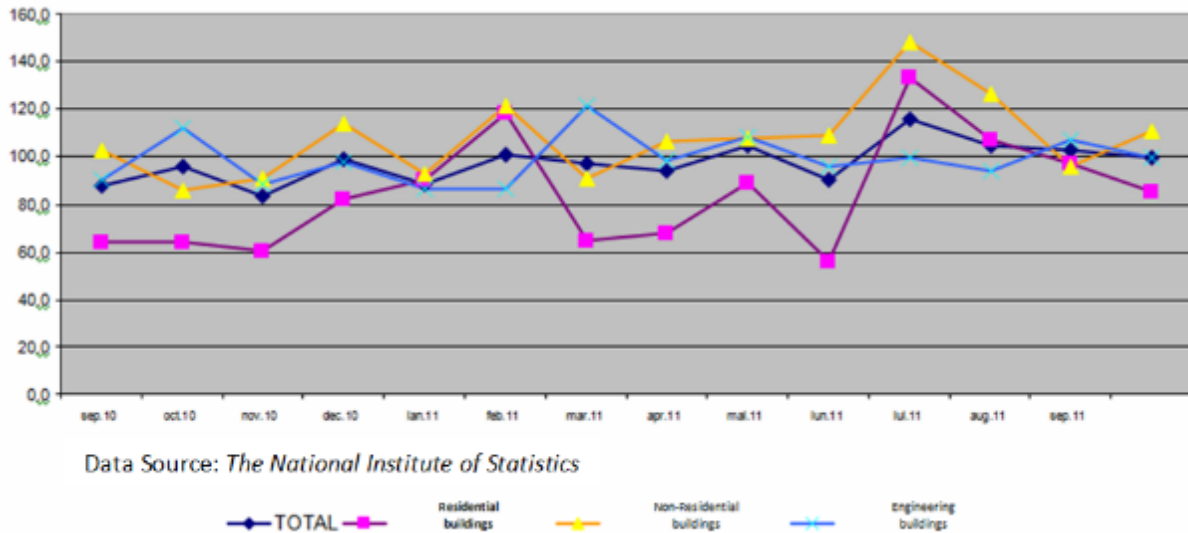
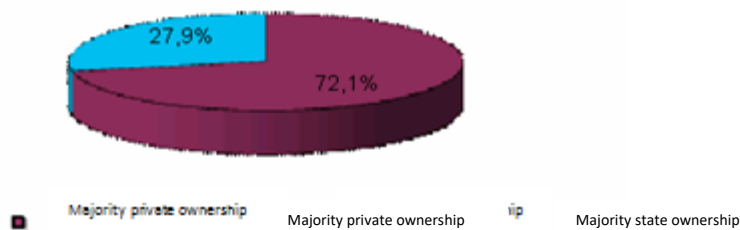


Figure no. 3. The evolution of indices for construction works by types of constructions during September 2010 – September 2011 (Anghelache, 2012, pp. 166)

One can mention the decrease in the period 2009-2011, of the number of completed dwellings due to the reduction of both private funds and public funds (figure no. 4). Between 2010-2011 fewer building permits were issued for residential buildings, compared to the second half of the previous year (figure no. 3). Investments in the national economy dropped by almost 10% in 2010 compared to 2009, this being recorded after an even more accentuated decrease in 2011 which had reached only 72% compared to 2009. Thus, in 2011 there was a diminution of overall investments of nearly 21.3%.



Data Source: *The National Institute of Statistics*

Figure no. 4. Investments made in the national economy by ownership forms and structure elements in 2011 (Anghelache, 2012, pp. 166)

The biggest decrease per half-year (21.4%) was recorded in new construction works and equipment. This fact was also reflected on some mutations that occurred in the branch structure of the investments. Another significant decrease of proportion was particularly recorded in other branches of the national economy, except the ones mentioned, which by size annihilated increases, some being surprising in the constructions branch, from the proportion of 12.8% in 2009 to 17.9% in 2010 (by 5.1 percentage points), commercial services from 32.9% to 36.7% (by 3.7 percentage points), agriculture from 4.3% to a proportion of 5.5% in 2010 (+1.2 percentage points).

Table no. 3. Dynamics and structure of the investments made in the national economy in 2010 (Anghelache, 2012, pp. 167)

– in % compared to the corresponding period of the previous year –

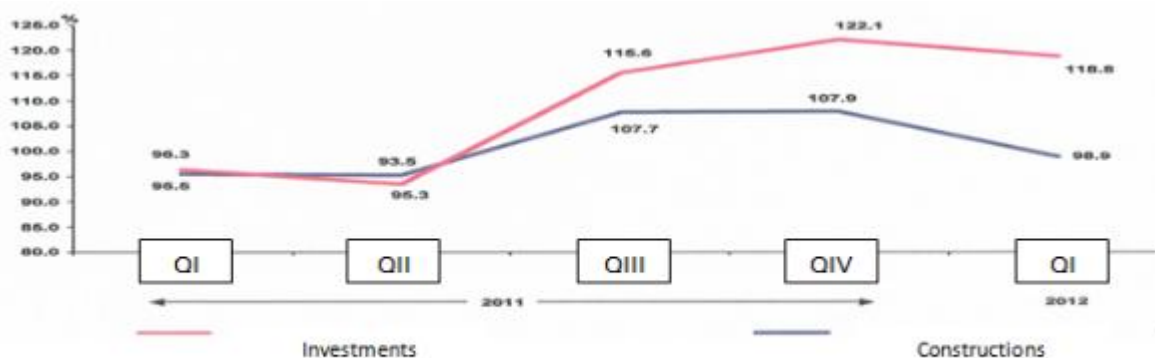
Index	1 st half of 2010	2 nd half of 2010	Total
Investments	71.9	90.2	81.3
New construction works	70.6	82.5	77.5
Equipment and vehicles	69.6	98.4	81.8
Other expenses ^{*)}	82.3	99.9	91.6

Data Source: The National Institute of Statistics

*) It includes expenditures for geological and drilling works, vineyards, orchards, reforestation, livestock purchases, purchasing household inventory items of fixed means type and so on.

4. Analysis of the Results Obtained in the Constructions Area

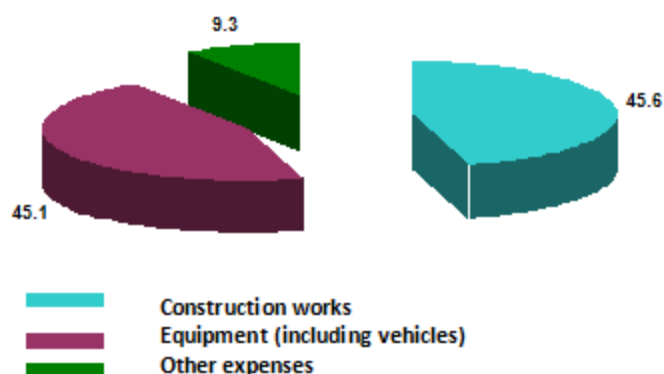
After 1990, the building activity was carried out in a gradual process by trade companies with private capital. Throughout this period between 1990 and the present, a compensation for the volume reduction of works to the state was made through the rapid pace at which the population constructed.



Data Source: The National Institute of Statistics

Figure no. 5. Indices of investments made and construction works (Anghelache, 2012, pp. 393)

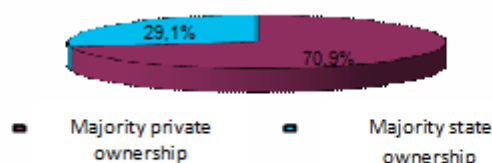
From the data published by the National Institute of Statistics it is found that, in 2011, the value of construction works increased in real numbers, compared to the corresponding period last year.



Data Source: *The National Institute of Statistics*

Figure no. 6. Investments made in the national economy by structure elements in 2012 (Anghelache, 2012, pp. 393)

The investment works made in 2011 manifested decreases compared to 2010. Declines were of -6.5% in the first quarter, 3.7% in the second quarter. The year 2011 showed a downward tendency of all expenses. In the period under review, investments in equipment and constructions were higher. The investments of private market operators with private capital and of the population represented in 2011, 70.9% out of the total (figure no. 7). The same structure was also maintained in 2012.



Data Source: *The National Institute of Statistics*

Figure no. 7. Investments made in the national economy by ownership forms and by structure elements in 2011 (Anghelache, 2012, pp. 395)

Total construction works by structure elements and types of construction have known oscillatory dynamics. Accelerated growth rates were also recorded in new construction works, general overhaul works, maintenance works and operating repair works. The data are shown in the following table.

Table no 4. Indices of construction works by structure elements and types of constructions (Anghelache, 2012, pp. 395-396)

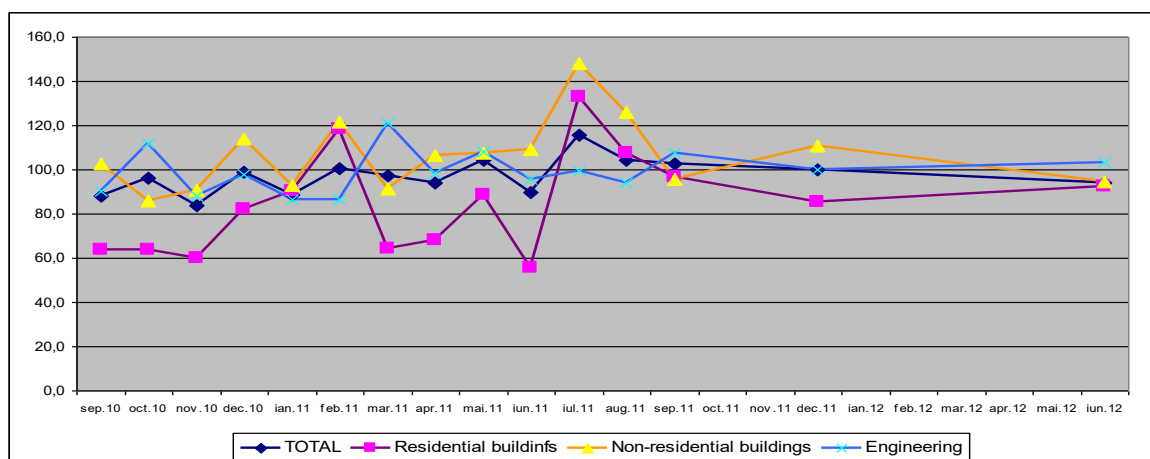
– Gross series –

Index	Corresponding month of the previous year = 100					
	2011			2012		
	June	Sep	Dec.	Jan	Mar	June ¹⁾
Construction works – total	90	104.2	101.8	103.1	100.6	99.2
out of total, by structure elements:						

Index	Corresponding month of the previous year = 100					
	2011			2012		
	June	Sep	Dec.	Jan	Mar	June ¹⁾
- new construction works	87.9	94.4	104.8	146.7	102.3	101.0
- general overhaul works	73.1	131.4	95.3	70.7	97.6	115.3
- maintenance and cooperating repair works	110	119.2	98.8	54.4	97.0	86.1
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- residential buildings	55.8	98.5	121.0	66.2	87.9	92.6
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- engineering constructions	95.8	108.7	102.5	112.2	106.4	103.2

¹⁾ Provisional data.

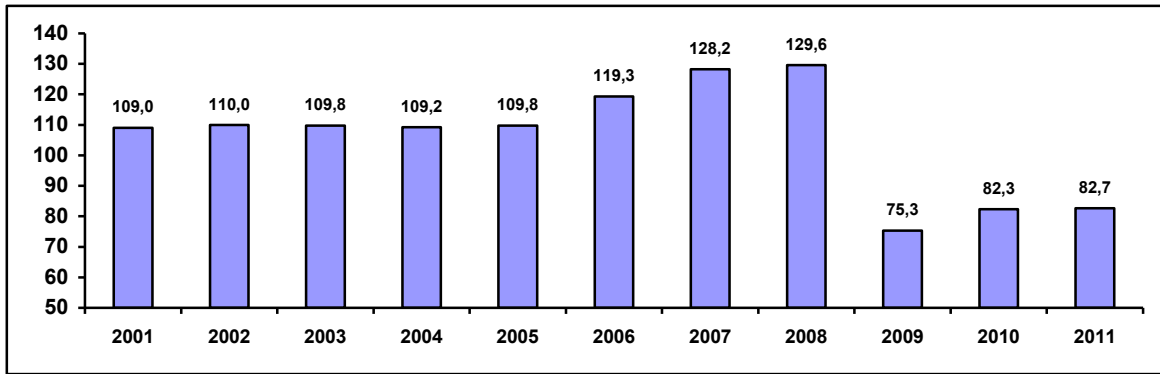
During 2010 - June 2012 a negative rate of making investments and construction works was recording throughout the entire period under review (figure no. 8).



Data Source: *The National Institute of Statistics*

Figure no. 8. The evolution of indices of the construction works by types of constructions during September 2010 – June 2012 (Anghelache, 2012, pp. 396)

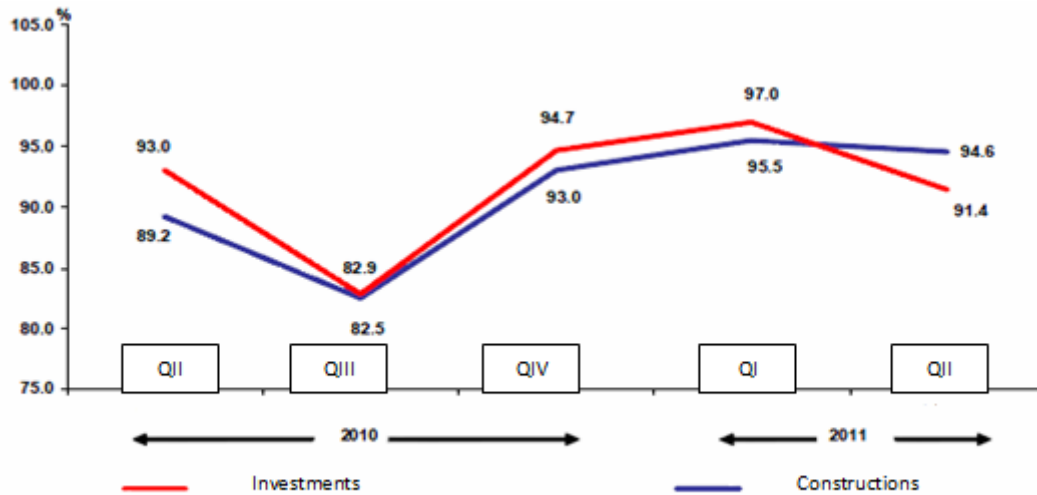
The dwellings made from budgetary subsidies continued to hold a tiny percentage and recorded a decrease compared to the same periods previously (figure no. 9).



Data Source: *The National Institute of Statistics*

Figure no. 9. The evolution of construction works 2001-2011 (Anghelache, 2012, pp. 397)

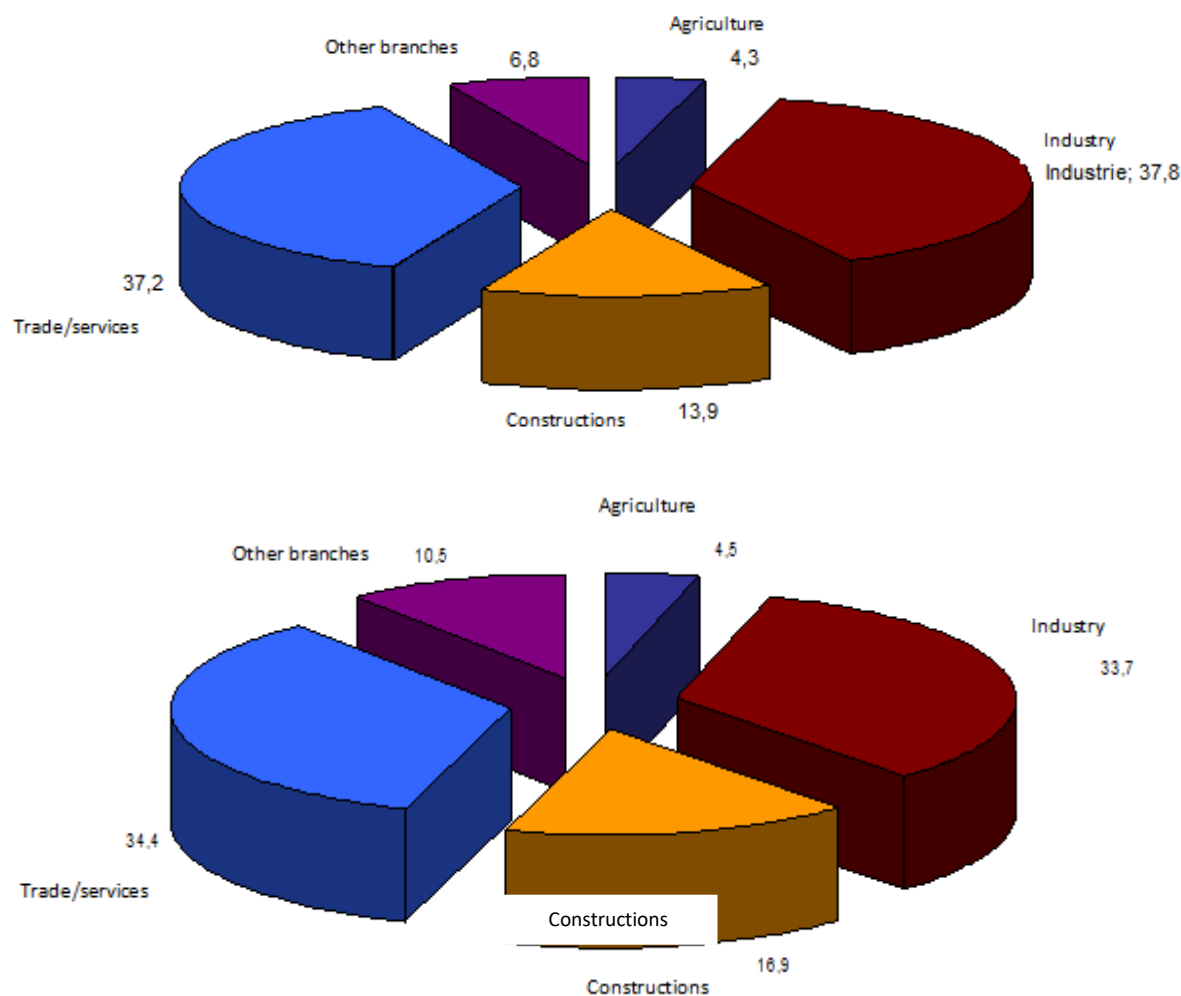
The effort of investing in the housing construction sector from private funds has been supported in a high proportion by private operators or population, by own construction works (figure no. 10). Most homes built and completed by the population by themselves can be located in rural areas.



Data Source: *The National Institute of Statistics*

Figure no. 10. Indices of investments made and construction works (Anghelache, 2012, pp. 397)

Some counties such as Bacău, Cluj, Ilfov, Suceava, Iași, Vrancea and Bucharest achieved better results. But there are also some counties (Caraș-Severin, Giurgiu or Alba) with lower results. The data presented show that in 2011 the number of constructions made in the private sector and the one of the population continued to decrease as a result of the crisis. The structure of constructions by the national economy branches in 2010 and 2011 are shown in figure no. 11.



Data Source: *The National Institute of Statistics*

Figure no. 11. Investments structure by branches of the national economy (%) in 2010 and 2011 (Anghelache, 2012, pp. 398)

5. Developments and Tendencies in the Constructions Area

The constructions market in Romania does not show major signs of recovery even in the near future. The evaluation possibilities of building material markets on medium term are difficult to assess, especially in the current situation of economic instability. Among the causes that have led to this situation are: the ever decreasing number of permits for new constructions, low demand for construction materials, price increases of raw materials and energy, extremely low level of available financing, economic instability and investors' lack of trust in the Romanian market. To this, also the downward tendency of the market that brings to the fore the price factor can also be added. For lack of information, many consumers are tricked into the "lowest price" and lose sight of the fact that, most times, quality is reflected in the cost. Consumers do not take into consideration the most important elements for sustainability, quality of buildings or comfort level, such as: product attributes and how to use it, energy performance, soundproofing or fire resistance, etc. Developing sustainable constructions means using quality materials correctly.

The tendencies on the Romanian constructions market regarding consumers are reflected in the orientation to modern constructive solutions, such as autoclaved aerated concrete, which offers superior benefits to the traditional materials and come packaged with

additional support services. Another tendency that has been felt on the Romanian market in recent years is the focus on energy efficiency. Thus, the market's maturation process brings along the orientation towards quality products. The interest in quality has increased, but accurate information is still needed in Romania.

6. Conclusions

The period 2001-2008 marked the stage of economic boom in the constructions area in Romania. Starting with the first half of 2009 this volume of constructions has started to decrease significantly, the building companies recording a very large amount of fixed expenses that are far more risky and far less flexible to the changes in the economic environment marked by the financial crisis. Constructions and particularly, the real estate sector are affected by the worsening of perception concerning risks, financial difficulties, doubling of liquidities risk with the one of solvency.

Profit and profitability ratio depend both on the amount of expenses and on the turnover level, recorded by the prices development. A recovery possibility for the building companies is the diminution of production costs based on the decrease of prices in building materials.

To revive the constructions area, investments are required or other measures meant to stimulate the constructions of houses (dwellings), which will have an amplifying effect of economic growth in Romania. Only by the increase of demand also the increase of workforce volume, implicitly of the turnover is possible. According to the privatization process's intensification it is expected that the building activity will be performed to the largest extent in the private sector and by the population with their own means. It is necessary to substantiate and put into application a program that envisages the support of investments in the constructions area, particularly for housing building. In this respect, by granting low interest credits, improving the mortgage credit conditions, strengthening the building companies and giving other forms of support must find their place with a long-term program that provides the accelerated solution of the need of homes for population. Unfortunately, the „First Home” program does not support the interested ones, since the social and particularly the economic development will be negative and represents a real risk for the population in need.

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