

Panzaru, Ciprian

**Article**

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# SOCIAL SECURITY IN ROMANIA AFTER EU ACCESSION. RISKS AND TRENDS

Ciprian Panzaru<sup>24</sup>

West University of Timisoara  
ciprian.panzaru@gmail.com

**Abstract:** *This article reflects the evolution of the social security system in Romania after accession to the European Union. Social security states its specificity as a basic concept that encompasses all the collective measures established by legislation to maintain individual or family income, to provide income when some or all sources have been lost or exhausted or in cases where the individual must cope with increased expenses. From this perspective, social security is a system that takes into account both the protection of able-bodied people (by the social insurance system) and of those who cannot work or are socially disadvantaged. For Romania, the social security system is currently profoundly affected due to the low ratio between the number of productive Romanian citizens, contributors to the public budget and social funds, and the beneficiaries of these funds. The study highlights this issue and focuses primarily on the effect produced on the social security component by the external labor migration, a phenomenon accentuated by Romania's EU accession. Basically, Romania has registered, according to Eurostat, only after 2007, more than 1 million migrants, most constituting the economically active population, the phenomenon having a major impact on the sustainability of the social security system.*

**Keywords:** social security, sustainability, migration, European integration, pension systems

**JEL Classification:** F22, H55

## INTRODUCTION

Social security is a means to protect its nationals by the State when faced with the risks induced by various social adversities. The development of an adequate social security system, the configuration and acceptance of a coherent legal and economic framework on this issue is an investment in “human infrastructure”, just as important as the investment in the physical infrastructure.

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Given mainly a role in preventing social risks, social security addresses very diverse areas, influencing their development strategy. Every person and every family needs protection from the risks and uncertainties resulting from everyday activities. When this need is not satisfied for the individual and his family, the released effects have significant negative implications on the individual's comfort, his motivation to work and especially on the sustainability and functionality of economic systems. From a conceptual standpoint, social security refers to both social insurance and social assistance. Social security includes: health insurance, maternity benefits, death grants, unemployment compensation, pension, insurance for work accidents and occupational diseases. In this format, the pension system is the largest sequence that composes the social security system. The main issue raised in most discussions concerning the characterization of pension systems has as leitmotiv the dichotomy between PAYG type systems and fully funded type systems.

Typically, the public pension system is founded on the idea of pay-as-you-go (PAYG), i.e. the current payment of pensions from contributions collected from the present income of the working population. On the other hand, there are private pension systems based on the accumulation and investment of individual savings, also called fully funded.

The existing pension systems differ considerably between countries mainly due to the specific historical path of each. For example, in countries with a significant social ideological and economic foundation, such as France and Germany, the PAYG type pension schemes are more present. In other countries, like Britain and the United States, with a liberal or neoliberal economic point of view, the emphasis is on fully funded type systems. These pension schemes can also work mixed. In fact, in most states, the main pillar for the funding of the pension provision consists of a public pension plan, mandatory, and completed by a private pension system, be it mandatory or optional.

## **1. CHARACTERISTICS OF THE SOCIAL SECURITY SYSTEM IN ROMANIA**

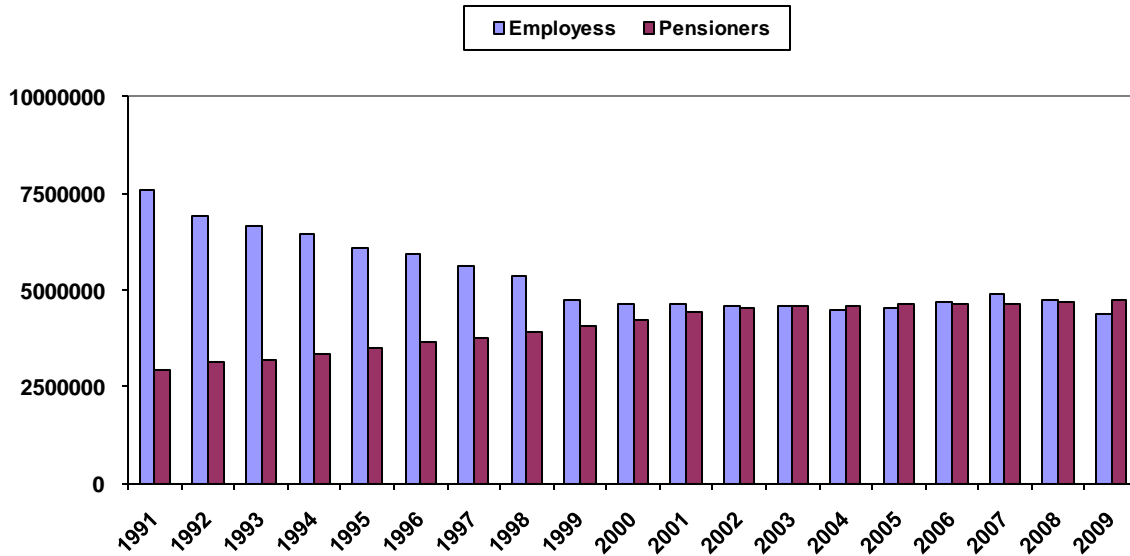
Currently, in Romania operates, as a basic formula, a public pension system of a redistributive type based on the solidarity between generations, i.e. a PAYG type system. It is also called Pillar I. To the public pension system contribute all employees plus any other taxpayers forced by law to pay the SSC (social security contributions). The social security contribution rates are approved by the state social insurance budget law. They are differentiated depending on working conditions: normal, particular and special. The amounts collected from the State Social Insurance Budget out of which

pension rights are paid come from contributions calculated in percentage rates of pay, as incurred, on the one hand, by the employer, and secondly, by the employee.

All contributors receive a pension right, but the link between the amount of contributions paid during the lifetime and the pension amount is not proportionate. All contributors accumulate a score according to the amounts paid, and the pension calculated is the result of the product between the number of points and the point value. A formula that is very relative, because the point value is determined politically and therefore subject to the country's political development and the economic and doctrinal orientation of those in power. This is one of the major flaws of the PAYG type public pension system operating now in Romania. Currently, to the public pension system contribute approximately 4.1 million employees which support about 4.7 million pensioners. The pension formulas applied in the post-socialist period hoping to solve the growing unemployment (including early retirement) have considerably increased the number of retirees. Thus, between 1990 and 2010, the number of pensioners increased by approximately 80%. The deeply unbalanced situation in which the pension system is, based on the principle of social solidarity, specific to PAYG, is reflected in the increased rate of dependency between the number of pensioners and number of employees and the upward direction in which it evolved between 1991 and 2010.

The ratio of employees and beneficiaries of state social insurance pension for the period 1991-2010 reflects the following situation:

**Figure 1 – The evolution of the employees and pensioners - Romania during 1991-2009**



Source: Romanian Statistical Yearbook 2009, pp. 136-137 and online database of the Ministry of Labor, Family and Social Protection, <http://www.mmuncii.ro/ro/statistici-55-view.html>

In addition to pensions paid from the state social security budget, in Romania works the pension system for farmers, different from the public system, not-contributory, which is supported which is supported by resources from the state budget and providing retirement benefits for about 760,000 former farm workers. Then there are the special pensions of former employees of the defense system, which had a special contribution scheme and we also mention other types of pensions such as those of diplomats, judges, parliamentarians, etc. Also in the case of the latter the contributions scheme had a special character.

A major challenge in terms of the reconfiguration of the pension system is the introduction of 2<sup>nd</sup> pillar, mandatory, of the fully funded type. In 2007, two pillars that match the private pension system were introduced: the 2<sup>nd</sup> pillar (regulated by Law 411/2004) and the 3<sup>rd</sup> pillar (regulated by Law 204/2006). The 2<sup>nd</sup> pillar is binding on all persons up to the age of 35. The contribution is voluntary for those between 35 and 45 years. The 2<sup>nd</sup> pillar represents the prefinanced component of the first pillar, a part of the social security system contributions, being mandatorily directed towards pension funds under private management. The contribution rate in the first year was 2% of the gross income, and will reach a maximum of 6% by the end of 2016. For 2011, the contribution rate related to the private pension funds is 3% (acc. to art. 17 paragraph [2] of Law no. 287/2010 on the state social insurance

budget in 2011). Regarding the state social insurance system, for 2010 the social insurance contribution rates were 31.3% (for normal working conditions), 36.3% (for particular working conditions) and 41.3% (for special working conditions). From this, the individual social security contribution rate is 10.5%, regardless of the working conditions. The evolution of the contribution rates for both employees and employers for the period 1991-2009 is shown in the table below:

**Figure 2 – Social insurance contribution rates paid by the employer and employee**

Year	Social insurance contribution rates paid by		
	Employer	Employee	Total
1991	20.00	3	23
1992	25.00	3	28
1993	25.00	3	28
1994	25.00	3	28
1995	25.00	3	28
1996	25.00	3	28
1997	25.00	3	28
1998	25.00	3	28
1999	30.00	5	35
2000	30.00	5	35
2001	23.33	11.67	35
2002	23.33	11.67	35
2003	24.5	9.5	34
2004	22	9.5	31.5
2005	22	9.5	31.5
2006	19.75	9.5	29.25
2007	19.75	9.5	29.25
2008	18	9.5	27.5
2009	20.8	10.5	31.3

Source: The Ministry of Labor, Family and Social Protection, <http://www.mmuncii.ro/pub/imagmanager /images/file /Statistica /Statistici %20lunare/Evolutia%20valorii%20cotelor%20de%20CAS%202011.pdf>

As noted, the individual social insurance contribution rate has evolved between 3% and 11.67% for normal working conditions.

## **2. THE RELATIONSHIP BETWEEN THE NUMBER OF CONTRIBUTORS AND PENSIONERS. THE SCENARIOS METHOD USING THE AVERAGE GROSS EARNINGS AND THE AVERAGE PENSION**

The calculation made in this approach is a scenario based on average amounts collected annually from individual contributions and employer contributions for normal working conditions, collections in relation to average gross annual earnings and annual average pensions. Particular and special working conditions have been disregarded, since these situations are less common.

The value of the contribution rate for each year for the period 1991 - 2009 has been taken as a benchmark according to the data from the Ministry of Labor, Solidarity and Social Protection. For the gross average earnings for each year of the period analyzed and the average monthly pension, the data supplied by the National Institute of Statistics. Regarding the amounts collected, depending on individual and employer contribution rates, having as base the average gross earnings for the period 1991-2009, the analysis revealed the following situation:

**Figure 3 – Number of employees, the average gross earnings, the total amount collected annually, based on average gross earnings**

<b>Year</b>	<b>Number of employees</b>	<b>Average gross earnings (\$)</b>	<b>Total collected/year (\$)</b>
1991	7,574,000	121.14	2,532,438,648
1992	6,888,000	82.48	1,908,938,976
1993	6,672,000	100.59	2,255,124,768
1994	6,438,000	111.61	2,414,369,964
1995	6,106,000	135.67	2,783,507,052
1996	5,939,000	138.23	2,758,470,252
1997	5,597,000	117.67	2,212,827,300
1998	5,369,000	148.58	2,680,273,044
1999	4,761,000	125.34	2,506,377,336
2000	4,623,000	130.94	2,542,497,792
2001	4,619,000	145.23	2,817,415,068
2002	4,568,000	160.96	2,896,665,360
2003	4,591,000	199.94	4,295,796,240
2004	4,469,000	250.75	4,235,791,800
2005	4,559,000	332.22	5,725,216,512
2006	4,667,000	407.97	6,660,249,288
2007	4,885,000	572.53	9,732,896,196
2008	4,738,600	699.11	11,528,630,592
2009	4,367,700	605.06	9,926,007,552

Source: The Romania National Institute of Statistics, Tempo-online, data series, www.ins.ro, FOM 107A matrix – The average nominal monthly gross earnings on activities in the national economy and author calculation

The same premise indicates the following situation of expenditure to support pensions, using as a basis for calculating the average pension level for the period 1991 to 2009:



**Figure 4 – Number of pensioners, the average pension, the amount spent for insurance of pension rights Romania during 1991 to 2010**

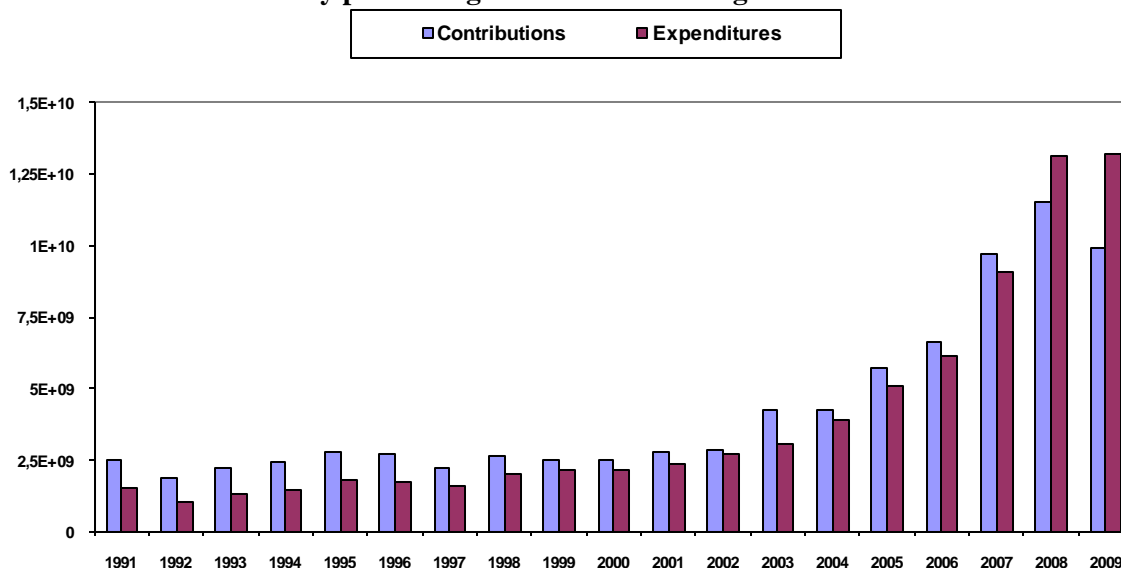
Year	Number of pensioners	Average pension (\$)	Amount spent (\$)
1991	2,941,000	44	1,550,990,532
1992	3,124,000	28	1,065,416,292
1993	3,174,000	36	1,352,625,156
1994	3,359,000	37	1,473,884,544
1995	3,519,000	42	1,790,649,984
1996	3,652,000	40	1,763,027,292
1997	3,782,000	36	1,614,225,360
1998	3,924,000	44	2,059,817,472
1999	4,074,000	44	2,135,667,756
2000	4,246,000	42	2,140,587,660
2001	4,426,000	45	2,385,326,448
2002	4,535,000	49	2,691,686,796
2003	4,570,000	56	3,089,543,544
2004	4,597,000	71	3,923,327,364
2005	4,611,000	92	5,070,406,704
2006	4,633,000	111	6,155,342,112
2007	4,643,000	164	9,117,288,276
2008	4,664,000	235	13,175,999,052
2009	4,718,000	233	13,201,054,668

Source: The Romania National Institute of Statistics, Tempo-Online, data series, [www.ins.ro](http://www.ins.ro), PNS102A matrix – The average monthly pension according to the retirement system, the Ministry of Labor, Family and Social Protection, <http://www.mmuncii.ro/ro/statistici-55-view.html> and author calculation

Thus, at an average pension of 233 dollars, with a total, in 2009, of 4.718 million pensioners benefiting from state social insurance, the effort for supporting them, taking as a basis for calculating the average pension, is 13,201,054,668 dollars. Since 2009 marked only 4,367,700 employees (i.e. contributors), which provide only 9,926,007,552 dollars in the form of social insurance, a major discrepancy between the amount required to cover the pensions and the amounts collected by the state social insurance system can be noticed.

The situation of this scenario, based on the amount of gross average earnings and average pension is reflected in the chart below:

**Figure 5 – The evolution of state social insurance contributions and expenditures to ensure state social security pension rights - Romania during 1991 - 2009**



Source: The Romania National Institute of Statistics, Tempo-Online, data series, www.ins.ro, PNS102A matrix – The average monthly pension according to the retirement system, FOM107A matrix – The average nominal monthly gross earnings on activities in the national economy and author calculation

### **3. IMPACT ON THE STATE SOCIAL INSURANCE BUDGET PRODUCED BY MIGRATION FROM ROMANIA TO THE EUROPEAN UNION**

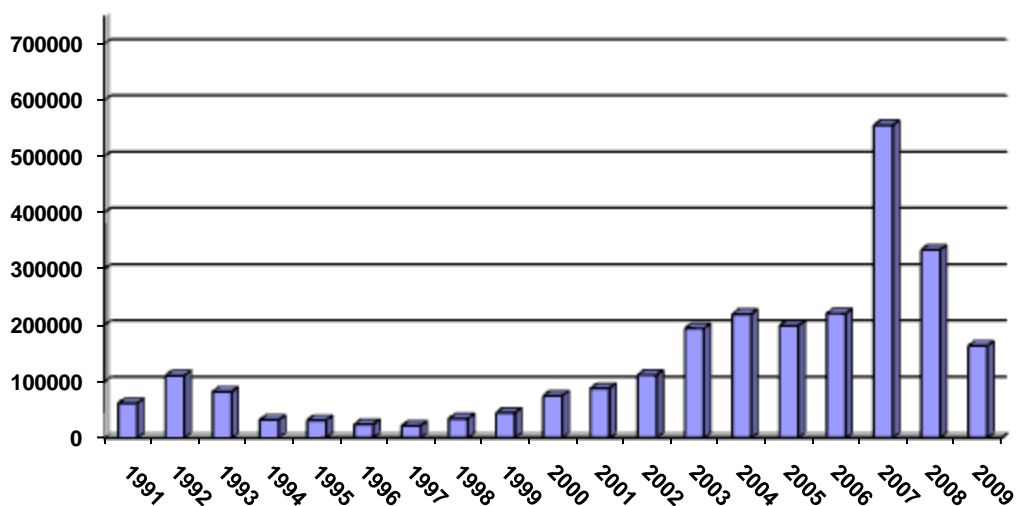
The phenomenon of globalization has generated substantial movements in the international area, among them being found in a significant proportion movement of persons, goods and capital. The geopolitical and social context created following the fall of the Berlin Wall significantly shaped the migration phenomenon, opening the possibility of movement of people mainly from Eastern Europe to Western Europe. Freedom of movement gained by the citizens of Central and Eastern Europe after 1989 has allowed them to turn to other countries including for searching for jobs. The phenomenon, somewhat timid at first because of the quite restrictive legislative conditionalities, accelerated once with the enlargement of the European Union and liberalization of the labor market for all its citizens. The continuous increase in the number of migrants allowed it to become an important phenomenon of the current social reality. Currently, virtually all countries are involved in the complex process of migration abroad, integrating in the general picture wither as countries of destination, either as countries of origin or transit, and this makes migration to be one with multiple facets: economic, social and political.

Research examines one of the major social risks induced by the decrease of contributors due to migration. The effect of this phenomenon is analyzed primarily through the impact on the social security system component, deeply unbalanced by the major asymmetry between the number of employees – thus of contributors – and the numbers of retirees. Article makes an analysis based on existing statistical data at the level of specialized institutions such as the UN Population Fund, the Ministry of Labor, Family and Social Protection, the National Institute of Statistics, Eurostat, OECD etc.

From a conceptual point of view, the meaning of the terms used in this study referring to migration is consistent with the general definitions established by the International Organization for Migration. Thus, the concept of migration refers to movement of a person or a group of people outside the community of residence, within a given reference period, in order to change domicile. From the perspective of this study, migration is treated as one of the factors with the greatest impact on the pension systems, the effects being obvious: lower share of contributions as a result of the reduction of the number of contributors. Given the PAYG scheme financing of these pension programs (pension system based on the principle of social solidarity, i.e. support by those who currently have an income of those who worked in the past), the tax burden is placed especially on employees and employers).

Research shows migration flows from Romania to the European Union. Data on migration flows for the period 1991 to 2009 (this being the last year for which there is data ) were extracted from the Eurostat. Where there were missing data, supplementing them was provided with data from Organization for Economic Co-operation and Development. The situation of departures from Romania to the European Union for the period 1991-2009 is shown in the chart below:

**Figure 6 – The migration phenomenon Romania during 1991 - 2009**



Source: Eurostat 2011 - [http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search\\_database](http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database), table on migr\_imm1ctz-Immigration by sex, age group and citizenship and OECD, International Migration Database, <http://stats.oecd.org/Index.aspx>

As seen from the data, consistent in the early 90s, migration falls on a downward route in the period 1993-1997. We can note that the maximum moment in terms of migration was achieved in 2007, therefore when Romania adhered to the European Union, which allowed for greater labor mobility. Thus, in 2007 the total number of emigrants from Romania to the European Union was 555,797 people. Based on the above data, the amount of state social contributions that would have been collected from those who emigrated during the period 1991-2009 was calculated. The analysis is only a scenario that assumes that all those who have emigrated are potentially economically active population. As such, due to lack of evidence enabling an accurate quantification of migration for work abroad, we have used data that reflect the total number of migrants (not only for work, but in general). In fact, a test applied in Spain and Italy, countries that have attracted the largest number of Romanian migrants for the period 2005 - 2009 (period for which Eurostat provides data also on the age of migrants, from which it can be deduced how many of the mass of migrants are potentially active population) shows that approximately 90% of the total migrants fall within the economically active population, aged between 15 and 65.

Thus, under the advanced scenario, if those who emigrated from Romania during 1991 - 2009 would have been contributors to the State Social Insurance Budget, the amounts with which they would have contributed, according to the contribution rate established for the advanced period and according to the average salary, would have been the following:

**Figure 7 – The number of Romanian emigrants in the EU, the average gross earnings and the total amount collected (according to the scenario)**

Year	The number of Romanian emigrants in the EU	The average gross earnings (\$)	Total/year \$
1991	61,414	121.14	20,533,550
1992	172,030	82.48	47,675,156
1993	254,059	100.59	85,867,471
1994	286,251	111.61	107,346,873
1995	317,567	135.67	144,763,298
1996	341,695	138.23	158,701,199
1997	363,052	117.67	143,540,305
1998	397,114	148.58	198,250,746
1999	441,500	125.34	232,417,962
2000	516,289	130.94	283,932,103
2001	604,245	145.23	368,568,906
2002	716,011	160.96	484,046,348
2003	910,453	199.94	742,706,769
2004	1,130,338	250.75	1,071,373,918
2005	1,329,529	332.22	1,669,611,350
2006	1,550,603	407.97	2,220,424,266
2007	2,106,400	572.53	4,232,979,944
2008	2,440,428	699.11	5,630,221,143
2009	2,604,208	605.06	5,918,337,059

Source: Eurostat - [http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search\\_database](http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/search_database), table on migr\_immlctz-Immigration by sex, age group and citizenship, OECD - <http://stats.oecd.org/Index.aspx>, The Romania National Institute of Statistics, Tempo-online, data series, [www.ins.ro](http://www.ins.ro), FOM107A matrix – The average nominal monthly gross earnings on activities in the national economy and author calculation

As shown in the table above, the hypothetical amounts that would have been collected from the mass of Romanian emigrants, where they would have been in Romania and would have been enrolled on the labor market are not at all insignificant.

## CONCLUSIONS

The logic course of such calculations was to highlight the extent to which social insurance contributions collected from those who emigrated from Romania, provided they would have acted in the capacity of contributors, would have redrawn the state social insurance budget. As such, we have aggregated the amounts collected from contributors registered in Romania to those which could have

been collected from Romanian emigrants. The figures, restored, would have looked in the following way:

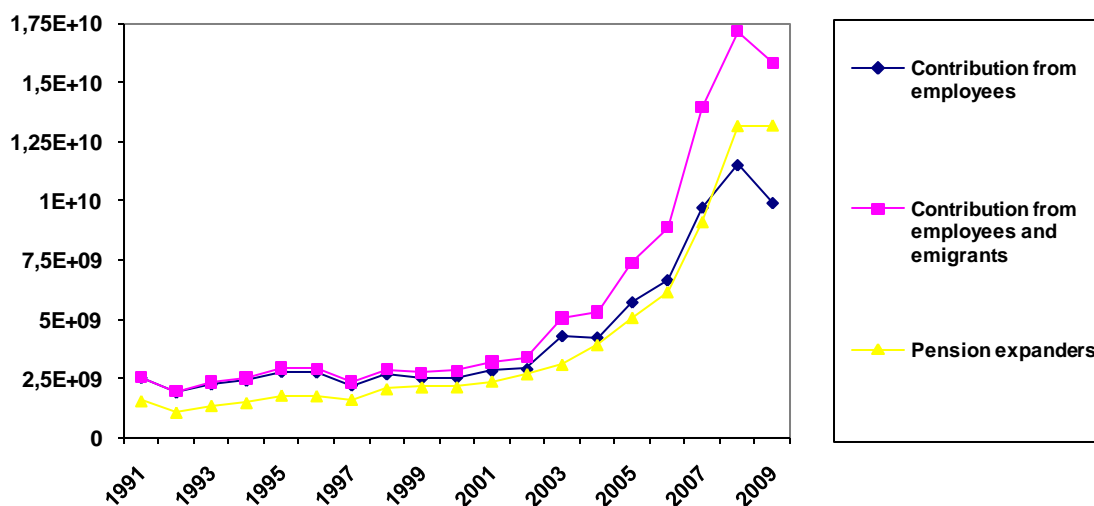
**Figure 8 – The migrants amounts, the employee amount and total amount collected**

<b>Migrant amounts \$</b>	<b>Employee amounts \$</b>	<b>Total amount collected \$</b>
20,533,550	2,532,438,648	2,552,972,198
47,675,156	1,908,938,976	1,956,614,132
85,867,471	2,255,124,768	2,340,992,239
107,346,873	2,414,369,964	2,521,716,837
144,763,298	2,783,507,052	2,928,270,350
158,701,199	2,758,470,252	2,917,171,451
143,540,305	2,212,827,300	2,356,367,605
198,250,746	2,680,273,044	2,878,523,790
232,417,962	2,506,377,336	2,738,795,298
283,932,103	2,542,497,792	2,826,429,895
368,568,906	2,817,415,068	3,185,983,974
484,046,348	2,896,665,360	3,380,711,708
742,706,769	4,295,796,240	5,038,503,009
1,071,373,918	4,235,791,800	5,307,165,718
1,669,611,350	5,725,216,512	7,394,827,862
2,220,424,266	6,660,249,288	8,880,673,554
4,232,979,944	9,732,896,196	13,965,876,140
5,630,221,143	11,528,630,592	17,158,851,735
5,918,337,059	9,926,007,552	15,844,344,611

Source: author calculation

The chart showing the amounts collected from taxpayers in the country, plus the amounts collected from them plus the hypothetical amounts collected, according to the scenario, from emigrants are as follows:

**Figure 9 – Evolution of the contribution from employees, pension expanders and total income from contribution from employees and emigrants**



Source: author calculation

Romania's accession to the European Union, in that it has created new opportunities for labor migration, heavily imbalanced the state social insurance budget. It is noted that the hypothetical contribution of these would have been more than sufficient to ensure the sustainability of the Romanian pension system. In fact, when the balance of income-expenditures is broken is when migration begins an upward trend (2002 - 2003) and accentuates once with Romania's accession to the European Union in 2007.

The scenario considered in this approach does nothing else, beyond the mathematical calculation, but to warn that the migration phenomenon, accentuated by Romania's EU accession, has significant implications on the social security component. The imbalance of social security system is closely linked to the economically active population trends. Calculations show that if state social insurance contributions would have been collected from absolutely all Romanian emigrants the state social insurance system in Romania would have been different. It should be recognized however that this scenario has a number of limitations mostly due to the fact that not all migrants are economically active population, on the other hand not all would have become employees, i.e. contributors, even if they would have stayed in Romania.

However, we can conclude that, concerning the impact of emigration on the state social insurance budget, this is a major cause of imbalances registered in the system. Also, we must point out that

migration has an impact on the entire social security system, not only in terms of social security but also in terms of social assistance. For example, in 25 to 35 years, those who work illegally or not at all (significant in number) will reach retirement age without being insured, and will burden the social assistance system, claiming from public money the minimum guaranteed income or other forms of social aid. At that time, the active age population (paying these costs through taxes and contributions to insurance funds) will be less numerous, which will significantly increase taxes (World Bank 2009).

Romania's accession to the European Union, produced in 2007, and the permanent process of integration, the gradual liberalization of the labor market for Romanian citizens will increase the dynamics of migration while at the same time will accentuate the imbalance on the social security component.

In 2008, the European labor commissioner Vladimir Spidla said that the "Hidden economy undermines the financing of social security systems, impedes the pursuit of coherent economic policies and could lead to social dumping". We might add that the phenomenon of migration, especially for countries that face a downward trend of the volume of economically active population can produce the same underfunding effect of social security systems.

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