# THE EFFECTS OF THE NONREIMBURSABLE FINANCIAL ASSISTANCE ON THE CITIES WITH LESS THAN 50.000 INHABITANTS FROM THE NORTH-EAST REGION OF ROMANIA

# Cristina CIOCOIU<sup>1</sup>, Victor MANOLE<sup>2</sup>

<sup>1</sup> PhD Candidate, Faculty of Agro-Food and Environmental Economics, The Bucharest University of Economic Studies, email: cris.ciocoiu@yahoo.com,

<sup>2</sup> PhD., Professor, Faculty of Agro-Food and Environmental Economics, The Bucharest University of Economic Studies, Str. Mihail Moxa 5-7, Sector 1, Bucharest, Romania, email: profmanolevictor@gmail.com

#### Abstract

The effects of the implementation of the programmes financed by the European Union (EU) for 2007-2013 have begun to take a clearer shape as the implementation period reaches its end. An accurate understanding of these effects could lead to a better identification and support of those regional development interventions with a significant impact on reducing the development gaps between Romania and the other member states of the European Union and on the improvement of the living conditions for the Romanian people in general. In this context, the paper presents the results of an analysis performed with regard to the connection between the projects implemented with EU assistance in cities with under 50.000 inhabitants from the Romanian North-East region and the attractiveness of these cities, measured in terms of the increase in number of individuals establishing a residence in the city and the decrease in the number of individuals no longer residing in a city. Two hypotheses are verified. With regard to the first hypothesis, the more the cities benefit from a larger financial assistance, regardless of the number or the typology of the projects on the basis of which this assistance has been granted, the more the attractiveness of the cities increases for their population. With regard to the second hypothesis, the attractiveness of the cities increases when the complexity of the interventions increases, independent from the amount of the financial nonreimbursable assistance.

### Keywords

regional development, complementarity, urban development, e-cohesion, nonreimbursable financial assistance

#### Introduction

The end of the year 2015 represents the end of the implementation period for the projects financed by the European Union within the 2007-2013 programmes. For Romania, these programmes have covered a wide range of interventions, from which have benefitted private companies (microenterprises, small, medium or large enterprises), nongovernmental organizations, authorities from the local and central administrations, etc. Regardless of the type of entity which managed the projects, the final recipient of all these interventions is, directly or indirectly, the Romanian population. The research presented in this paper focuses on the consequences of the projects implemented in the North-East Romanian region by the town halls and the city councils of cities of under 50.000 inhabitants on the attractiveness of the cities in question for their population.

The main programme within which the town halls and the city councils could benefit from the EU nonreimbursable assistance during 2007-2013 was the Regional Operational Programme. Its key areas of intervention supported significant investments in the urban,

social, local transport and health infrastructure, in promoting touristic products, etc. The local authorities could also access EU funds via other programmes. One of these programmes is the Operational Programme Administrative Capacity Development, which supported measures increasing the organizational efficiency, the introduction of systems of quality management and strategic planning. Another programme was the Sectoral Operational Programme Human Resources Development, which offered financial support for the implementation of prevention and correction measures against early school leaving and for initiatives for social economy development.

All these regional development interventions, regardless of their funding source, were meant to have beneficial effects on the population from the cities in which they were implemented. In our research, we focus on the effects of nonreimbursable assistance (including here both the contribution of the EU funds and the co-financing ensured from the state budget) on the attractiveness of the cities from Romanian North-East region. For our research and given the availability of information, the attractiveness of the cities was measured by means of 2 indicators, number of individuals that establish a residence in the city and number of individuals no longer residing in a city in a given year.

Two hypotheses were tested in the study. The first one states that the more the cities benefit from a larger financial assistance, regardless of the number or the typology of the projects on the basis of which this assistance has been granted, the more the attractiveness of the cities increases for their population. The second hypothesis states that the attractiveness of the cities increases when the complexity of the interventions increases, independent from the amount of the financial nonreimbursable assistance.

## 1. Literature review

The Ministry of Regional Development and Public Administration has recently elaborated and published the results of the impact evaluation of the area of intervention (KAI) 1.1 from the Regional Operational Programme. KAI 1.1 offered financial support towards the sustainable development of the cities from all the regions of Romania. One of the conclusions of this study was that programme beneficiaries perform better with regard to attractiveness than non-beneficiaries. The beneficiaries were defined as cities that implemented minimum 2 projects financed by KAI 1.1, covering 2 different types of interventions, which were finalized by November 2013 and the non-beneficiaries were defined as cites that did not implement any project financed by KAI 1.1 by November 2013. Attractiveness was measured by the living birth rate and the immigration rate. According to the study, this improved performance is also due to the implementation of KAI 1.1.

The research presented in this paper includes all projects financed by the 2007-2013 programmes, without limitation to a certain area of intervention or a certain programme. With regard to the means of measurement of the attractiveness of a city, the indicators that were used, namely number of residence establishing individuals in the city and number of persons that no longer reside in a city, were considered more relevant than birth rate and immigration rate as they reflect the desire of the population to permanently live or leave a certain city in response to the living conditions that the city is offering.

## 2. Methodology

The population on which the research was performed includes the cities from the North-East region of Romania which had fewer than 50.000 inhabitants in 2007, according to the data published by "National Institute of Statistics", presented in Table 1.

Table 1 Cities from the North-East region of Romania with under 50.000 inhabitants

County	Cities with a population between	Cities with less than 10.000	
	10.000 and 50.000 inhabitants	inhabitants	
Bacău	Buhuşi, Moineşti, Comăneşti, Dărmăneşti,	Slănic Moldova	
	Târgu Ocna		
Botoșani	Dorohoi, Flămânzi, Darabani	Săveni, Ștefănești, Bucecea	
Iași	Paşcani, Târgu Frumos, Hârlău, Podu		
	Iloaiei		
Neamţ	Tîrgu Neamţ	Roznov, Bicaz	
Suceava	Fălticeni, Rădăuți, Câmpulung	Cajvana, Broșteni, Frasin	
	Moldovenesc, Vatra Dornei, Dolhasca		
Vaslui	Huşi, Negreşti	Murgeni	

Source: Authors' adaptation of data from TEMPO online – population by residence at January 1st 2007

The first step taken was to identify the financing agreements signed by the town halls/local councils within all the operational programmes for the cities mentioned above, using the data distributed by the "Ministry of European Funds" (according to the list of projects contracted by August 31<sup>st</sup> 2015). The analysis of the data showed that such contracts were concluded within 3 programmes: the "Regional Operational Programme" (ROP), the "Operational Programme Administrative Capacity Development" (ACD OP) and the "Sectoral Operational Programme Human Resources Development" (SOP HRD), as reflected in Table 2:

Table 2 Number of financing contracts signed

Table 2 Number of financing contracts signed					
	City	No. of contracts ROP	No. of contracts ACD OP	No. of contracts SOP HRD	Total
Bacău County	Buhuşi	5	0	0	5
	Moinești	6	1	0	7
	Comănești	6	0	0	6
	Dărmănești	1	0	0	1
	Slănic Moldova	1	3	0	4
	Târgu Ocna	1	0	0	1
Botoșani County	Dorohoi	3	1	1	5
	Flămânzi	5	0	0	5
	Darabani	0	0	0	0
	Săveni	1	0	0	1
	Ştefăneşti	0	0	0	0
	Bucecea	0	0	0	0
Iași County	Pașcani	4	1	0	5
	Târgu Frumos	1	0	0	1
	Hârlău	0	0	3	3
	Podu Iloaiei	0	0	0	0
Neamţ County	Târgu Neamţ	2	0	0	2
	Roznov	0	0	0	0
	Bicaz	1	0	0	1
Suceava County	Fălticeni	4	0	0	4

	City	No. of contracts ROP	No. of contracts ACD OP	No. of contracts SOP HRD	Total
	Rădăuți	2	0	0	2
	Câmpulung	4	0	0	4
	Moldovenesc				
	Vatra Dornei	2	0	0	2
	Dolhasca	1	0	0	1
	Cajvana	0	0	0	0
	Broșteni	0	0	0	0
	Frasin	0	0	0	0
Vaslui County	Huşi	6	0	0	6
	Negrești	2	0	0	2
	Murgeni	0	0	0	0

Source: Authors' adaptation of data from lists of contracted projects by August 31st 2015 (www.fonduri-ue.ro)

Taking into account the fact that the effects of these projects become visible mainly after the end of their implementation, the next step in defining our sample of cities was to identify those projects that were finalized before the end of 2013. Identifying such projects was not an easy process. If in the case of OP ACD projects, the managing authority publishes on its webpage information regarding the date when each project is concluded, such information is not available for ROP and SOP HRD projects.

In the case of ROP, we used the information regarding the date when the financing contract was signed, the duration of implementation of the project and the status of implementation, issued by "North-East Regional Development Agency" (NE RDA) on the webpage dedicated to ROP 2007-2013. This information was correlated with the data regarding the status of the projects, issued by the managing authority (the "Ministry of Regional Development and Public Administration") and even with the webpages of the beneficiaries when the data were not in line with the lists of financing contracts published by "Ministry of European Funds". In the case SOP HRD, the status of the projects was used, as mentioned in the list of the contracted projects by 28.08.2015, issued by the managing authority, as none of the projects concerned were registered as finalized. The results are synthetized in Table 3.

Table 3 Cities from the Romanian North-East region with under 50.000 inhabitants with financing contracts finalized by 31.12.2013

Number of financing contracts	Cities		
1 financing contract (ROP)	Dorohoi, Săveni, Tîrgu Neamț Rădăuți, Vatra		
	Dornei, Dolhasca, Negrești		
At least 2 financing contracts, all financed by	Buhuşi, Slănic Moldova, Flămânzi, Fălticeni,		
the same programme (ROP/OP ACD)	Câmpulung Moldovenesc, Huși		
At least 2 financing contracts, financed by	Moinești, Pașcani		
different programmes (ROP and OP ACD)			

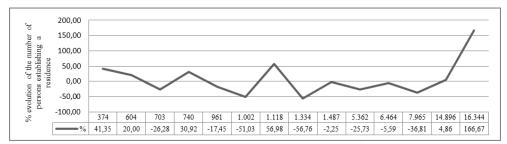
Source: Authors' adaptation of numbers made available by managing authorities and the NE RDA

Finally, information was collected for the 15 cities mentioned in the table above with regard to indicators concerning their general development between 2006-2014. For this purpose, we

used locality-level data, put out by the National Institute of Statistics. It is important to mention here the fact that such detailed statistical information is very scarce, most of the data being presented at the level of the county or the country. Moreover, where such detailed data exist, in certain cases the timeframe for which they are available is limited. For this research, we used as indicators number of residence establishing individuals in the city and number of individuals that no longer reside in a city during the 2006-2014 period.

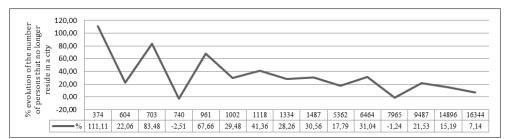
## 3. Results

Our first hypothesis was that there is positive correlation between the amount of the nonreimbursable financial assistance provided to a city, irrespective of its type or purpose, and the attractiveness of the city, measured in terms of the increase in number of residence establishing persons and the decrease in number of persons that no longer reside in a city. The correlation between the financial assistance and residence establishments in the selected cities is reflected in Fig. 1. In order to better reflect the evolution of the indicator, the value regarding the evolution of the indicator for one city, which presented an increase of over 900%, was excluded.



Source: Authors' adaptation of data published at www.fonduri-ue.ro and http://statistici.insse.ro/shop/?lang=ro

Fig. 1 The evolution of number of residence establishing individuals in a city between 2006 and 2014 in relation to the financial nonreimbursable assistance



Source: Authors' adaptation of data published at www.fonduri-ue.ro and http://statistici.insse.ro/shop/?lang=ro

Fig. 2 The evolution of number of individuals that no longer reside in a city between 2006 and 2014 in relation to the financial nonreimbursable assistance

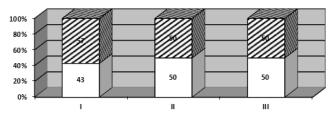
As reflected in the figure above, while the amount of financial assistance increased, from 374 thousand LEI to 16.344 thousand LEI, the evolution of number of residence establishing persons in the city did not follow an ascendant trend. Negative values were registered in the second half of the chart. A  $\rho$  Spearman correlation analysis established that there is no

significant correlation between the financial assistance and the number of residence establishments ( $\rho$  (15) = .113,  $\rho$  = .689).

A different situation was registered with regard to number of persons that no longer reside in a city, as presented in Figure 2.

While the financial assistance increases, the chart reflects a certain trend of decrease in number of individuals that no longer reside in a city. A  $\rho$  Spearman correlation analysis revealed that there is a moderate and significant correlation between the amount of financial assistance and the decrease in number of individuals that no longer reside in a city ( $\rho$  (15) = -.535, p =.040). Having in mind the outcomes of the analysis presented above, the first hypothesis can be partially confirmed, only with regard to the link between the nonreimbursable financial assistance and the decrease in individuals that no longer reside in a city.

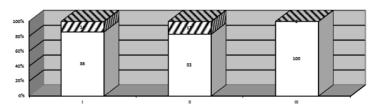
With regard to the second hypothesis, the evolution of the 2 indicators was analyzed separately for 3 groups of cities. Group 1 included cities that implemented just one project, financed by ROP. Group II included cities that implemented at least 2 projects, all financed by the same programme. Group III included cities that implemented at least 2 projects, financed by different programmes. For the first indicator, number of residence establishing individuals in a city, the results are presented in Figure 3.



□decrease □increase

Source: Authors' adaptation of data published at www.fonduri-ue.ro and http://statistici.insse.ro/shop/?lang=ro

Fig. 3 The evolution of number of individuals establishing a residence in a city between 2006 and 2014



**©** decrease □increase

Source: Authors' adaptation of data published at www.fonduri-ue.ro and http://statistici.insse.ro/shop/?lang=ro

Fig. 4 The evolution of number of persons that no longer reside in a city between 2006 and 2014

As can be seen in Figure 3, the cities in groups II and III that implemented more than one EU-funded project had a relatively better evolution than the cities in group I, which implemented only one project, 50% of them registering an increase in number of residence establishing persons between 2006 and 2014. We have to mention here that the best evolution of all the cities from all 3 groups was registered by the city that implemented most projects (4 financed by ROP and 1 financed by PO ACD).

As far as the second indicator is concerned, number of persons that no longer reside in a city, the situation is different, as shown in Figure 4.

As can be seen in Figure 4, the indicator did not decrease at all for the cities in group III, it decreased by 17% for the cities in group II and by 14% for the cities in group I, which means that there is no significant relation between the typology of interventions and the indicator in question. Taking into consideration the aspects mentioned above, the second hypothesis can be only partially confirmed, namely with regard to the relation between the typology of interventions for which EU assistance is granted and the increase in number of persons establishing a residence in a city.

#### Conclusions

Within the research presented in this paper, two hypotheses were tested regarding the relation between the implementation of EU-funded projects in cities from the Romanian North-East region with under 50.000 inhabitants, measured by the amount of the nonreimbursable assistance granted, the variety of interventions and the number of the projects, and the attractiveness of the cities where the projects were implemented. The attractiveness of the cities was measured by 2 indicators, namely the number of residence establishing persons and number of persons that no longer reside in a city. The first hypothesis tested was that there is a connection between the increase in the financial assistance granted and the increase in the attractiveness of the city receiving the assistance. The second hypothesis was that there is a connection between the typological variety of the financed interventions and the increase in the attractiveness of the city where these interventions are implemented.

The results obtained from analyzing the data partially confirmed the 2 tested hypotheses. As such, a significant negative correlation can be established between the amount of the financial assistance and number of individuals that no longer reside in a city. Moreover, the cities that implemented more than an EU-funded project evolved relatively better in terms of number of residence establishing individuals than those cities which implemented only one project. Taking into consideration the reduced number of cities in our sample and the fact that other factors such as the evolution of the overall population or of the real estate market could intervene and affect the evolution of the indicators, the results cannot be extrapolated to the other cities in Romania. In order to obtain a more complete and accurate image of the effects that the European funds have had on the evolution of the Romanian cities and to establish a potential complementarity effect among the different regional development interventions, the analysis should be performed again after the end of the implementation period of the 2007-2013 programmes on the entire database of finalized projects.

Our study has also highlighted a limited availability of statistical information detailed at the level of locality for the general public, which hampers the conduct of studies and detailed analyses. In some cases, even if the information was available for the necessary level of detail, it covered an insufficient period of time, for instance the data for years 2006-2009 was not available. This issue should be solved in order to have a better quantification and understanding of the effects that the European funds have on the cities of Romania.

Another important issue revealed by the research concerns the availability of data regarding the EU-funded projects for the public. In this respect, although the Ministry of European Funds, as coordinator of the authorities responsible for the management of EU-funded programmes, the managing authorities and the intermediate bodies make information regarding the projects that received financial assistance available to the general public on their websites, this information is not always updated (e.g. projects that are presented as in implementation on one webpage are presented as finalized on another webpage) or is not

complete (e.g. there are projects that are presented on a webpage but missing from another one, important data are missing such as the date when the project was finalized).

Bearing in mind that the 2014-2020 programming period introduces new requirements regarding both the gathering of data (i.e. the e-cohesion concept) and their release to the public, the volume and the accuracy of information available for studies and analyses should increase. The concept of e-cohesion, embedded by the EU regulations for 2014-2020, implies granting the beneficiaries of EU funds the right to communicate with the authorities involved in the control and management of a programme in electronic format only. The existence of a flow of information from and to the beneficiaries in real time will ensure a larger amount of information, easy to make available to the public. This information could contribute to an adequate understanding of the effects of the European funds, leading to a better identification and support of those regional development interventions that have a significant impact on reducing the gap between Romania and the other European member states and on the improvement of the living standards for the Romanian people in general.

#### References

- North-East Regional Development Agency, REGIO Projects North-East, http://www.proiecte.inforegionordest.ro/
- Managing Authority for OP ACD, List of OP ACD beneficiaries by 03.02.2015, http://www.fonduriadministratie.ro/wp-content/uploads/2015/02/Lista-Beneficiarilor-PODCA-la-data-03.02.20151.xlsx
- 3. Managing Authority for SOP HRD, List of contracted projects by 28.08.2015, http://old.fonduri-ue.ro/posdru/images/doc2015/contractate.28.08.2015.pdf
- 4. Institute of National Statistics, TEMPO online population by residence at January 1st, http://statistici.insse.ro/shop/index.jsp?page=tempo3&lang=ro&ind=POP107D
- 5. Institute of National Statistics, TEMPO online number of persons establishing a residence per counties and cities, http://statistici.insse.ro/shop/index.jsp?page=tempo3&lang=ro&ind=POP304B
- 6. Institute of National Statistics, TEMPO online number of persons that are no longer residents per counties and cities, http://statistici.insse.ro/shop/index.jsp?page=tempo3&lang=ro&ind=POP305B
- 7. Ministry of Development, Public Works and Housing, Regional Operational Programme 2007-2013, June 2007, http://www.inforegio.ro/images/regio2007-2013doc/POR\_august\_07.doc
- 8. Ministry of European Funds, Lists of contracted projects by August 31<sup>st</sup> 2015, http://www.fonduri-ue.ro/files/implementare-absorbtie/Lista.proiectelor.contractate-31.august.2015.rar
- 9. Ministry of Regional Development and Public Administration, View ROP projects, http://administratie.gisportal.ro/mdrap/
- SC ACZ CONSULTING SRL and associates, Impact Evaluation Report of Key Area of Intervention 1.1 Integrated urban development plans within the Regional Development Programme 2007-2013, March 2015, http://www.inforegio.ro/images/Ghiduri/Raport%20evaluare%20DMI%201%201%20-%2030.03.2015%20-%20RO\_f ara%20anexe.docx.