MODELS AND FUNDING SOURCES FOR ECONOMIC REVIVAL. CASE STUDY: SUCEAVA

Laurian Gabriel TĂNĂSESCU

Stefan cel Mare University of Suceava, Romania laur@euromg.ro

Abstract:

Economic development is a nonlinear process. Intense economic activity in a given region can be followed by periods of poor growth or even by decline in the economic activity.

Numerous and diverse factors affect the rate of economic growth of an area / region. Such factors are related to:

- ▶ global economic background (events and influences from abroad)
- > moves and decisions at EU level
- > events and decisions at national level (institutional decisions of national impact)
- regional or local influences
- ➤ European, national, regional and/or local priorities

Suceava is one of the least developed regions in Romania. Despite the fact that, as far as the population is concerned, the county tops among the first, in terms of living standard and economic activities Suceava is at the bottom of the ranking.

This analyse shows that there is a potential in terms of human resources available in the area. It is supposed that, in the case of a private employer, there is a balance between what the employees offer and the salary they get. Starting from this premise, it results that people in the area can offer value, and, if they get the chance, we can assume they will produce even higher value.

Key words: Economic revival; Economic grow; Regional Development; Public funds allocation;

JEL classification: C13, C81, E22, E61, H27, H50, H70, H72, O11, O21.

ECONOMIC REVIVAL. NEEDS AND APPROACH

I. FACTORS THAT AFFECT THE ECONOMIC DEVELOPMENT OF A REGION

Economic development is a nonlinear process. Intense economic activity in a given region can be followed by periods of poor growth or even by decline in the economic activity.

Numerous and diverse factors affect the rate of economic growth of an area / region. Such factors are related to:

- > global economic background (events and influences from abroad)
- > moves and decisions at EU level
- > events and decisions at national level (institutional decisions of national impact)
- regional or local influences
- European, national, regional and/or local priorities

On the other hand, we can clasify the factors with impact on the economic development of a region as follows:

political factors. Political decisions on resource allocation and spending, prioritization and consistency of actions have a major influence on the development of a region

the level of the regional economic development along with the economic model adopted are crucial for the economic growth of the region, for instance: the business infrastructure available, the availability of specialized producers or suppliers, the actors' ability to adapt to change, etc.

environmental factors (eg. smooth communication with neighbours, the extent of geographical isolation, including the natural resources available that can support or can be used for the development of the region)

social factors. We include here the social habits of the community (which may influence, for example, the adoption of new technologies, the labour efficiency, availability for certain skills), the capacity and willingness of the community to interact, communicate and collaborate with other similar or different communities, etc.

typology of human resources available - the level of education of the community members, types of skilled professions available, the ability to adapt education to change, the experience and availability of permanent vocational training of the existing workforce, etc.

technological factors. At one point, the emergence of new technologies may have a major impact on the pace of development in some regions. Inventing, adopting or rejecting new technologies can support economic development or restrain it.

II. THE NEED TO IDENTIFY SOLUTIONS FOR SUCEAVA'S ECONOMIC REVIVAL

General framework

A few years after December 1989, Romania faced some uncertainty with regard to its choice of a social and economic model. Thus, in the early 1990s, lots of theories went on public debates about models Romania was supposed to adopt. Such models were trying to include both the benefits of the Socialist/Communist system the country had just left behind and the advantages of the capitalist system and the market economy we wanted to embrace.

Before 1989 there were consistent public policies and a functional economic model, whose removal was not followed by the immediate implementation of a new one. Consequently, preservation or closure of economic activities were on on short-term facts, hard to identify and assess rathre than objective, clear, transparent factors (such as public policy decision or economic efficiency or available opportunities). Under the circumstances, the fate of the existing assets (both tangible and intangible assets such as brands, relationships and experience on certain markets, etc.) and their dynamics ran out of control and became unpredictable.

The political decision to join the European Union (formally adopted in February 1993 through signing the Association Agreement between Romania and the European Union and reinforced in June 1995 by the accession application to the European Union), but especially the decision to start accession negotiations (adopted by the European Council, in Helsinki, in December 1999) were crucial for choosind and defining the economic model Romania wanted to adopt. The start of EU accession negociations coincided with the beginning of the process of adapting Romania's legislation to EU regulations and adopting EU legislation as a whole.

The process of joining the European Union provided Romania with a new functional framework. However, the country lacked the material and human resources that could enforce it. The regional development policy is illustrative in this respect. The Regional Development and Cohesion Policy is one of the major European policies, similar only to the Common Agricultural Policy. Their importance is reflected by the the large budgets allocated (the highest scores of the total EU budget) as well as by their influence on other EU policies.

As far as Romania is concerned, one of the major tools for the implementation of the regional policy is the territorial division into regions of development. In the early 2000', based European criteria and expertise, Romania identified 8 development regions. For each region, institutions were established (Regional Development Agencies, Regional Committees for Strategic Evaluation and Correlation, etc.).

Unfortunately, more than 15 years after their establishment, most citizens and decision-makers still do not understand the meaning and importance of such institutions. Hence the 2012-2014 political debate concerning the change of Romania's regional divisions did not present any criteria that should define a region; relevant analyses of the current regional divisions that should justify the change based on the advantages and weaknesses of the current organisation along with alleged strenghts, weaknesses, and threats (a SWOT analysis) were not offered either. The debates have ended with no results, no conclusion while leaving the general impression that there was a problem (the current organisation), which is neither a priority, nor a concern to anyone.

Suceava and the rest of the country – a comparison

Suceava is part of the North - Eastern Region of Romania, with its Regional Development Agency in Piatra Neamţ. The region includes the counties of Bacău, Botoşani, Iaşi, Neamţ, Suceava and Vaslui. The main statistical information, accordinf to the National Institute of Statistics, 2017, is:

- Although the North-Eastern Region is home to most labour force 3,239,612 people (16.4 percent of the total of 19,644,350 people) in terms of its contribution to GDP, the region tops only 6th, with a contribution of RON 61,107.60 million, representing 10.24 percent of the total. (Table 1: Labour resources in regions and counties and Table 3: GDP by development regions and counties SEC 2010, calculated according to CANE Rev.2)
- As far as the labour force in Suceava County is concerned, there are 455,400 people, representing 3.25 percent of the national total (8th position among counties), but when we talk about their contribution to GDP, the county tops only 19, with a contribution of RON 10,954.70 million, representing only 1.84 percent of the total. (Table 1: Labor resources in regions and counties and Table 3: GDP by development regions and counties SEC 2010, calculated according to CANE Rev.2)
- ➤ The North-Eastern Region has the largest population compared to other development regions but it has also the lowest employment rate of only 49.6 percent (Table 2: Employment rate of labour resources by regions of development and counties)
- Suceava County is the eighth largest in Romania but has a 51.30 percent employment rate, which puts it on the 8th place, with only 7 counties with lower employment rates ahead. (Table 2: Employment rate of labour resources by development regions and counties)
- ➤ The migration of people may reflect the standard of living and the level of employment. Most people have left from the North Eastern Region (according to latest available statistical information) compared to other development regions; thus Suceava County ranks 7th in this respect with only 6 counties ahead. (Table 4: Balance of Residence Change by Environment, Development Regions and Counties)

- ➤ In 2013, out of a total school population in Romania of 3,650,933 people, Suceava County accounted for 131,793 people, which represented 3.6 percent of the total, so Suceava ranked 6th as compared to the other counties.
- ➤ In 2013, out of a total of 433,234 students in Romania, Suceava county accounted for 6,951 students, representing 1.6 percent of the total. Suceava ranked 14th as compared to the other counties. If we limit the analysis to students enrolled in the public education system, out of a total of 353,988 in Romania, there are 6,951 students in Suceava, that is 1,96% of the total, which tops Suceava on the 12th place. Noteworthy the analysis of the 11 counties reveals that none of them relies on a single university anymore, as most of them have much older university centres, all of them having several universities. Table 1 Number of students by counties. (Table 5 Number of students by counties)
- The situation in the North East Region and Suceava county does not look any better in terms of the monthly average net income either. Thus, the lowest monthly average net income was registered in the North-Eastern Region when compared to the rest of the regions (a monthly salary of RON 1,321 compared to the national average of RON 1,579 or the RON 2,265 the income seen in the Bucharest-Ilfov region or RON 1,492 income in Western Region)

Table 1: Labour Resources by regions and counties (year 2016)

Table	Table 1: Labour Resources by regions and counties (year 2016)				
No.	Development regions and counties	Labour resources (thousands of people)			
	TOTAL	13.997,90			
	REGIONS				
Α	NORTH-EAST Region	2.428,70			
В	SOUTH-MUNTENIA Region	2.068,80			
С	SOUTH-EAST Region	1.842,60			
D	NORTH-WEST Region	1.775,70			
Е	CENTRU Region	1.657,10			
F	BUCURESTI – ILFOV Region	1.530,40			
G	SOUTH-WEST OLTENIA Region	1.431,70			
Н	WEST Region	1.262,90			
	COUNTIES				
1	City of Bucharest	1.279,20			
2	Iași	572,30			
3	Prahova	524,20			
4	Constanta	491,10			
5	Bacău	470,00			
6	Cluj	462,60			
7	Timiş	461,80			
8	Suceava	455,40			

Table 2: Rate of employment of the labour resources by development regions and counties

No.	Development regions and counties	Year 2017 Unit: Percent
	REGIONS	
A	NORTH-EAST Region	49,60
В	SOUTH-MUNTENIA Region	54,50
C	SOUTH-EAST Region	56,50
D	NORTH-WEST Region	58,10
Е	CENTRU Region	66,90
F	BUCURESTI – ILFOV Region	82,10
G	SOUTH-WEST OLTENIA Region	62,80
Н	WEST Region	66,20
	COUNTIES	
1	Bacău	44,30
2	Galați	45,20
3	Vaslui	47,80
4	Giurgiu	49,60
5	Iași	49,90
6	Călărași	50,70

No.	Development regions and counties	Year 2017 Unit: Percent
7	Tulcea	51,00
8	Suceava	51,30
9	Neamţ	51,90
10	Brăila	53,10
11	Gorj	53,40
12	Botoșani	53,60

Table 3: GDP by development regions and counties - SEC 2010, calculated based on CAEN Rev.2

Nr. Crt.	Development regions and counties	Year 2017 Unit: Millions RON
	TOTAL	712.658,50
	REGIONS	
Α	Bucuresti – Ilfov Region	197.788,40
В	South – Muntenia Region	86.647,20
C	North-East Region	81.669,40
D	Centru Region	78.814,50
Е	South-East Region	76.184,30
F	North – East Region	71.470,30
G	West Region	67.446,50
Н	South -West – Oltenia Region	52.067,70
	COUNTIES	
1	Municipiul Bucuresti	178.659,00
2	Timis	33.611,00
3	Constanta	32.782,90
4	Cluj	31.178,20
5	Prahova	28.086,30
6	Brasov	23.442,60
7	Iasi	21.755,50
8	Ilfov	19.129,40
9	Arges	19.079,00
10	Dolj	17.230,80
11	Bihor	16.218,90
12	Mures	15.595,10
13	Sibiu	15.527,80
14	Arad	15.321,70
15	Bacau	14.001,00
16	Suceava	12.771,00

Table 4: Residential changes by medium, development regions and counties

No.	Development regions and counties	Year 2017 Unit: Number of people
	REGION	
Α	NORTH-EAST Region	-5.546,00
В	SOUTH-MUNTENIA Region	-1.673,00
C	SOUTH-EAST Region	-802,00
D	NORTH-WEST Region	-799,00
E	SOUTH-WEST OLTENIA Region	-753,00
F	CENTRU Region	92,00
G	WEST Region	2.494,00
Н	BUCURESTI – ILFOV Region	6.987,00
COUNTY		
1	Hunedoara	-2.283,00
2	Iași	-1.836,00

3	Vaslui	-1.567,00
4	Galați	-1.327,00
5	Teleorman	-1.236,00
6	Maramureș	-898,00
7	Suceava	-732,00

Table 5: Number of students by county

Table 5. Number of students by county				
No.	COUNTY	Number of students – public education system	Percentage	Number of universities in the county
	TOTAL	353.988		103
1	City of Bucharest	88.141	24,90%	33
2	Cluj	46.482	13,13%	10
3	Iași	41.120	11,62%	10
4	Timiș	28.993	8,19%	8
5	Constanta	18.815	5,32%	5
6	Dolj	16.802	4,75%	3
7	Brașov	15.530	4,39%	3
8	Sibiu	12.194	3,44%	4
9	Bihor	11.885	3,36%	4
10	Galați	9.773	2,76%	2
11	Mureș	8.246	2,33%	4
12	Suceava	6.951	1,96%	1

FUNDING SOURCES AVAILABLE FOR THE ECONOMIC REVIVAL OF THE REGION

III. PUBLIC INVESTMENT

Public investment is one of the main sources that supports the development of a region. Such investments may include large infrastructure projects (highways, railways, airports), various investment projects of local or regional interest (county roads, water supply and sewerage networks, etc.) or other local projects, which are expected to use and support available or potential local resources.

It is difficult to analyze the availability of such resources in a given geographic region. To do so, first of all, any public spending should have a budget record, allocated to the region where it can have the strongest impact. However, such information is not available when speaking about public funds spent in Romania. And more, in case such information exists, it should be available as open data. Still few states make such information available to the public in this way, and Romania is not among them, unfortunately.

Under the circumstances, the analysis of the public procurement carried out by the institutions in the region remains the only indirect method of estimating the budget allocations with an impact in a given geographic region. However, if we use such a method, we need to consider the following limitations:

Legislation on public procurement has limited application (from 2006 to 2016 it was based on Government Emergency Ordinance No 34 of 19 April 2006 on awarding public procurement contracts, public works concession contracts and service concession contracts, with later additions and changes; since 2016 the public procurement has been regulated by Law 98/2016 on public procurement, Law No. 99/2016 on sectoral acquisitions, Law No. 100/2016 on concessions of works and services, Law No. 101/2016 on remedies and ways of challenging the award of public procurement contracts, sectoral contracts and concession contracts of works and services as well as the way of organising and allowing the activity of the National Council for Solving Complaints). For example, it does not apply to the purchase of goods and services for a certain purpose if they do not exceed a certain threshold (currently the threshhold is RON 132.000).

Depending on the value of the acquisition, the law provides various procedures (requests for offers, bids, solution contests, etc.). Strucutre information is not available for all the procedures.

In terms of importance (according to values, percentage of total procurement, impact, etc.), the (open or restricetd) auction remains the most important procurement procedure. Structured information in available in such cases.

According to the law, procurement procedures are carried out through the National Electronic System for Public Procurement - www.e-licitatie.ro -. However, the system does not provide advanced tools for the analysis of the procedures; the smooth access to structured information is not granted either. A pay service offers access to structured information, based on a subscription, which means a steady activity and advanced technical knowledge. Therefore, for our analysis we could not use raw data; instead we had to use the information available on Romanian Government

Open Data Portal, http://opendata.gov.ro., which may lead to additional alterations of the information available, However, our assessments have revealed no major alterations.

Some public procurement is not carried out through the Electronic Public Procurement System. Such cases involve purchases included in World Bank's co-financing projects, which are carried out exclusively through World Bank's accredited system, www.dgmarket.com.

The analysis based on the residence of the Contracting Authority (the institution organising the public procurement procedure) does not necessarily indicate the place impacted by the respective funds. On one hand, there are procedures organised by local institutions aimed at implementing projects in another location (for example, central institutions such as the National Highways and Roads Company, which organises procurement procedures at a national level). On the other hand, a procedure organised in a community which is the end beneficiary of that project, doe not necessarily trigger an economic impact on that particular community. For example, in most cases of goods' purchase, the amount spent has the strongest impact on the producer who may be located in another city or even country

The purpose of the analysis is to assess the extent, trends, and understand phenomena as exact figures are not relevant. Thus, we believe that an analysis of the procurement procedures carried out from 2007 to 2017 is relevant.

In order to eliminate failed procedures and exclude errors due to wrong assessment of procurement's value by the Contracting Authority, we conducted an analysis using the information available in the award notice. According to existing regulations at the end of any procedure carried out through the Electronic Procurement System, the Contracting Authority (the body organising the procurement procedure) has to publish an award notice within 45 days after the awarding procedure. The announcement includes information about the signed contract including its value and the winning bidder. Unfortunately, information on the bidder is not structured (it is not available in a tabular format designed to isolate and identify the bidder's name of any other information about them; all information is available in a non-standard text and the Contracting Authority fills in the date with no respect for validation and correction rules).

At a national level, between 2007-2017, the National Electronic Public Procurement system published a total of award notices as follows:

Table 6: The value of the procurement procedures finalized with an award notice (at a national level):

16 (61)				
		Value of pr	cocurement	
Year	Number of announcements	RON	EURO	USD
2007	72.832	22.336.581.222	9.388.525.355	6.776.468.749
2008	240.801	53.349.954.121	21.711.319.087	14.797.884.460
2009	539.033	52.094.708.104	17.646.691.247	12.636.761.547
2010	910.964	48.979.455.920	15.722.680.267	11.634.398.876
2011	1.086.083	69.487.652.412	22.805.883.840	16.394.187.130
2012	1.163.953	71.912.150.234	21.033.738.315	16.260.930.465
2013	1.206.280	72.311.312.479	21.665.983.145	16.370.527.311
2014	1.406.998	85.625.218.318	25.140.700.394	19.278.379.879
2015	1.602.236	94.602.918.778	24.023.117.811	21.288.855.494
2016	2.507.882	49.546.451.674	12.228.428.253	11.035.775.008
2017	4.105.581	75.358.828.519	16.478.916.179	18.799.477.338

Using the average exchange rate published by the National Bank of Romania for the date of awarding the contract while summing up the acquisitions in RON, EURO and USD, we get the following total annual value of the acquisitions with a final award notice:

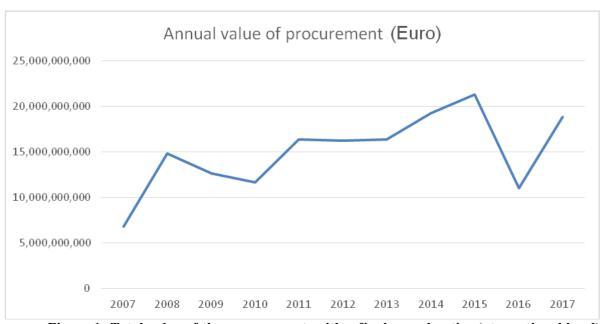


Figure 1: Total value of the procurement with a final award notice (at a national level)

One can notice that, except for the start-up year (2007), total values ranged between 10 and 20 billion euro annually; only in 2015 the amount exceeded 20 billion, while a special situation is noticeable in 2017 when the number of award notices increased by 250 percent compared to 2015. But the total value of awarded contracts represents only 88 percent of 2015 figures. The situation may be explained as follows:

- 2015 was the last year when beneficiaries from EU projects funded by 2007-2013 budget could make payments. Under the cirumstances, the procurement procedures and project implementation had to be carried at a high pace
- Throughout the year 2017, the new public procurement legislation was enacted; the law stipulated that procurement procedures (direct ones included) had to be carried out through SEAP. This provision led to a major increase of procedures carried out electronically, though without significant impact on the value of all contracts awarded.

A similar analysis in Suceava county reveals that:

Table 7: Value of public procurement procedures with a final award notice in Suceava county

		Procurement v	alue	
Year	Number of announcements	RON	EURO	USD
2007	909	217.659.835	66.087.970	91.144.361
2008	4.232	407.164.884	113.521.264	166.187.059
2009	12.939	586.089.939	142.091.667	201.273.222
2010	23.491	1.141.217.527	268.427.796	378.403.813
2011	26.487	592.106.484	140.537.208	196.620.710
2012	30.568	529.144.904	118.417.077	151.680.057
2013	29.556	999.109.989	225.738.377	298.723.258
2014	32.105	497.830.967	112.480.519	150.531.138
2015	34.794	965.144.111	217.429.335	245.669.317
2016	74.016	423.941.349	94.454.510	104.462.065
2017	234.595	1.253.472.015	275.849.069	310.949.020

Using the daily exchange rates published by the National Bank of Romania for the day when the contract was awarded, we get the following dynamics:

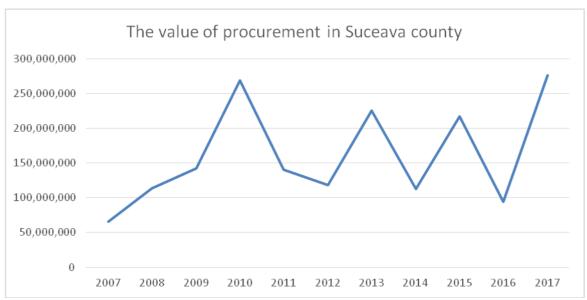


Figure 2: Total value of procurement procedures with a final award notice in Suceava county

We note that the dynamics of the acquisitions in Suceava county differs from the national dynamics. To our surprise, in 2011, 2012 and 2014, Suceava county recorded a 42 percent decline in procurement compared to the peak year of 2010 while nationally, an increase by 166 percent was recorded in the same period.

This discrepancy between the national trend and the situation in Suceava county deserves an analysis of the two data sets.

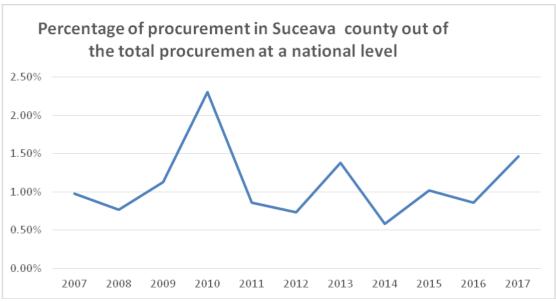


Figure 3: The percentage of procurement in Suceava county out of the total procurement at a national level

In terms the procurement purpose, as expected, both nationally and locally, the highest values are related to procurement procedures for contruction works.

Table 8: Value of award notices published by contracting authorities in Suceava county per CPV codes

No.	Procurement CPV Code	Number of notices	Value of the notices published (Lei)
1.	Road construction.	872	3.027.199.074
2.	Gas pipes construction.	227	2.408.699.348
3.	Roadworks.	653	2.170.810.164
4.	Antineoplastic agents	3670	1.752.276.128
5.	Antineoplastic agents and immunomodulators.	2523	1.602.714.547

6.	Pharmaceuticals.	36395	1.535.190.660
7.	Electricity.	1982	1.479.856.182
8.	Various medicine.	42556	1.324.816.562
9.	Green space planning and maintenance.	812	966.503.950
10.	General maintenance and refurbishing.	7149	913.534.206

The analysis of the Award notices may reveal some useful information regarding the the Contracting Authorities which have carried out the most important (in terms of value) procurement procedures. Such an analysis reveals the potential vectors of community development, the institutions that can - directly or indirectly - support the development projects.

Astfel, la nivelul Județului Suceava în perioada analizată cele mai importante Autorități Contractante sunt: Thus, in Suceava county, during the period under scrutiny, the most important Contracting Authorities are:

Table 9: Value of award notices published by the most important contracting authorities (in terms of procurement value) in Suceava county

No	Contracting Authority	Number of notices	Value of the notices published (Lei)
1.	ACET S.A. Suceava	523	827.444.427
2.	SUCEAVA COUNTY COUNCIL	1.637	731.673.477
3.	"SFANTUL IOAN CEL NOU" EMERGENCY COUNTY HOSPITAL SUCEAVA	19.940	659.557.697
4.	the CITY HALL - Campulung Moldovenesc	2.667	582.678.009
5.	Municipality of SUCEAVA	6.069	509.495.956
6.	Road and Bridge County Directorate, Suceava	585	469.103.999
7.	MUNICIPAL HOSPITAL in CAMPULUNG MOLDOVENESC	14.925	233.486.440
8.	"Stefan cel Mare" University, Suceava	9.560	155.385.276
9.	"Stefan cel Mare" Airport, a Public Company, Suceava	894	138.860.087
10.	Municipality of Fălticeni	2.343	109.469.719

IV. STATE AID GRANTED FROM THE NATIONAL BUDGET

Following the EU accession, Romania can grant benefits to commercial companies only within limits set by the Treaty (By benefits we understand financing or preferential access to certain facilities). Thus, almost any such benefit has to be notified and approved by the European Commission or the national competent authorities and should not disturb the Single Market of the European Union.

Recently Romania has not implemented many state aid schemes financed exclusively from national funds. Most aid granted to companies was directed towards a particular company or industry.

One of the notable exceptions (for which public information on expected impact is available) is the scheme announced by the Romanian Government and regulated by GD 979/2012. This scheme finances the creation of new jobs by covering part of the taxes and fees paid by beneficiary companies. The list of projects selected for funding is presented in the following table.

Table 10: List of projects approved for funding within the state aid scheme adopted by GD 979 / 2012

No.	Company	Sector of activity / Investement project	Location of the investment project	Value of the approved state aid (mil. Euro)	Estimated no. of new jobs
1	SC ENDAVA ROMÂNIA SRL	Services in information technology / Creation of the soft on demand / "Regional development ă Endava 1000+" extention	Bucharest, Municipality of Bucharest Iași, county Iași Cluj, county Cluj-Napoca	9,50	500

No.	Company	Sector of activity / Investement project	Location of the investment project	Value of the approved state aid (mil. Euro)	Estimated no. of new jobs
2	SC IBM ROMÂNIA SRL	Services in information technology / "Enlarging the activity of IBM ROMÂNIA by means of an initial investment for purchasing equipment and creating new jobs" extention	Bucharest, Municipality, Bucharest Braşov, county Braşov	21,00	900
3	SC TELECOM GLOBAL SERVICES CENTER SRL (ORANGE)	Services in information technology / "Umanis" greenfield	Bucharest Municipality Bucharest	3,44	220
4	S.C. SCC SERVICES ROMÂNIA S.R.L.	Services in information technology / "Extending and diversifying the activity of SC SCC SERVICES ROMÂNIA by means of an initial investment for purchasing equipment and creating new jobs" extention	• Bacău, county Bacău	3,87	376
5	SC DELL INTERNATIONAL SERVICES S.R.L.	Services in information technology/"Extending and diversifying the current activity by investing in new technologies and creating new jobs" extention	București, Municipality București	8,43	455
6	SC MICROSOFT ROMÂNIA S.R.L.	Services in information technology / "Enllarging and siversifying the Client and Partner Support and Services Department of Microsoft România SRL" extention, diversification	Bucharest, Municipality Bucharest Timişoara, Timiş county,	5,06	200
7	SC DB GLOBAL TECHNOLOGY S.R.L.	Services in information technology / "Deutsche Bank AG Technology Centre for Eastern Europe" greenfield	• Bucharest, Municipality of Bucharest	15,69	500
8	SC LUXOFT PROFESSIONAL ROMÂNIA S.R.L.	Services in information technology / "Extending Luxoft capacity to develop IT products and services" extention	• Bucharest, Municipality of Bucharest	4,40	250

No.	Company	Sector of activity / Investement project	Location of the investment project	Value of the approved state aid (mil. Euro)	Estimated no. of new jobs
9	SC PENTALOG ROMÂNIA S.R.L.	Services in information technology / "Expanding the activity of S.C. PENTALOG ROMÂNIA S.R.L." extention	Bucharest, Municipality of Bucharest Braşov, Braşov county Iaşi, Iaşi county Cluj-Napoca, Cluj county	5,79	230
10	SC SIEMENS SRL	Research - development in other natural sciences and engineering/ "Extending the research - development capacity of SC SIEMENS SRL" extention	•Bucharest, Municipality of Bucharest • Braşov, Braşov county	5,41	220
11	SC NESS ROMÂNIA S.R.L.	Services in information technology/ "Expanding the Development Centre in Iaşi and creating 200 jobs at în SC NESS ROMÂNIA S.R.L." extention	• Iași, Iași county	5,43	200
12	SC ATOS IT SOLUTIONS AND SERVICES SRL	Services in information technology /"Expanding the Development Centre in Iaşi and creating 200 jobs at în SC NESS ROMÂNIA S.R.L." extention"extindere	• Timisoara, Timiş county • Braşov, Braşov county	6,03	350
13	SC ACCESA IT SYSTEMS SRL	Services in information technology/ "Creating a new department for software development, which results in new jobs in Cluj-Napoca" greenfield	Cluj – Napoca, Cluj county	5,38	215
14	SC VODAFONE TECHNOLOGIES ROMANIA SRL	Services in information technology/ "Expanding the activity of SC VODAFONE ROMÂNIA TECHNOLOGIES SRL by an initial investment for equipment purchase and for creating new jobs" extention	Voluntari, Ilfov county	8,19	450
15	SC EMAG IT RESEARCH S.R.L.	Services in information technology / "EMAG IT RESEARCH SRL Software Development Centre " greenfield	Voluntari, Județul Ilfov	6,65	203

No.	Company	Sector of activity / Investement project	Location of the investment project	Value of the approved state aid (mil. Euro)	Estimated no. of new jobs
16	SC COMPUTER GENERATED SOLUTIONS ROMÂNIA SRL	Services in information technology / "Developing the capacity of Computer Generated Solutions România SRL by expanding the technical support unit tehnic" extention	Bucharest, Municipality of Bucharest Sibiu, Sibiu county Târgu Jiu, Gorj county	3,69	300
17	SC TEAMNET BUSINESS SERVICES	Services in information technology / "Expanding the software development activity of Teamnet in Central and Eastern Europe" extention	• Bucharest, Municipality of Bucharest	7,60	300
18	SC SAP ROMÂNIA S.R.L.	Services in information technology / "Expanding SAP Near Shore Center România" extention	Bucharest, Municipality of Bucharest Timişoara, Timiş county Cluj – Napoca, Cluj county	8,7	255
Total	l :	1	1 9 • • • • • • • • • • • • • • • • •	134,26	6.124

Source: The Site of the Ministry of Public Finances, www.mfinante.ro

The analysis of the list shows that most of the major competitors on the international ICT market have decided to expand their service centers in Romania or start new centers. These service centers also have an impact on the local economy i several ways:

- Such centres follow very strict standards and procedures, which sets an example (with its good and bad parts) for the local companies. They can learn from multinationals and identify what differentiates them from the biog companies!!!
- > Such centers need services and goods provided by local companies (from real estate and building management to communications services, technical assistance for complementary activities, etc).
- Such companies conduct training programmes, which has an impact on the labour force. Part of that work force will get to work in local companies, start local businesses, etc.

Unfortunately, most of new jobs are created in Bucharest, Braşov, Cluj and Iaş, that is in places with an already adequate infrastructure, university centers expected to provide skilled and qualified work force. None of such projects targets Suceava.

V. FINANCING FROM STRUCTURAL AND COHESION FUNDS

Number of projects approved for financing

Public information provided by the authorities (Ministry of European Funds, 2014) reveals that, from the EU 2007-13 budget, 127 projects financed by the Structural and Cohesion Funds were implemented by beneficiaries in Suceava county.



Screenshot 1: Number of projects approved for funding in Suceava County

In order to understand this figure, we need to compare it with the number of projects in similar cities.

Table 11: Number of projects approved for beneficiaries in various cities

City	Number of project approved for financing (total projects for all financing programmes in the financial framework 2007 – 2013)
Municipality of Suceava	127
Municipality of Alba Iulia	Over 200
Municipality of Oradea	Over 200
Municipality of Târgoviște	193
Municipality of Galați	Over 200
Municipality of Râmnicu Vâlcea	145
Municipality of Arad	137

In the 2007-13 budget exercise (funds spent by the end of 2015) there were two major funding programs that provided funding for economic rehabilitation plans and projects of an area: the Regional Operational Program and the Operational Program "Increase of Economic Competitiveness". The two programs should have been complementary, mutually supportive while also supporting the achievement of common targets related to the development of some areas.

The Regional Operational Programme 2007 – 2013

Under this program, which is relevant to our analysis, the following types of projects were funded:

- Projects designed to support the sustainable development of cities. This development should have included infrastructure projects (roads, buildings, urban amenities) aimed to support social services and the business environment, the opening of operational business centers included.
- Projects which targeted companies
- Projects designed to support growth poles

According to public information available on the donor's website (Ministry of Regional Development and Public Administration, 2014), only 14 contracts targeted beneficiaries from the North-East Region, exclusively from Iasi county, out of a total of 157 financing contracts signed under Priority Axis 1 Supporting the sustainable development of cities - urban growth poles/ Major Area of Intervention 1.1 Integrated urban development.

As for the impact of these grants provided through the ROP 2007 - 2013, the Program Evaluation Report, a document available on the donor's website in the Evaluation Studies section (Ministry of Regional Development and Public Administration, 2014) shows that:

- ✓ In cities participating in the program the standard of living indicators were higher than in cities not included in the programme. Thus, the evaluation study found that the average number of employees was higher by 8.31% while unemployment rate was lower by 0.89 percent when compared to non-beneficiary cities
- ✓ Urban centres running Regio projects have become more attractive to active labour force and investment; they have also attracted more immigrants as compared to centres who did not participate in the program: the live birth rate is 5.5 percent higher and the immigration rate doubles with difference between beneficiaries and non-beneficiaries at 120.72 percent.

Sectoral Operational Programme Increase of Economic Competitiveness 2007 – 2013

Under this operational program, several funding lines were relevant to supporting a particular group of enterprises. We will not consider the financing lines concerning individual enterprises because the grant obtained individually by a commercial enterprise does not represent a systemic action of economic revival of an area and it is not the result of a chain of actions carried out at a superior level.

A first relevant line of funding is *Priority Axis 1 - An innovative and eco-efficient production system / Key Area of Intervention 3 - Sustainable Development of Entrepreneurship / Operation 1 - Development of Business Support Structures of National and International Interest.* Within this line, 47 projects have been approved for financing, only one of them from the North-Eastern Region, namely a project of the Iasi City Hall.

me proiect: meficiar: pgram Operational: a Prioritara: meniul Major de Interventie eratiunea indicativa:	Construc?le hal? ?i achizi?le echipamente pentru linie de produc?le ?i poligon testare panouri fotovolta 12.P024.008 (I8) DATA INCORPORATED SRL 3-Programul Operational Sectorial Cresterea Competitivitatii Economice 1-Un sistem inovativ si eco-eficient de productie 3-Dezvoltarea durabila a antreprenoriatului 1-Dezvoltarea structurilor de sprijin al afacerilor (SSA) de interes national si international	ice
me proiect: neficiar: ogram Operational: a Prioritara: meniul Major de Interventie	DATA INCORPORATED SRL 3-Programul Operational Sectorial Cresterea Competitivitatii Economice 1-Un sistem inovativ si eco-eficient de productie 3-Dezvoltarea durabila a antreprenoriatului	ice
me proiect: neficiar: ogram Operational: a Prioritara:	12.P024.008 (I8) DATA INCORPORATED SRL 3-Programul Operational Sectorial Cresterea Competitivitatii Economice 1-Un sistem inovativ si eco-eficient de productie	ice
me proiect: neficiar:	12.P024.008 (I8) DATA INCORPORATED SRL 3-Programul Operational Sectorial Cresterea Competitivitatii Economice	lice
me proiect:	12.P024.008 (18)	iice
		ice
Unitate administrativ teritoriala: Cauta	Trebuie sa alegeti un judet mai intai Cauta direct pe cod SMIS:(pentru un numar valid, celelalte filtre vor fi ignorate)	
ludet:	Toate	
Regiune:	NORD-EST	
Domeniul Major de Interventie: Operatiunea indicativa:	3-Dezvoltarea durabila a antreprenoriatului 1-Dezvoltarea structurilor de sprijin al afacerilor (SSA) de interes national si international	
	1-Un sistem inovativ si eco-eficient de productie	
Axa Prioritara:		

Screenshot 2: A project financed by POS CCE 2007 – 2013, Priority Axis 1 – An innovative and ecoefficient production system / Major Intervention Area 3 – Sustainable development of entrepreneurship / Operation 1 – Developinf Support Structure for Businesses of National and International Interest in North-East Region.

A relevant funding line could have been under Priority Axis 2 - Research Technological Development and Innovation for Competitiveness / Key Area of Intervention 2 - Investment in CDI Infrastructure and Administrative Capacity Development / Operation 2 - Development of Excellence Poles. Unfortunately, as revealed by the public information provided by the donor (Ministry of European Funds, 2014), no project was funded under this operation.

In addition to the operation above, under the same Sectoral Operational Program Increase of Economic Competitiveness 2007 - 2013 Priority Axis 1, *An innovative and eco-efficient production system, there* has been an operation aimed to support the Competitiveness Poles. Under this line, 8 Competitiveness Poles have been approved for financing, which included 81 projects. None of these poles are implemented in the North-Eastern Region (Managing Authority for Sectoral Operational Program Increase of Economic Competitiveness 2007 - 2013 / Ministry of European Funding, 2014)

FINANCING OPPORTUNITIES FOR ECONOMIC REVIVAL

VI. NATIONAL STRATEGIES

Unfortunately, Romania does not have the exercise of developing medium and long-term national strategies assumed and respected by the society as a whole and by all decision makers. Such strategies have been developed either for media considerations, promotion of ideas, or under the pressure of external factors. Exceptions to the rule are Romania's NATO and EU accession strategies, which were assumed by the whole society and received massive support from almost all decision makers.

Historically, Romania has started to develop various strategies since the early part of the 1990s. One of first documents in this regard was the Strategy for Poverty Eradication elaborated with the support of President Ion Iliescu. This kind of strategy did not include action plans, did not assign any people or responsibilities, budgets and resources. They seemed rather a sort of statement of intent.

The National Development Plan 2007-2013 (Government of Romania, 2006) was the first comprehensive strategic document, coherently and correlately designed, through co-operation of several relevant institutions. This document was adopted in 2006 through Government Ruling and became the basis for the elaboration and implementation of programs financed through the structural and cohesion funds for Romania in the 2007 – 2013 European budget. The plan had a clear and measurable objective (in 2013, Romania hinted a Gross Domestic Product (GDP) of at least 40 percent of the EU-25 GDP level - prior to January 1, 2007), actions and priorities, an estimated budget (approximately 40 billion euros) and proposed financing sources (one half of the funds were supposed to come from the European Union while the other from the state budget).

As shown in the analysis carried out in the previous chapter, the initial complementarity between the operational and sectoral programmes for the period 2007 - 2013 was lost in time, and, eventually, each funding line came to be analyzed independently.

At the moment, there are several strategies and priorities developed in response to various conditions, especially from the perspective of the new European funding programmess. In May 2015, the Romanian Government established the priority areas in which small and medium-sized firms in Romania can become competitive. For such cases grants were likely to become a priority. These areas are: (Hotnews.ro, 2015):

tourism and eco-tourism;

textiles and leather products;

wood and funiture;

creative industries;

car and spare parts industry;

IT&C technology; drink and food processing; health and drugs;

energy and environmental management; bio-economy

Such domains are supposed to bring added value and contribute to the economic development of society. In order to analyse the trend, we will compare the areas established as priorities with the average income for economic activities, as shown by the latest available information from the National Institute of Statistics (National Institute of Statistics, 2017):

Table 12: Average nominal monthly income by activities of the national economy, according to CAEN section Rev.2

CAEN Rev.2 (activities in the national economy)	Year 2008 Lei	Year 2009 Lei	Year 2010 Lei	Year 2011 Lei	Year 2012 Lei	Year 2013 Lei
Average per economy	1309	1361	1391	1444	1507	1579
K FINANCIAL INTERMEDIATION and INSURANCE	3205	3109	3200	3435	3587	3645
J INFORMATION and COMMUNICATION	2119	2468	2687	2965	2992	3067
B EXTRACTIVE INDUSTRY	2287	2360	2435	2577	2786	2943

CAEN Rev.2 (activities in the	Year 2008	Year 2009	Year 2010	Year 2011	Year 2012	Year 2013
national economy)	Lei	Lei	Lei	Lei	Lei	Lei
D ELECTRICAL and THERMIC						
ENERGY, GAS, HOT WATER and AER CONDITIONING						
PRODUCTION and SUPPLY	2200	2572	0.671	2505	2004	2017
O PUBLIC ADMINISTRATION	2389	2573	2671	2787	2904	2917
and DEFENSE; SOCIAL						
ASSISTANCE IN THE PUBLIC						
SYSTEM	2411	2159	1968	1909	2102	2420
M PROFESSIONAL,						
SCIENTIFIC and TECHNICAL ACTIVITIES	1749	1870	1915	2061	2216	2351
H TRANSPORT and STORAGE	1454	1518	1557	1580	1624	1629
INDUSTRY	1189	1300	1388	1470	1541	1604
P EDUCATION	1538	1596	1380	1316	1371	1533
C MANUFACTURING	1330	1370	1300	1310	13/1	1333
INDUSTRY	1050	1146	1237	1324	1393	1466
Q HEALTH and SOCIAL						
ASSISTANCE	1266	1342	1226	1210	1315	1456
E WATER SUPPLY;						
SALUBRITATE, WASTE MANAGEMENT,						
DECONTAMINATION						
ACTIVITIES	1154	1241	1256	1333	1388	1427
L REAL ESTATE						
TRANSACTIONS	1270	1193	1182	1268	1248	1349
G WHOLESALE and RETAIL						
TRADE; CAR and MOTOR-						
BYKE REPAIR	1040	1047	11.66	1007	1205	1202
R PERFORMANCES,	1042	1047	1166	1227	1305	1293
CULTURAL and LEISURE						
ACTIVITIES	1195	1249	1103	1076	1148	1216
F CONSTRUCTION	1162	1069	1125	1247	1193	1191
A AGRICULTURE, FORESTRY						
and FISHING	914	1007	1024	1044	1093	1179
N ADMINISTRATIVE						
SERVICES and SUPPORT						
SERVICES	835	873	940	966	1030	1132
S OTHER SERVICES	780	818	824	852	929	991
I HOTELS and RESTAURANTS	773	799	786	841	850	898

Table 13: Labour productivity of the national economy activities per hour CAEN Rev.2 - SEC 2010

CAEN Rev.2 (activities of the national economy)	Year 2017 Lei / hour
Media per economy	33,5
L REAL ESTATE TRANSACTIONS	1004,7
J INFORMATION and COMMUNICATION	99,8
K FINANCIAL INTERMEDIATION and INSURANCE	77,1
PROFESSIONAL, SCIENTIFIC and TECHNICAL	
ACTIVITIES; ADMINISTRATIVE SERVICES	49,5
ACTIVITIES and SUPPORT SERVICES ACTIVITIES	
PERFORMANCES, CULTURALE and LEISURE	43,1

ACTIVITIES; HOUSEHOLD OBJECTS REPAIR and OTHER SERVICES	
EXTRACTIVE INDUSTRY; PROCESSING INDUSTRY; ELECTRICITY, HEATING, GAS, HOT WATER and AER CONDITIONED PRODUCTION and SUPPLY; WASTE, DECONTAMINATION ACTIVITIES	42,4
F CONSTRUCTION	40,9
WHOLESALE and RETAIL TRADE; CAR and MOTOR BYKE REPAIR; TRANSPORT and STORAGE; HOTELS and RESTAURANTS	31,8
PUBLIC ADMINISTRATION and DEFENSE; SOCIAL SECURITY IN THE PUBLIC SYSTEM; EDUCATION; HEALTH and SOCIAL ASSISTANCE	27
A AGRICULTURE, FORESTRY and FISHING	6,8

When we compare the two sets of information (priority areas and monthly earnings generated by business areas) we note that although IT is the second most revenue-generating resource for people working in this area – with an increase of nearly 45 percent between 2008 - 2013, it is one of the last in the list of priority documents. Instead, tourism, where revenue is the smallest compared to other areas of activity, tops first among priorities.

VII. FINANCING AVAILABLE FROM NATIONAL SOURCES EXCLUSIVELY

Recently some state aid schemes have been available, financed exclusively from national sources (the state budget). These schemes are managed exclusively by the Ministry of Public Finance. According to information available on the state aid schemes website (Ministry of Public Finance, 2014), there are several schemes available, most of them multiannual. The purpose of these schemes is to support investments. Some of them cover part of investment costs, others cover part of the salary related expenses.

Since 2014, as the development regions of Bucharest - Ilfov and the West have reached higher development levels, according to European rules, the state aid ceiling that can be granted under regional development support schemes has declined considerably for companies in these regions. In the case of Bucharest - Ilfov Region, this ceiling was 35 percent, but for payments made since 2017 it has fallen to 15 percent, and for payments made after 2018 it has reached 10%. For the West Region this ceiling is 50 percent. In such conditions, the effort of getting state aid for an investment in these areas, especially in Bucharest Ilfov Region, becomes disproportionately high when compared to the benefit received. If we consider the responsibility the company takes upon receiving such aid, it is to be expected that those wishing to access funding schemes will look for other implementation locations across the country, more attractive in this respect.

One should take into account that such aids also target larger investments, involving the creation of several hundred jobs. Large companies are expected to make such investments, especially multinationals, wishing to expand their operations in Romania.

Unlike similar funding from European funds, the state aid schemes provided exclusively from national budget have the following features:

They may have a simpler, less rigorous administrative formula

They may have specific actions. For example, they can only cover salary costs for a certain period without any other eligible expenditure

They do not require complementary actions or activities (e.g. information and advertisement, project management, etc.) They may have a greater risk of fund unavailability or change of operating rules

VIII. CONCLUSIONS AND RECOMMENDATIONS

Suceava is one of the least developed regions in Romania. Despite the fact that, as far as the population is concerned, the county tops among the first, in terms of living standard and economic activities Suceava is at the bottom of the ranking.

Suceava is located in the North - Eastern Development Region, a region with the lowest development level in Romania. Therefore, no development plan for the area can be based on attracting nearby resources, from the region; it can only rely on developing together with the neighbouring areas by establishing joint partnerships and actions.

As for the support received from the central institutions, the analysis carried out using data collected from public procurement procedures, such support was sporadic and did not represent a coherent tool of support for the community and its needs. As for other areas in Romania too, there is no coherence in allocating resources, no continuity or predictability. Consequently, projects of related to the development of the area, can only only partially rely on such resources.

The analysis of accessing European funds available in the 2007-13 budget does not reveal a high interest in the area in this respect. We can say that Suceava ranks among the last counties in term of accessing EU funds. Which does not mean the community showed no interest or the leaders refused to access such funds; it only shows a lack of leading forces, of leaders (first of all institutions, not necessarily people) unable to unite the community.

On the other hand, from these analyses we can see that Ştefan cel Mare University in Suceava may become a reservoir of resources. It is a large institution which managed to keep a large number of students in Suceava (compared to other similar counties in Romania), which indicates a good position in the community and a high quality of its actions. Thus, the university has become one of the major Contracting Authorities in the county, its budget run through public procurement procedures being higher than the budget used by other communities as a whole, such as the Fălticeni City Hall.

In order to see an economic revival in the area, a viable local development plan, a plan setting priorities and identifying available resources should be achieved first. When allocating resources, particular attention must be paid to human resources while their availability remains a basic condition for any development plan.

The development plan should bring together every major actor in the area (local authorities, academia, companies, civil society). This requires a coagulator, a centraliser which the community perceives as a leader, and a development engine. In such a multidisciplinary and multi-institutional group projects should initiate projects which rely on existing funding opportunities.

The analysis in the previous chapter shows that most important financing opportunities target action groups like development poles / growth poles / poles of excellence / clusters. Such concepts are rather new to Romanian society but, especially in the academic environment, resources can be identified to understand and support their implementation.

As far as income is concerned, Suceava county is not among the last in the ranking compared to the other counties in Romania, as shown in the following table.

Table 14: Average net nominal monthly income according to development regions and counties

1 a	ble 14: Average net		ntniy income	according to	o developmen	t regions and	counties		
No.	Region of development and county	Year 2008 Lei	Year 2009 Lei	Year 2010 Lei	Year 2011 Lei	Year 2012 Lei	Year 2013 Lei		
	Average per România	1.309	1.361	1.391	1.444	1.507	1.579		
	REGION								
A	NORTH-EAST Region	1.155	1.207	1.192	1.199	1.229	1.321		
В	NORTH-WEST Region	1.119	1.161	1.168	1.208	1.280	1.342		
С	SOUTH-EAST Region	1.190	1.255	1.234	1.276	1.307	1.381		
D	CENTRU Region	1.150	1.223	1.240	1.279	1.330	1.394		
Е	SOUTH-WEST OLTENIA Region	1.260	1.308	1.299	1.330	1.377	1.433		
F	SOUTH- MUNTENIA Region	1.220	1.294	1.303	1.321	1.394	1.463		
G	WEST Region	1.207	1.270	1.295	1.332	1.416	1.492		
Н	BUCURESTI – ILFOV Region	1.810	1.817	1.946	2.086	2.187	2.265		
			COU	JNTY					
1	Harghita	998	1.099	1.025	1.054	1.072	1.130		
2	Bihor	1.004	1.025	1.074	1.086	1.123	1.155		
3	Maramureș	1.018	1.046	1.025	1.043	1.153	1.165		
4	Vaslui	1.060	1.126	1.071	1.046	1.125	1.172		
5	Covasna	987	1.037	1.062	1.085	1.119	1.179		
6	Vrancea	1.064	1.091	1.085	1.078	1.136	1.196		
7	Bistrița-Năsăud	1.085	1.115	1.088	1.107	1.159	1.198		
8	Neamţ	1.040	1.080	1.095	1.114	1.123	1.198		
9	Botoșani	1.036	1.122	1.085	1.074	1.126	1.216		
10	Sălaj	1.076	1.152	1.119	1.135	1.159	1.219		

ECOFORUM

[Volume 8, Issue 1(18), 2019]

11	Caras-Severin	1.054	1.148	1.174	1.157	1.213	1.227
12	Teleorman	1.100	1.122	1.124	1.139	1.168	1.236
13	Ialomița	1.087	1.131	1.134	1.161	1.212	1.239
14	Suceava	1.091	1.117	1.109	1.136	1.148	1.256

This shows that there is a potential in terms of human resources available in the area. It is supposed that, in the case of a private employer, there is a balance between what the employees offer and the salary they get. Starting from this premise, it results that people in the area can offer value, and, if they get the chance, we can assume they will produce even higher value.

REFERENCES

- Autoritatea de Management pentru Programul Operațional Sectorial Creșterea Competitivității Economice 2007 2013 / Ministerul Fondurilor Europene. (2014, 05 14). AM POS CCE. (Management authority for the Sectoral Operational Programme Increase of Economic Competitiveness0 Accessed on 07 25, 2015, on Ministerul Fondurilor Europene: http://www.fonduri-ue.ro/poscce/
- 2. Comisia Europeana. (2014, 6 2). Recomandare de RECOMANDARE A CONSILIULUI privind Programul național de reformă al României pentru 2014 și care include un aviz al Consiliului privind Programul de convergență al României pentru 2014. (The Council's Recommendation concerning Romania's 2014 National Reform Plan, which includes the note of the Council with regard to Romania's Convergence Programme for 2014). Journal of the European Union, 9. Bruxelles, Bruxelles, Belgia: Comisia Europeană.
- 3. Government of Romania. (2006, December 01). Planul Național de Dezvoltare 2007 2013. (National Development Plan 2007-2013) Accessed on 1 July, 2014, on Ministry of European Funds: http://www.fonduri-ue.ro/posdru/images/downdocs/pnd_ro.pdf
- 4. Hotnews.ro. (2015, 05 03). Lista celor 10 domenii in care firmele mici si mijlocii romanesti ar putea fi cel mai competitive. (List of the 10 areas in which Romanian SMEs could be most competitive) Accessed on 07 25, 2015, on Economie: http://economie.hotnews.ro/stiri-startupcafe-20066549-lista-celor...ele-mici-mijlocii-romanesti-putea-cel-mai-competitive-export.htm
- 5. National Institute of Statistics. (2017). Populatia rezidenta la 1 ianuarie pe grupe de varsta si varste, sexe si medii de rezidenta, macroregiuni, regiuni de dezvoltare si judete. (Rezident population at 1 January by age groups and ages, gender, living areas, macroregions, development regions and counties) Accessed on 05 03, 2015, on Baza de date statistice online (Statistics data online database): http://statistici.insse.ro/shop/
- 6. Ministry of Regional Development and Public Administration . (2014). Infregio. Accessed on 07 25, 2015, on Infregio: www.Infregio.ro
- 7. Ministry of Public Finance. (2014). Ajutor de stat.(State aid) Accessed on 07 25, 2015, on Ajutor de stat: http://www.mfinante.ro/ghidajstat.html?pagina=domenii
- 8. Ministry of European Funds . (2014). Date SMIS privind stadiul proiectelor contractate. (SMIS Data concerning the status of the contracted project} Accessed on 07 25, 2015, on Date SMIS privind stadiul proiectelor contractate: http://www.fonduri-ue.ro/baza-de-date-proiecte-contractate
- 9. Ministry of European Funds, Romania. (2014). OPERATIONAL PROGRAMME UNDER THE 'INVESTMENT FOR GROWTH AND JOBS' GOAL. Bucureşti: www.fonduri-ue.ro.
- 10. Nastase, P. L. (2009, 01 01). Distribuția radiației solare pe teritoriul României.[Distribution of solar radiation on Romanian territory] Accessed on 08 17, 2014, on ENERGIE SOLARA SURSADE ENERGIE REGENERABILA (Solar energy a sourse of renewable energy): http://labo-energetic.eu/ro/a_telecharger/Copac/esolara.html