# HOW IS THE REGIONAL OPERATIONAL PROGRAM 2014-2020 PERFORMING WITHIN ROMANIAN REGIONS OF DEVELOPMENT?

# Silviu BECIU<sup>1,2</sup>, Georgiana Armenița ARGHIROIU<sup>2</sup>, Răzvan PANAIT<sup>2</sup>

<sup>1</sup>The Bucharest University of Economic Studies, Piaţa Romană, 6, 010374, Bucharest, Romania Phone: 004 0723165907, Email: beciu.silviu@gmail.com

<sup>2</sup>University of Agronomic Sciences and Veterinary Medicine, Bucharest 59 Marasti, sector 1, 011464, Bucharest, Romania, E-mail: beciu.silviu@gmail.com, armenitaarghiroiu@gmail.com, razvanpan2@yahoo.com

Corresponding author: armenitaarghiroiu@gmail.com

#### Abstract

This paper was focused on the study of one of the main driver of Regional Development in Romania, the REGIO program, being analysed the efficiency of its implementation in all the Romanian Regions of Development. The study was made from the point of view of the projects that were accessed within the Romanian counties that belongs to one region or another. The method was based on REGIO data analysis, and the results indicated significant regional disparities and various mobilization at the county and regional level in EU fund accessing which justify the GDP growing trends within the regions.

Key words: program, projects, REGIO, Romania, regions of development

#### INTRODUCTION

Regional development was conceptualized as a dynamic outcome of the complex interaction between two types of networks: territorialized relational networks and global production networks that are acting in relation with variable regional governance structures[4]. While some studies debated the nature of regional problems [7], other were focused on the key role of the labour flexibility within regions or were targeted on the role of the local [5] and foreign [8] SMEs within regions. The Ministry of Regional Development and Public Administration from Romania is the institution that we considered professionally in charge [6] with regional planning and allocating resources at the national level, which must act in the direction of a sustainable development of the all [2, 3] regions existing at national level. Considering that the institutions are essential for economic development, and have the capability to generate various institution-based regional development strategies, the efficiency of the institutions that are implementing the regional programs in Romania vary and the effects can be seen also within the Romania Operational Program (REGIO), which was developed

within the regional development agencies [8]. If the economic growth can be achieved more easily in regions with a high level of workforce qualification, the increase of the level of capitalization does not depend solely on the characteristics of the region and can be achieved by increasing the level investments in the region [1]. The main instrument used in the last years by this minister, the REGIO program, was target to reduce large disparities between regions, highly underlined by indicators as GDP per inhabitant or average monthly nominal gross earning [7]. This paper aimed to identify how REGIO performed in the recent period within the Romanian Regions of Development. taking in to account the projects that were implemented at the regions level and within regions at the county level.

#### MATERIALS AND METHODS

For this paper we determined the evolution of the population and the GDP progress in each Romanian region of development, then we analysed the implementation level of the Romanian Operational Program - REGIO, from the point of view of: the total number of projects that were ongoing or implemented in

each Romanian region of development and also in each county from a region of development; the total value of the projects in each region; the top projects from the point of value at the national level. In order to have a better picture of the impact of the implementation of REGIO in each region we have calculated the value of the projects per person for each region population. Most of the data were provided by the National Institute of Statistic and the Romanian Operational Program – REGIO.

#### RESULTS AND DISCUSSIONS

During the 2015-2019 period all the Romanian regions of development, excepting Bucharest- Ilfov, followed a negative trend in terms of resident population. The Bucharest-Ilfov Region of Development was the only region in 2018 - the last year with available data - which recorded a positive natural increase of the population, of 124 persons, while the South Muntenia Region had the highest negative decrease, of 16,261 persons. The North – East Region of Development had the largest population (Table 1), of 3.1 million people in 2019, while at the opposite pole was the West Region of Development with only 1.7 million people.

Table 1. Usually resident population by development regions at January 1st

Development regions	2015	2016	2017	2018	2019
Total	19,875,542	19,760,585	19,643,949	19,530,631	19,414,458
North - West	2,586,034	2,576,567	2,568,392	2,560,822	2,552,112
Centre	2,350,539	2,341,964	2,332,791	2,325,747	2,318,272
North - East	3,272,210	3,256,734	3,239,573	3,221,183	3,198,564
South - East	2,492,582	2,469,868	2,447,305	2,421,957	2,396,171
South - Muntenia	3,061,759	3,031,555	3,003,333	2,965,205	2,929,832
Bucharest - Ilfov	2,284,443	2,288,203	2,287,065	2,301,255	2,315,173
South - West Oltenia	2,015,792	1,993,482	1,972,940	1,949,940	1,926,860
West	1,812,183	1,802,212	1,792,550	1,784,522	1,777,474

Source: NIS, 2020.

While, the GDP recorded a positive trend between 2013 and 2017 at national and regional level (Table 2), the contribution of each region to the total GDP varied between 27.15 % for Bucharest - Ilfov and 10.25% for South East Region of Development, at the level of the year 2017. We noticed that in 2017 the lowest GDP contribution at regional level, excepting extra regions (the continental platform from the Black Sea and territorial enclaves) was recorded in South West Oltenia, of only 7.4 %.

The highest value of the project funded by REGIO 2014-2020 was recorded in the North West Region of Development, of 8.7 million lei, followed by the South East Region with 7.4 million lei. In relation with direct or indirect beneficiary population of each region,

the highest value calculated by person for the REGIO program was also recorded in North - West Region with 3.4 thousand by person, followed by the South – East Region of Development with 3.1 thousand per person (Table 3).

At the national level, REGIO 2014-2020 financed in the period 2017-2019 a total number of 4,600 projects, from which 3,301 were in implementation at the end of September 2019, and 1,299 were finished.

In the North West Region, at the mentioned time, from the total of 877 projects, 746 were in implementation phase while 131 were finished (Table 4).

The South East Region recorded in the same period 837 projects, from which 635 were in implementation and 202 were finished.

Table 2. GDP by development regions - calculated according CANE Rev.2 - ESA 2010

Development regions	2013	2014	2015	2016	2017
Total	635,459.4	668,590.1	712,587.8	765,135.4	857,895.7
North - West	71,248	76,654.7	81,580.5	90,039	104,848.9
% NW in Total	11.21	11.47	11.45	11.77	12.22
Centre	70,163.1	73,374.8	78,706.6	86,532.8	96,984.1
% C in Total	11.04	10.97	11.05	11.31	11.30
North - East	65,222.2	67,636.7	71,626.9	77,337.4	88,847.7
% NE in Total	10.26	10.12	10.05	10.11	10.36
South - East	71,597.9	75,316.1	76,154.9	79,884.4	87,914.5
% SE in Total	11.27	11.26	10.69	10.44	10.25
South - Muntenia	77,341.8	86,980	86,622	93,655.7	100,917.7
% SM in Total	12.17	13.01	12.16	12.24	11.76
<b>Bucharest - Ilfov</b>	171,307.9	178,134.2	197,800	207,575.2	232,876.2
% BI in Total	26.96	26.64	27.76	27.13	27.15
South - West Oltenia	47,848.5	48,504.6	52,068.7	55,344.2	63,927.8
% SWO in Total	7.53	7.25	7.31	7.23	7.45
West	60,215	61,516.8	67,458	74,234.5	80,895.3
%W in Total	9.48	9.20	9.47	9.70	9.43
Extra-regions	515	472.2	570.2	532.2	683.5
% Extra-regions in Total	0.08	0.07	0.08	0.07	0.08

Source: NIS and own determination based on NIS data.

Table 3. Value of the project per person (lei/person)

<b>Development regions</b>	Total value of the projects	Population in 2019	Value of the project / person
Total	41,577,671,775	19,414,458	2,141.58
North - West	8,719,012,011	2,552,112	3,416.39
Centre	4,357,863,510	2,318,272	1,879.79
North - East	4,910,747,062	3,198,564	1,535.30
South - East	7,463,521,287	2,396,171	3,114.77
South - Muntenia	4,159,529,168	2,929,832	1,419.72
<b>Bucharest - Ilfov</b>	3,518,752,826	2,315,173	1,519.87
South - West Oltenia	4,243,598,733	1,926,860	2,202.34
West	4,204,647,175	1,777,474	2,365.52

Source: Own determination based on NIS and REGIO data.

In the third place was situated the South Muntenia Region with 596 projects, from which 370 were ongoing and 226 completed. Only 159 projects were funded in the Bucharest – Ilfov region, from which 124 were ongoing and 35 were finished.

Table 4. Number and project status in the development regions

Development	Project	Project status	
regions	numbers	In	Finished
		implementation	
North - West	877	746	131
Centre	584	385	199
North - East	547	409	138
South - East	837	635	202
South- Muntenia	596	370	226
<b>Bucharest - Ilfov</b>	159	124	35
South-West	487	315	172
Oltenia			
West	513	317	196
Total	4,600	3,301	1,299

Source: Own determination based on REGIO data.

In the North West Region (Table 5), the county with highest number of projects developed through REGIO program was Cluj, where from 292 projects, 228 were in implementation and 64 were finished, followed by Bihor County, where from 192 projects, 185 were in implementation and 7 were finished.

Table 5. Number and project status in the North - West region

Counties	Project	Project status	
	numbers	In implementation	Finished
North - West	877	746	131
Bihor	192	185	7
Bistrita	103	93	10
Nasaud			
Cluj	292	228	64
Maramures	126	97	29
Salaj	67	61	6
Satu Mare	93	79	14
Regional projects	4	3	1

A significant number of projects were developed in Maramures County – 126 projects and also in Bistrita Nasaud County with 103 projects.

In the Centre Region (Table 6), the county with the highest number of projects developed through REGIO program was Brasov, where from 133 projects, 73 were in implementation and 60 were finished, followed by Harghita County, where from 124 projects, 92 were in implementation and 32 were finished.

A significant number of projects were developed in Mures County – 110 projects and also in Alba County with 84 projects.

Table 6. Number and project status in the Centre region

Counties	Project	Project sta	tus
	numbers	In implementation	Finished
Centre	584	385	199
Alba	84	55	29
Brasov	133	73	60
Covasna	46	38	8
Harghita	124	92	32
Mures	110	69	41
Sibiu	81	53	28
Regional	6	5	1
projects			

Source: Own determination based on REGIO data.

In the North East Region (Table 7), the county with the highest number of projects developed through REGIO program was Suceava, where from 134 projects, 107 were implementation and 27 were finished, followed by Iasi County, where from 125 projects, 89 were in implementation and 36 were finished. A significant number of projects were developed in Bacau County -122 projects and also in Neamt County with 79 projects.

Table 7. Number and project status in the North - East region

Counties	Project	Project status	
	numbers	In	Finished
		implementation	
North - East	547	409	138
Bacau	122	82	40
Botosani	47	39	8
Iasi	125	89	36
Neamt	79	58	21
Suceava	134	107	27
Vaslui	36	31	5
Regional projects	4	3	1

Source: Own determination based on REGIO data.

In the South East Region (Table 8), the county with the highest number of projects developed through REGIO program was Tulcea, where from 276 projects, 242 were implementation and 34 were finished. followed by Constanta County, where from 203 projects, 150 were in implementation and 53 were finished. A significant number of projects were developed in Buzau County -114 projects and also in Galati County with 113 projects.

Table 8. Number and project status in the South - East region

Counties	Project	Project status		
	numbers	In implementation	Finished	
South -	837	635	202	
East				
Braila	33	20	13	
Buzau	114	66	48	
Constanta	203	150	53	
Galati	113	74	39	
Tulcea	276	242	34	
Vrancea	96	82	14	
Regional	2	1	1	
projects				

Source: Own determination based on REGIO data.

In the South Muntenia Region (Table 9), the county with the highest number of projects developed through REGIO program was Arges, where from 155 projects, 74 were in implementation and 81 were finished, followed by Prahova County, where from 153 projects, 100 were in implementation and 53 were finished. A significant number of projects were developed in Dambovita County – 112 projects.

Table 9. Number and project status in the South - Muntenia region

Counties	Project	Project status	
	numbers	In	Finished
		implementation	
South -	596	370	226
Muntenia			
Arges	155	74	81
Calarasi	41	25	16
Dambovita	112	80	32
Giurgiu	58	42	16
Ialomita	32	22	10
Prahova	153	100	53
Teleorman	37	20	17
Regional	8	7	1
projects			

The Bucharest – Ilfov (Table 10) developed 159 projects within REGIO program, from which 124 were in implementation and 35 were finished. While 125 projects were applied in Bucharest and 28 in Ilfov, 6 covered the whole region.

Table 10. Number and project status in the Bucharest -

Ilfov region

Counties	Project	Project status		
	numbers	In implementation	Finished	
Bucharest - Ilfov	159	124	35	
Bucharest	125	92	33	
Ilfov	28	28	0	
Regional projects	6	4	2	

Source: Own determination based on REGIO data.

In the South West Oltenia Region (Table 11), the county with the highest number of projects developed through REGIO program was Dolj, where from 153 projects, 83 were in implementation and 70 were finished, followed by Valcea County, where from 125 projects, 86 were in implementation and 39 were finished. A significant number of projects were developed in Olt County – 84 projects, from which 28 were finished.

Table 11. Number and project status in the South – West Oltania region

Counties	Project	Project sta	ntus
	numbers	In implementation	Finished
South - West Oltenia	487	315	172
Dolj	153	83	70
Gorj	65	49	16
Mehedinti	53	36	17
Olt	84	56	28
Valcea	125	86	39
Regional projects	7	5	2

Source: Own determination based on REGIO data.

In the West Region (Table 12), the county with the highest number of projects developed through REGIO program was Timis, where from 191 projects, 92 were in implementation and 99 were finished, followed by Hunedoara County, where from 171 projects, 124 were in implementation and 47 were finished.

Table 12. Number and project status in the West region

Counties	Project	Project status		
	numbers	In implementation	Finished	
West	513	317	196	
Arad	81	51	30	
Caras	68	49	19	
Severin				
Hunedoara	171	124	47	
Timis	191	92	99	
Regional	2	1	1	
projects				

Source: Own determination based on REGIO data.

Table 13. Total value of the projects by development region (lei)

Development regions	Total value of the projects value	
Total	41,577,671,775.73	100
North - West	8,719,012,011.64	20.97
Centre	4,357,863,510.61	10.48
North - East	4,910,747,062.35	11.81
South - East	7,463,521,287.73	17.95
South - Muntenia	4,159,529,168.27	10.00
<b>Bucharest - Ilfov</b>	3,518,752,826.06	8.46
South - West	4,243,598,733.12	10.21
Oltenia		
West	4,204,647,175.94	10.11

Source: Own determination based on REGIO data.

In terms of value, the projects developed in the North West Region had a share of 20.9 % from the total national value (Tabel 13) of the REGIO 2014-2020 projects, while the projects from the South East region had a share of 17.9 %.

In the North West Region (Table 14), the county with the biggest value of the projects developed through REGIO 2014-2020 program was also Cluj, followed by Bihor, both of them accounting together more than half of the total value of the projects accessed in this region. The Bistrita Nasaud had also a significant share of 18.15 % from the total value accessed at the region level.

Table 14. Total value of the projects by counties in the

North – West region (lei)

Counties	Total value of the projects Total value	
North - West	8,719,012,011.64	100
Bihor	1,770,510,369.44	20.31
Bistrita Nasaud	1,582,581,477.00	18.15
Cluj	2,912,718,734.74	33.41
Maramures	821,035,256.34	9.42
Salaj	857,711,736.89	9.84
Satu Mare	545,696,179.30	6.26
Regional projects	228,758,257.94	2.62

In the Centre Region (Table 15), the county with the biggest value of the projects developed through REGIO 2014-2020 program was Brasov, followed by Sibiu, both of them accounting together around 40 % of the total value of the projects accessed in this region. Alba, Harghita and Mures counties had also a significant share, each of them covering around 15 % from the total value accessed at the region level.

Table 15. Total value of the projects by counties in the Centre region (lei)

Counties	Total value of the projects	% Total value
Centre	4,357,863,510.61	100
Alba	673,807,210.64	15.46
Brasov	963,946,191.45	22.12
Covasna	329,218,622.97	7.55
Harghita	657,032,697.66	15.08
Mures	636,511,912.80	14.61
Sibiu	812,275,701.90	18.64
Regional projects	285,071,173.19	6.54

Source: Own determination based on REGIO data.

In the North East Region (Table 16), the county with the biggest value of the projects developed through REGIO 2014-2020 program was by far Iasi, followed by Suceava and Bacau counties, all of them accounting together over 60 % from the total value of the projects accessed in this region.

Table 16. Total value of the projects by counties in the North – East region (lei)

Counties	Total value of the projects % Total value	
North - East	4,910,747,062.35	100
Bacau	827,056,316.00	16.84
Botosani	564,637,140.15	11.50
Iasi	1,408,837,735.56	28.69
Neamt	498,186,085.44	10.14
Suceava	846,999,040.59	17.25
Vaslui	453,970,004.22	9.24
Regional projects	311,060,740.39	6.33

Source: Own determination based on REGIO data.

In the South East Region (Table 17), the county with the biggest value of the projects developed through REGIO 2014-2020 program was Vrancea, followed by Tulcea, and Constanta, all of them accounting together over 65 % of the total value of the projects accessed in this region. Even if Tulcea County had the highest number of projects developed in the Region, the Vrancea

county had fewer project with much greater value per project.

Table 17. Total value of the projects by counties in the South – East region (lei)

Counties	Total value of the % projects Total value	
South - East	7,463,521,287.73	100
Braila	470,030,260.39	6.30
Buzau	772,143,635.99	10.35
Constanta	1,361,184,831.10	18.24
Galati	1,172,757,369.56	15.71
Tulcea	1,619,478,732.59	21.70
Vrancea	2,004,209,893.56	26.85
Regional projects	63,716,564.54	0.85

Source: Own determination based on REGIO data.

In the South Muntenia Region (Table 18), the county with the biggest value of the projects developed through **REGIO** 2014-2020 Prahova, followed program was Dambovita, both of them accounting together close to the half from the total value of the projects accessed in this region. The Arges county had also a significant share of 19.27 % from the total value accessed at the region level, but have to be mentioned that even this county had the highest number of project, their individual value was lower.

Table 18. Total value of the projects by counties in the South - Muntenia region (lei)

Counties	Total value of the projects	% Total value
South - Muntenia	4,159,529,168.27	100
Arges	801,503,658.88	19.27
Calarasi	258,738,696.69	6.22
Dambovita	896,507,335.58	21.55
Giurgiu	282,630,033.28	6.79
Ialomita	401,148,737.96	9.64
Prahova	1,010,027,627.02	24.28
Teleorman	218,654,837.81	5.26
Regional projects	290,318,241.05	6.98

Source: Own determination based on REGIO data.

Table 19. Total value of the projects by counties in the Bucharest - Ilfov region (lei)

Counties	Total value of the projects	% Total value
Bucharest - Ilfov	3,518,752,826	100
Bucharest	3,031,937,557	86.17
Ilfov	399,351,693	11.35
Regional projects	87,463,576	2.48

Source: Own determination based on REGIO data.

In the Bucharest – Ilfov Region, the highest value of the regional projects (Table 19) was

attracted by Bucharest, which had a share of 86.7 % from the total value of the projects from this region.

In the South West Oltenia Region (Table 20), the county with the biggest value of the projects developed through REGIO 2014-2020 program was also Dolj, followed by Valcea, both of them accounting together more than half of the total value of the projects accessed in this region. The Mehedinti county had also a significant share of 15.38 % from the total value accessed at the region level.

Table 20. Total value of the projects by counties in the South – West Oltenia region (lei)

Counties	Total value of the projects	% Total value
South - West Oltenia	4,243,598,733.12	100
Dolj	1,112,598,274.53	26.22
Gorj	563,141,517.67	13.27
Mehedinti	652,841,439.45	15.38
Olt	586,182,695.35	13.81
Valcea	1,073,224,885.05	25.29
Regional projects	255,609,921.07	6.02

Source: Own determination based on REGIO data.

In the West Oltenia Region, the county with the biggest value of the projects developed through REGIO 2014-2020 program was also Timis, followed by Hunedoara, both of them accounting together almost 65 % the total value of the projects accessed in this region (Table 21).

Table 21. Total value of the projects by counties in the West region (lei)

Counties	Total value of the projects % Total value	
West	4,204,647,175.94	100
Arad	757,783,329.33	18.02
Caras Severin	651,084,088.08	15.48
Hunedoara	1,308,257,936.54	31.11
Timis	1,421,968,003.05	33.82
Regional projects	65,553,818.94	1.56

Source: Own determination based on REGIO data.

At the national level, Cluj County had the highest number of projects developed within the REGIO 2014-2020, followed by Tulcea and Constanta counties.

The lowest number of projects, accounting for 125, was registered in the following counties: Iasi, Bucharest and Valcea as presented in Table 22.

Table 22. Ranking of counties after the project numbers developed within REGIO program at the national level

No.	Counties	Project	% in total number of
Crt.		numbers	projects
1	Cluj	292	6.40
2	Tulcea	276	6.05
3	Constanta	203	4.45
4	Bihor	192	4.21
5	Timis	191	4.19
6	Hunedoara	171	3.75
7	Arges	155	3.40
8	Prahova	153	3.35
9	Dolj	153	3.35
10	Suceava	134	2.94
11	Brasov	133	2.92
12	Maramures	126	2.76
13	Iasi	125	2.74
14	Bucharest	125	2.74
15	Valcea	125	2.74

Source: Own determination based on REGIO data.

While Bucharest was placed in the 14<sup>th</sup> position in terms of project numbers accessed within REGIO 2014-2020, this region was in the top of regions in terms of the value of these projects, followed by Cluj and Vrancea counties.

The lowest value of the projects was registered in Brasov county, whose share in the total value of the projects was 2.32% (Table 23).

Table 23. Ranking of counties after the total projects value within REGIO 2014-2020 program at the national level (lei)

No. Crt.	Counties	Total value of the projects	% value projects per county in national value projects
1	Bucharest	3,031,937,556	7.29
2	Cluj	2,912,718,734	7.01
3	Vrancea	2,004,209,893	4.82
4	Bihor	1,770,510,369	4.26
5	Tulcea	1,619,478,732	3.90
6	Bistrita Nasaud	1,582,581,477	3.81
7	Timis	1,421,968,003	3.42
8	Iasi	1,408,837,735	3.39
9	Constanta	1,361,184,831	3.27
10	Hunedoara	1,308,257,936	3.15
11	Galati	1,172,757,369	2.82
12	Dolj	1,112,598,274	2.68
13	Valcea	1,073,224,885	2.58
14	Prahova	1,010,027,627	2.43
15	Brasov	963,946,191	2.32

## **CONCLUSIONS**

REGIO program is by far the most important financial tool for supporting the regional development in Romania. Its second phase, named REGIO 2014-2020 started to produce its effect since 2017. There are still many significant socio-economic regions with potential that accessed less than 100 project per county and regions that are situated above the regional average in terms of project numbers, but have a smaller value of the projects. While all the Romanian regions, excepting Bucharest - Ilfov region, suffered in the last years in terms of population trends, and recorded a slow increase of the GDP at region level, their development through large infrastructure projects is a condition for reducing the negative trends.

## **REFERENCES**

[1]Beciu, S., 2013, Sustainable rural development. Current trends and perspectives of the North-Eastern Region of Romania, Ceres Printing House, Bucharest, pp.15-22.

[2]Beciu, S., Lădaru, R. G., 2013, Trends and Actual Issues Concerning Sustainable Regional Development in Romania, Study Case: The North East Region of Development, Scientific Papers Series Management, Economic Engineering in Agriculture and rural development, Vol. 13(2):27-30.

[3]Chew, Y.-T., Wai-Chung Yeung, H., 2001, The SME Advantage: Adding Local Touch to Foreign Transnational Corporations in Singapore, Regional Studies, 35:5, 431-448.

[4]Coe, N.M., Hess, M., Wai-Chung Yeung, H., Dicken, P., Henderson, J., 2004, Globalizing' regional development: a global production networks perspective, Transactions of the Institute of British Geographers, New Series, Vol. 29, No. 4 (Dec., 2004), pp. 468-484.

[5]Lădaru, R. G., Beciu, S., 2013, The SMEs sector in Romania: comparative study by economic sectors and regional level, International Scientific Meeting. Sustainable Agriculture and Rural Development in Terms of the Republic of Serbia. Strategic Goals Realization within the Danube Region, Preservation of Rural Values. Thematic Proceedings, December 6-8, 2012, 1273-1288.

[6] Lentz, S., 2020, Towards a Sustainable Future? Challenges for Regional Development and Innovation, Frühauf M., Guggenberger G., Meinel T., Theesfeld I., Lentz S. (eds) KULUNDA: Climate Smart Agriculture. Innovations in Landscape

Research. Springer, Cham Switzerland, Seite 433-434, https://link.springer.com/chapter/10.1007/978-3-030-15927-6 31, Accessed on 17 Jan 2020.

[7]Massey, D., 1978, In what sense a regional problem?, Regional Studies 13, 233–243, https://www.tandfonline.com/doi/abs/10.1080/0959523 7900185191, Accessed on 18 Jan 2020.

[8] Rodríguez-Pose, A., 2013, Do Institutions Matter for Regional Development?, Regional Studies, 47:7, 1034-1047.

74