

Iordan, Marioara; Albu, Lucian Liviu; Chilian, Mihaela Nona

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European Performances regarding Flexicurity. The Case of the New Member States¹

Chilian Mihaela-Nona

Institute of Economic Forecasting, Bucharest, Romania, e-mail: cnona@ipe.ro,
nonachilian@hotmail.com

Albu Lucian-Liviu

Institute of Economic Forecasting, Bucharest, Romania, e-mail: albul@ipe.ro

Iordan Marioara

Institute of Economic Forecasting, Bucharest, Romania, e-mail: miordan@ipe.ro,
mioaraiordan@hotmail.com

Abstract

The revised Lisbon Strategy has decided upon an integrated programme of policy reforms envisaging the labor market in the context of globalization, demographic changes and fast technological progress, transposed into the integrated guidelines. Such reforms aimed at increasing the employment rates, at improving work quality and labor productivity and social and territorial cohesion; in other words, at updating and upgrading the European labor markets. In order to reach such aims, the flexicurity concept was considered and employed as a key strategic framework.

Flexicurity itself may be defined as an integrated strategy aiming to improve both the labor market flexibility and job security, implying successful switching between educational system and labor market, between jobs, between unemployment and inactivity and employment, and between job and retirement.

We propose a possible assessment of the performances of the flexicurity policies by using certain composite indicators that allow for a multidimensional appraisal of flexicurity in the EU countries, providing also elements for comparison between the EU countries and regions (especially the new member states and their regions).

Keywords: labor market, flexicurity, composite indices, New Member States

JEL Classification: J08, J20, R23, R28

¹ The paper presents some of the preliminary results of researched performed for Project 91-038/2007 “Mecanisme de promovare a politicii de flexibilitate si securitate (flexicurity) si de reducere a segmentarii pietei muncii”, PNCDI-II Programme – Partnerships, Phase V, “Mecanisme de control operational, evaluarea impactului in procesul de implementare a politicilor”, Contracting authority: National Programme Management Center, Bucharest, Romania, Contractor: National Institute for Scientific Research in Labor and Social Welfare (INCSMPS), Bucharest, Romania, Subcontractor: Institute of Economic Forecasting of the Romanian Academy, Bucharest.

The revised Lisbon Strategy has decided upon an integrated programme of policy reforms envisaging the labor market in the context of globalization, demographic changes and fast technological progress, transposed into the integrated guidelines. Such reforms aimed at increasing the employment rates, at improving work quality and labor productivity and social and territorial cohesion; in other words, at updating and upgrading the European labor markets. In order to reach such aims, the flexicurity concept was considered and employed as a key strategic framework. However, the worsening economic conditions throughout Europe might threaten the future of flexicurity policy, due to governments' dwindling trust in flexible labor markets and to the enormous pressures upon the social welfare systems².

In the current paper, we present a possible way to assess the flexicurity performance by using certain composite indicators that allow for a multidimensional appraisal of flexicurity in the EU countries, providing also elements for comparison between the EU countries and regions (especially the new member states and their regions).

Flexicurity was initially described by the Dutch scholar Ton Wilthagen as “*a policy strategy that attempts, synchronically and in a deliberate way, to enhance the flexibility of labour markets, work organization and labour relations on the one hand, and to enhance security – employment security and social security – notably for weaker groups in and outside the labour market, on the other hand*”³. Its objective was thus considered to combine employment and income security with flexible labour markets, work organisation and labour relations, and the key principles that underpin a flexicurity strategy were that flexibility and security should not be seen as opposites, but could be made mutually supportive⁴. Later on, Wilthagen developed a more complex definition, which included also aspects of gradual development of flexicurity: “*Flexicurity is (1) a degree of job, employment, income and ‘combination’ security that facilitates the labour market careers and biographies of workers with a relatively weak position and allows for enduring and high quality labour market participation*

² André Sapir (Ed.), *Bruegel Memos to the New Commission, Europe's economic priorities 2010-2015*, Bruegel, Brussels, 2009.

³ Per Kongshøj Madsen, *A new perspective on labour markets and welfare states in Europe*, CARMA Research Paper 2006:03, Centre for Labour Market Research Aalborg University, Denmark and *Flexicurity pathways. Turning hurdles into stepping stones*, Report by the European Expert Group on Flexicurity, EC, June 2007.

⁴ *Flexicurity pathways. Turning hurdles into stepping stones*, Report by the European Expert Group on Flexicurity, EC, June 2007.

*and social inclusion, while at the same time providing (2) a degree of numerical (both external and internal), functional and wage flexibility that allows for labour markets' (and individual companies') timely and adequate adjustment to changing conditions in order to enhance competitiveness and productivity"*⁵.

Drawing on experience of previous work, the European Commission and the Member States, have reached a consensus on an *operational concept of flexicurity*, which comprises four components⁶: i) *flexible and reliable contractual arrangements and work organisations*, both from the perspective of the employer and the employee, through modern labour laws and modern work organizations; ii) *effective Active Labour Market Policies (ALMPs)*, which effectively help people to cope with rapid change, unemployment spells, reintegration and, importantly, transitions to new jobs; *comprehensive, reliable and responsive lifelong learning (LLL) systems* to ensure the continuous adaptability and employability of all workers, and to enable firms to keep up productivity levels; and iv) *modern social security systems*, which provide adequate income support and facilitate labour market mobility.

Over time, drawing from experience and the flexicurity literature, different methods to assess the evolution of the two broad dimensions of flexicurity and the effectiveness of the policies derived from the above-mentioned components, were developed and indicators and groups of indicators were built for such purpose⁷.

The most used indicator to assess the *flexibility of employment relations* is the *employment protection legislation index* developed by the OECD, which measures three dimensions: difficulty of dismissal, notice and severance pay, and regular procedural inconveniences. The EPL indicator is measured on the scale 1 to 5 with higher values corresponding to a higher degree of protection (Table 1).

⁵ Taken from Per Kongshøj Madsen, *A new perspective on labour markets and welfare states in Europe*, CARMA Research Paper 2006:03, Centre for Labour Market Research Aalborg University, Denmark.

⁶ *Towards Common Principles of Flexicurity: More and Better Jobs through Flexibility and Security*, European Commission, 2007, *Flexicurity pathways. Turning hurdles into stepping stones*, Report by the European Expert Group on Flexicurity, EC, June 2007.

⁷ See L. Frey, A. Janovskaia, G. Pappada, *The concept of flexicurity: Southern and East European countries compared*, 5th International Research Conference on Social Security "Social security and the labour market: A mismatch?" Warsaw, 5-7 March 2007, *Monitoring and analysis of Flexicurity policies*, EMCO Reports, ISSUE 2/July 2009, Iain Begg, Christine Erhel and Jørgen Mortensen, *Medium-term Employment Challenges*, CEPS Special Report, January 2010, Andranik Tangian (Tanguiane), *Six families of flexicurity indicators developed at the Hans Boeckler Foundation*, WSI – Diskussionspapier Nr. 168 November 2009 Wirtschafts- und Sozialwissenschaftliches Institut in der Hans Böckler Stiftung, Hans-Böckler-Str. 39, 40476 Düsseldorf.

Table 1: Country ranking according to the EPL index

Rank	Country	Protection of permanent employees against individual dismissals	Regulation of temporary employment	Specific regulations for collective dismissals	Total
1	United Kingdom	0.46	0.17	0.48	1.11
2	Ireland	0.67	0.25	0.40	1.32
3	Hungary	0.79	0.46	0.48	1.73
4	Denmark	0.63	0.58	0.65	1.86
5	Czech Republic	1.38	0.21	0.35	1.94
6	Slovakia	1.46	0.17	0.42	2.05
7	Finland	0.92	0.79	0.43	2.14
8	Poland	0.92	0.54	0.68	2.14
9	Austria	1.00	0.63	0.55	2.18
10	Netherlands	1.29	0.50	0.50	2.29
11	Italy	0.75	0.88	0.82	2.45
12	Belgium	0.71	1.08	0.68	2.47
13	Germany	1.13	0.75	0.63	2.51
14	Sweden	1.21	0.67	0.75	2.63
15	Romania	0.83	1.20	0.73	2.80
16	France	1.04	1.50	0.35	2.89
17	Greece	1.00	1.38	0.55	2.93
18	Spain	1.08	1.46	0.52	3.06
19	Portugal	1.79	1.17	0.60	3.56

Source: V. Ciuca, D. Pasnicu (coord.), *Flexibilitate si securitate pe piata romaneasca a muncii*, Editura Agora, Bucharest, 2009.

The data show that a more flexible employment regulation was a feature of countries such as the UK, Ireland, Denmark, while a more rigid legislation was a feature of countries from the South of Europe (France, Greece, Spain, Portugal). The new member states (NMS) were characterized by broad differences regarding employment regulation rigidity: from more flexible

rules in Hungary and Czech Republic to more rigid ones in Romania. However, analyzing by components one may notice that the highest differences among countries were induced by the regulation of temporary employment, and the lowest by the regulation for collective dismissals.

An index that also measures the regulation of employment on the basis of difficulty of hiring and firing workers and the rigidity of working hours is the *rigidity of employment index*, developed at the World Bank. Its values range from 0 (less rigid) to 100 (more rigid). In the case of the European Union countries (Table 2), similar discrepancies were revealed among the “Anglo-Saxon group” (United Kingdom and Ireland, plus Denmark), the “Southern” (Spain, Greece, Portugal, plus Romania) and the “Continental” (Germany, France, Netherlands and Luxembourg) groups, and also wide differences among the NMS: less rigid regulations in the Czech Republic, Bulgaria, Hungary, the Slovak Republic and Poland and more rigid ones in Latvia, Romania, Estonia and Slovenia.

Table 2: Rigidity of Employment Index for the EU Countries

Country	2008	2009
Austria	24	24
Belgium	17	17
Bulgaria	19	19
Cyprus	24	24
Czech Republic	11	11
Denmark	7	7
Estonia	51	51
Finland	41	41
France	52	52
Germany	42	42
Greece	47	50
Hungary	22	22
Ireland	10	10
Italy	38	38
Latvia	43	43
Lithuania	38	38
Luxembourg	56	56
Netherlands	42	42
Poland	25	25
Portugal	43	43
Romania	46	46
Slovak Republic	22	22
Slovenia	54	54
Spain	49	49
Sweden	38	38
United Kingdom	10	10
UE27	33.7	33.8

Source: World Bank Data Base.

One well-known group of flexicurity indicators is that developed by EMCO, based on a three-elements framework: i) *inputs* (quantitative assessments of rules and regulations that, however, must be interpreted with caution, since some relevant information will always be excluded from such a numerical value); ii) *processes* (the shares of particular groups of persons affected by or participating in policy measures; the indicators will thus show and measure the extent to which policy measures are being implemented) and iii) *outputs* (that should be identified for the four components of flexibility). Both the flexibility and the security aspects should be taken into account when defining indicators, if possible flexibility and security aspects for each component. However, the opinion was that it was not appropriate to measure *general outcomes of flexicurity*, since the outcome indicates the broader results achieved after implementation of several policies. Also, it was not advised to use a *composite indicator* that included all four dimensions, being considered as inappropriate for monitoring the complex issue of flexicurity⁸.

However, *composite indicators* were widely used to assess flexicurity (Begg *et al.*, 2010; Tangian, 2009, Ciuca and Pasnicu, 2008), as advantages being cited the easily accessible overall estimate of the level of achievement in this field and the fact that such an indicator facilitates quantitative and econometric analysis of the correlations, both within the set of indicators chosen and between the composite indicator and other indicators of economic performance⁹.

In the following, we shall employ a similar methodology, based on the inputs-processes-outputs framework, but using available data at regional level. Though flexicurity is indeed most relevant for the national policies and strategies (not only in what regards the labor market), certain aspects revealed by such an analysis might prove quite useful, especially in the current economic context and considering the serious threats to flexicurity, both as concept and as viable long-term strategy in the EU.

Following the EMCO approach¹⁰ and considering the available data¹¹, we decided upon using only *process* indicators as components of the composite index. The chosen indicators were:

⁸ A composite indicator would need to be "decomposed" in order to understand and interpret the results. However, it was considered that in the longer term, a composite indicator or composite indicators for each of the components might be useful at least for analysis with the aim to summarize large quantities of information - *Monitoring and analysis of Flexicurity policies*, EMCO Reports, ISSUE 2/July 2009.

⁹ Iain Begg, Christine Erhel and Jørgen Mortensen, *Medium-term Employment Challenges*, CEPS Special Report, January 2010.

¹⁰ See *Monitoring and analysis of Flexicurity policies*, EMCO Reports, ISSUE 2/July 2009.

- *Share of part-time employment in total employment* – for assessing contractual arrangements and working time arrangements;
- *Participation in lifelong learning* – for assessing the lifelong learning systems;
- *Labor market performance index*¹² – to assess the labor market policies. Since there were no available regional data to compute ALMP indicators such as *activation rates*, a composite labor market performance index based on three sub-indices was chosen instead. The indicator includes:
 - An *employment index* (1/3 a share in the total index), which comprises two indicators, each of them with equal shares (1/2):
 - o Increase in employment (year-to-year basis),
 - o Employment rate,
 - A *unemployment index* (1/3 a share in the total index), which comprises two indicators, each of them with equal shares (1/2):
 - o Unemployment rate,
 - o Share of long-term unemployment in total unemployment,
 - An *overall labor productivity index* (1/3 a share in the total index), which comprises two indicators, each of them with equal shares (1/2):
 - o GDP per capita (in percents of the EU average),
 - o Average number of usual weekly hours in the main job.
- *Share of social benefits other than social transfers in kind in household disposable income* – to assess the social security systems (data regarding the beneficiaries of social protection measures were not available at regional level).

All the indices, sub-indices and individual indicators were normalized according to the formulae:

$$I_{Ci} = \frac{V_i - V_{i\min}}{V_{i\max} - V_{i\min}} \quad (1)$$

where:

- V_i – value of criterion “i” in the case of a certain region;
- $V_{i\min}$ – minimum value of the “i” criterion for the analyzed regions;

¹¹ Data were compiled entirely from the Eurostat Labor Force Survey and the regional data series, for EU NUTS 1 and 2 regions.

¹² See V. Ciuca, D. Pasnicu (coord.), *Flexibilitate si securitate pe piata romaneasca a muncii*, Editura Agora, Bucharest, 2009.

- $V_{i_{\max}}$ – maximum value of the “i” criterion for the analyzed regions.

and:

- $$I_{Ci} = 1 - \frac{V_i - V_{i_{\min}}}{V_{i_{\max}} - V_{i_{\min}}} \quad (2)$$

In this case, the maximum value of the criterion has a negative economic significance and the minimum a positive one.

The final value of the composite indicator for each region is:

- $$CI = (IC1 + IC2 + IC3 + IC4) / 4 \quad (3)$$

In the case of *share of social benefits in household disposable income*, the indicator was computed both according to (1) and (2), because in our opinion it has a mixed interpretation: a high value may reveal both the presence of a generous welfare system, but also the high resilience of population of a certain region upon the social protection system (and, hence, high poverty level and likely threats due to increased pressure upon the social welfare systems generated by drops in budget incomes and unfavorable employment developments¹³). Also, the indicator average number of usual weekly hours in the main job was computed according to (2), to put an emphasis on the combination of effects (overall productivity) and efforts (amount of work). The results for EU15 countries (except for Luxembourg) and for the NMS (except for Cyprus and Malta) and their regions are presented in the Appendix (all the computations refer to 2007)¹⁴.

The best positions regarding the implementation of flexicurity policies are not changed as compared to the above-mentioned analyses, Denmark and the Netherlands being the top performers, with good scores on almost all indicators (except for part-time employment for Denmark and lifelong learning for the Netherlands). Very high scores were recorded by Denmark for the share of benefits in household disposable income (which is in line with previous findings, which consider the country as “flexicure” – employing high flexicurity and high security¹⁵) and participation in lifelong learning, and by the Netherlands for the spread of part-

¹³ For instance, the looming threat of massive layoffs in the public sector of many of the European economies.

¹⁴ A shortened presentation was chosen for reasons of space, but the whole set of computations is available upon request.

¹⁵ See Andranik Tangian (Tanguiane), *Six families of flexicurity indicators developed at the Hans Boeckler Foundation*, WSI – Diskussionspapier Nr. 168 November 2009 Wirtschafts- und Sozialwissenschaftliches Institut in der Hans Böckler Stiftung, Hans-Böckler-Str. 39, 40476 Düsseldorf.

time employment. Medium scores were recorded by Sweden, Austria, Finland and the United Kingdom, followed by Germany, France and Ireland – all countries with functioning labor market policies and mature social welfare systems. It is worth mentioning the high scores in the case of share of social benefits for Finland, Sweden, Germany and France, which may call for attention, considering the above-mentioned likely threats regarding the future sustainability of large social welfare systems. The Southern Europe countries recorded lower scores, that of Greece being even lower than the scores recorded by some of the most advanced NMS. Greece also recorded very low scores on the flexibility components (part-time employment and lifelong learning, and we must keep in mind that the analysis refers to 2007), which may explain some of the current serious difficulties in adapting its labor market to the drastic changes required by the austerity plan the country is pursuing.

The NMS and their regions recorded mixed performances, but nevertheless lower scores than the EU15 countries (except for Slovenia, which revealed good labor market performance and functioning welfare system). However, some grouping may be discerned: Slovenia followed by a group of countries with very close scores – the Czech Republic, Hungary and Poland, then the Baltic States and Slovakia, and the last Romania and Bulgaria. All the NMS generally recorded very low scores on part-time employment and lifelong learning, which calls for attention considering the flexibility needed to adapt to the fast changing economic conditions in Europe and in the whole world. An increased reliance on the social benefits is noticeable, especially in Hungary, Slovenia and the Czech Republic, and also in some of the poorest regions (Nord-Est and Sud-Vest in Romania, for instance). Part-time employment was very low in Bulgaria (and in all its regions), and low in the Czech Republic, Slovakia and Hungary, gaining ground in Poland, the Baltic States, Slovenia, and some regions of Romania, while the labor market performance was generally in the middle range in all the NMS and their regions (signaling – at that time and, among others - improvements regarding the labor market institutions and positive developments regarding unemployment and employment rates).

Meanwhile, the current economic picture of Europe has changed, and the EU countries and regions struggle nowadays to cope with the worst economic crisis of the beginning of the third millennium, which is far from being extinguished. Among the means employed by the EU countries to such a purpose, the flexicurity policies were not yet fully employed, with punctual

exceptions: Bulgaria and its attempts to a better flexicurity approach into national policies, Belgium and its “flexicurity measures” through the “temporary unemployment” scheme collectively agreed for blue collars and Estonia and its flexicurity approach through measures addressing the impacts of the crisis. However, the question of pertinence of flexicurity policies in times of crisis is relevant, and two major challenges are at stakes in Flexicurity policies: combining different policy fields and developing social partnerships, at national and regional level¹⁶.

Selective bibliography

Iain Begg, Christine Erhel and Jørgen Mortensen, *Medium-term Employment Challenges*, CEPS Special Report, January 2010.

Isabella Biletta, “*How Flexicurity could be used for restructuring against the backdrop of development*”: *An overview of approaches to Flexicurity in different Member States*, European Economic and Social Committee (EESC) Consultative Commission on Industrial Change (CCMI), Public Hearing 7 July 2009.

V. Ciuca, D. Pasnicu (coord.), *Flexibilitate si securitate pe piata romaneasca a muncii*, Editura Agora, Bucharest, 2009.

Per Kongshøj Madsen, *A new perspective on labour markets and welfare states in Europe*, CARMA Research Paper 2006:03, Centre for Labour Market Research Aalborg University, Denmark.

L. Frey, A. Janovskaia, G. Pappada, *The concept of flexicurity: Southern and East European countries compared*, 5th International Research Conference on Social Security "Social security and the labour market: A mismatch?" Warsaw, 5-7 March 2007.

André Sapir (Ed.), *Bruegel Memos to the New Commission, Europe's economic priorities 2010-2015*, Bruegel, Brussels, 2009.

Andranik Tangian (Tanguiane), *Six families of flexicurity indicators developed at the Hans Boeckler Foundation*, WSI – Diskussionspapier Nr. 168 November 2009 Wirtschafts- und

¹⁶ Isabella Biletta, “*How Flexicurity could be used for restructuring against the backdrop of development*”: *An overview of approaches to Flexicurity in different Member States*, European Economic and Social Committee (EESC) Consultative Commission on Industrial Change (CCMI), Public Hearing 7 July 2009.

Sozialwissenschaftliches Institut in der Hans Böckler Stiftung , Hans-Böckler-Str. 39, 40476 Düsseldorf.

****Council Conclusions on Flexicurity in times of crisis*, 2947th Employment, Social Policy, Health and Consumer Affairs Council meeting, Luxembourg, 8 June 2009

****EUROPE 2020 - A strategy for smart, sustainable and inclusive growth*, European Commission, Brussels, March 2010.

*** *Flexicurity pathways. Turning hurdles into stepping stones*, Report by the European Expert Group on Flexicurity, EC, June 2007.

****Monitoring and analysis of Flexicurity policies*, EMCO Reports, ISSUE 2/July 2009

****Towards Common Principles of Flexicurity: More and Better Jobs through Flexibility and Security*, European Commission, 2007.

Appendix

Country/Region	CI_Part-time employment	CI_Lifelong learning	CI_Labor market performance	CI_Benefits	CI_1	CI_2
Belgium	0.421	0.210	0.514	0.692	0.459	0.363
Bulgaria	0.007	0.031	0.441	0.407	0.222	0.268
Severna i iztochna Bulgaria	0.006	0.016	0.358	0.458	0.210	0.231
Severozapaden	0.007	0.000	0.382	0.540	0.232	0.212
Severen tsentralen	0.017	0.018	0.336	0.444	0.204	0.232
Severoiztochen	0.001	0.023	0.361	0.396	0.195	0.247
Yugoiztochen	0.002	0.020	0.395	0.459	0.219	0.240
Yugozapadna i yuzhna centralna Bulgaria	0.009	0.048	0.431	0.364	0.213	0.281
Yugozapaden	0.009	0.072	0.474	0.315	0.217	0.310
Yuzhen tsentralen	0.007	0.014	0.386	0.464	0.218	0.236
Czech Republic	0.075	0.164	0.436	0.550	0.306	0.281
Praha	0.117	0.286	0.479	0.386	0.317	0.374
Střední Čechy	0.060	0.135	0.487	0.479	0.290	0.301
Jihozápad	0.069	0.135	0.494	0.552	0.313	0.287
Severozápad	0.034	0.125	0.426	0.634	0.305	0.238
Severovýchod	0.076	0.165	0.456	0.591	0.322	0.277
Jihovýchod	0.087	0.169	0.473	0.582	0.328	0.287
Střední Morava	0.063	0.171	0.449	0.589	0.318	0.274
Moravskoslezsko	0.082	0.122	0.474	0.655	0.333	0.256
Denmark	0.461	0.878	0.694	0.960	0.748	0.518
Germany	0.500	0.228	0.557	0.625	0.478	0.415
Estonia	0.139	0.205	0.409	0.337	0.272	0.354
Ireland	0.249	0.221	0.643	0.516	0.407	0.399
Greece	0.087	0.056	0.440	0.543	0.282	0.260
Spain	0.212	0.307	0.560	0.428	0.377	0.413

France	0.321	0.213	0.489	0.649	0.418	0.343
Italy	0.249	0.180	0.449	0.623	0.375	0.314
Latvia	0.104	0.206	0.495	0.228	0.258	0.394
Lithuania	0.147	0.151	0.492	0.303	0.273	0.372
Hungary	0.058	0.100	0.437	0.641	0.309	0.239
Közép-Magyarország	0.049	0.154	0.447	0.541	0.298	0.277
Dunántúl	0.045	0.073	0.429	0.654	0.300	0.224
Közép-Dunántúl	0.042	0.073	0.466	0.615	0.299	0.242
Nyugat-Dunántúl	0.037	0.066	0.475	0.614	0.298	0.241
Dél-Dunántúl	0.059	0.082	0.376	0.751	0.317	0.192
Alföld és Észak	0.076	0.081	0.385	0.783	0.331	0.190
Észak-Magyarország	0.062	0.071	0.401	0.814	0.337	0.180
Észak-Alföld	0.098	0.082	0.391	0.786	0.339	0.196
Dél-Alföld	0.065	0.087	0.413	0.752	0.329	0.203
Netherlands	0.919	0.495	0.694	0.771	0.720	0.584
Austria	0.429	0.381	0.621	0.676	0.527	0.439
Poland	0.160	0.145	0.471	0.458	0.308	0.329
Centralny	0.135	0.190	0.517	0.368	0.302	0.369
Lódzkie	0.142	0.097	0.506	0.470	0.304	0.319
Mazowieckie	0.131	0.243	0.529	0.327	0.307	0.394
Poludniowy	0.178	0.138	0.432	0.527	0.319	0.305
Malopolskie	0.208	0.127	0.411	0.505	0.313	0.310
Slaskie	0.156	0.146	0.448	0.540	0.322	0.302
Wschodni	0.234	0.130	0.461	0.525	0.337	0.325
Lubelskie	0.275	0.172	0.477	0.542	0.367	0.346
Podkarpackie	0.290	0.108	0.498	0.546	0.361	0.337
Swietokrzyskie	0.137	0.101	0.424	0.527	0.297	0.284
Podlaskie	0.167	0.119	0.441	0.461	0.297	0.317
Północno-Zachodni	0.135	0.124	0.404	0.425	0.272	0.309
Wielkopolskie	0.150	0.116	0.401	0.406	0.268	0.315
Zachodniopomorskie	0.106	0.152	0.348	0.438	0.261	0.292
Lubuskie	0.124	0.112	0.465	0.470	0.293	0.307
Poludniowo-Zachodni	0.131	0.156	0.425	0.476	0.297	0.309
Dolnoslaskie	0.114	0.165	0.402	0.472	0.288	0.302
Opolskie	0.185	0.127	0.452	0.486	0.313	0.319
Północny	0.125	0.119	0.422	0.463	0.282	0.301
Kujawsko-Pomorskie	0.135	0.111	0.385	0.469	0.275	0.290
Warminsko-Mazurskie	0.095	0.103	0.378	0.505	0.270	0.268
Pomorskie	0.137	0.140	0.486	0.434	0.299	0.332
Portugal	0.218	0.111	0.455	0.586	0.343	0.300
Romania	0.171	0.029	0.435	0.281	0.229	0.338
Macroregiunea unu	0.136	0.028	0.398	0.219	0.195	0.336
Nord-Vest	0.167	0.030	0.419	0.251	0.217	0.341
Centru	0.101	0.026	0.414	0.184	0.181	0.339
Macroregiunea doi	0.284	0.027	0.441	0.448	0.300	0.326
Nord-Est	0.321	0.032	0.460	0.524	0.334	0.322
Sud-Est	0.231	0.022	0.373	0.360	0.246	0.316
Macroregiunea trei	0.161	0.032	0.446	0.176	0.204	0.366
Sud - Muntenia	0.272	0.024	0.460	0.424	0.295	0.333
Bucuresti - Ilfov	0.000	0.042	0.447	0.000	0.122	0.372

Macroregiunea patru	0.049	0.028	0.415	0.312	0.201	0.295
Sud-Vest Oltenia	0.028	0.023	0.424	0.483	0.240	0.248
Vest	0.076	0.035	0.447	0.148	0.176	0.353
Slovenia	0.162	0.440	0.487	0.570	0.415	0.380
Vzhodna Slovenija	0.169	0.395	0.484	0.570	0.404	0.369
Zahodna Slovenija	0.155	0.492	0.526	0.569	0.436	0.401
Slovakia	0.026	0.108	0.398	0.426	0.240	0.276
Bratislavský kraj	0.050	0.378	0.511	0.196	0.284	0.436
Západné Slovensko	0.026	0.066	0.420	0.391	0.226	0.280
Stredné Slovensko	0.035	0.106	0.385	0.489	0.254	0.259
Východné Slovensko	0.006	0.047	0.388	0.579	0.255	0.215
Finland	0.258	0.700	0.627	0.721	0.577	0.466
Sweden	0.465	0.549	0.693	0.781	0.622	0.481
United Kingdom	0.481	0.596	0.619	0.575	0.568	0.530

Source: Authors' computations and estimates based on Eurostat data.