

DETERMINING INTERNATIONAL COMPETITIVENESS THROUGH COMPARATIVE ADVANTAGE AT REGIONAL LEVEL – INSTRUMENT IN DESIGNING REGIONAL STRATEGY. STUDY CASE: CENTRAL REGION, ROMANIA

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Abstract

Internationally, Romania holds both good and weak positions in the European Competitiveness Report, with a strong concentration of strengths and weaknesses on the manufacturing and services sectors. Integration into the EU and total openness to the Member States have put Romanian economy in a position to cope with the pressures of the single market as well as with the global market competition. Despite the economic crisis of 2008-2010, the EU continued to have a number of comparative advantages on the world market, in about two thirds of the industrial sectors, which account for about three quarters of the added value. The study aims to analyze the advantages of the Central Region at national level. Analysis of the comparative advantage at regional level highlights the performances achieved at regional level by main groups of goods during 2011-2016. For calculating of the comparative advantage, the article presents the indirect method based on the trade flows structure by determining relative export performance and relative import-export performance. The analysis is based on the positive results obtained at national level by the Central Region, being the single Romanian region that recorded a positive result for the balance trade for the analyzed period. The study highlights a distinct regional development for the Central Region, which does not fully follow the tendency registered at national level. The author intends to confirm de comparative advantage held by Central Region by using both methods, validating in this manner an instrument for designing regional development strategies. The competitive sectors can be determined in an objective way, validated by the commercial flows and their evolution.

Keywords

revealed comparative advantage, relative export performance, relative import-export performance, regional development strategies

JEL Classification

O11, N70

Introduction

Integration into European Union, combined with the globalization process that affects all economies, generated changes for the Romanian economy. Economic development and internationalization of companies have to be considered in the conditions of a more intense competition, in the framework of international dimensions of market and the pressure of foreign investors on the regional and national markets. International dimensions of the competition generate new challenges for the companies participating in international trade. Considering these challenges, it is relevant to determine the competitiveness at regional level for each country in order to support the regional development policy and to create or adjust financial support instruments in order to maximize regional performances in international trade. Regional development strategies are designed in order to maximize the strengths and opportunities for each region, at national level. To support economic specialization at regional level, there has to be identified the competitive sectors. Regions, in which there were identified comparative advantages, have to be analyzed through the perspective of the number of the competitive sectors and the evolution of economic growth. In order to support macroeconomic decisions and to have a feedback regarding the implemented policies, there has to be determined at regional level (combined with county level) the revealed comparative advantage and to analyze its evolution in time.

Literature review

Absolute advantage supported by Adam Smith in the 18th century was based on the idea that one country should import goods that can be bought in lower price than the price that would be generated by producing the same goods with its own resources (Smith, 1776). This idea is based on international labor specialization that generates production of quality goods in low costs, respectively the basis for international trade. Determination of the comparative advantage was introduced by David Ricardo, in the beginning of 19th century. Comparative advantage refers to the principles according to which each country is specialized in producing and exporting the goods obtained with lower relative costs, namely more efficiently compared to other countries (Udrescu, 2012). International trade stimulated global production, by allowing the countries to be specialized in commodities for which they have comparative advantages (Krugman and Obstfeld, 2003). Considering this theory, one country can benefit by trade even if it does not have absolute advantage in production of any commodity. It has to have a relative advantage in producing a selected commodity that is able to export it. Thus, in this theory it is not compared the level of unit costs of manufacturing the same commodity in two countries, but it is compared the ratio of unit costs of manufacturing two selected products in two countries (Szczepaniak, 2018). Ricardian theory was verified in different analyzes conducted and studying international trade between two or more countries (MacDougall, 1951; Stern, 1962; Balassa, 1963; Budnikowski, 2017). Recent theories underlined the importance of increasing returns to scale and product differentiation to support intra-industry trade (Krugman; 1979, 1980, 1991; Bosa and Lu Zhang; 2012). The latest studies regarding competitive advantages are considering the importance of following factors: technological level, innovation, quality of products, including after sell services. Approaching the competitiveness through sustainable development strategy, supposes to observe also the efforts regarding the environment protection and the rational use of the non regenerating resources (Coenen, Lopez and Diaz, 2010; Rodríguez, 2012; Schwab, 2012). The analyze conducted in this study is based on the Balassa comparative advantage developed for identifying the competitive types of commodities that consolidate one country position to compete in international trade, even the commodities do not offer high profitability (Guzek, 2004). It has been developed the theory that comparative advantages can be competitive advantages (Misala, 2011). Nowadays, the theory of Balassa according with the methods of studying comparative advantages proposed, represents the starting point of international

competitiveness research in the area of foreign trade. Despite the unquestionable qualities of the theory of comparative costs, due to the complexity of processes occurring in the contemporary economy, it is not possible to present the directions and intensity of changes in trade flows using only one theory of international trade (Szczepaniak, 2018). Considering the development strategies of the countries, the regional strategies should consider the comparative advantage in order to maximize at regional and national level the resources of that country.

Romanian comparative advantages – motivation for regional analysis

Internationally, Romania occupies both good and weak positions in the European Competitiveness Report ranking, with a quite pronounced concentration of strengths and weaknesses in the manufacturing and services areas. Integration into the EU and total openness towards the Member States has put Romanian economy in a position to cope with both the pressures of the single market and the competition on the world market. Despite the economic crisis of 2008-2010, the EU continued to have a number of comparative advantages on the world market, in about two thirds of the industrial sectors, which hold about three quarters of the added value. The advantages are concentrated in products with a high degree of sophistication and knowledge intensity, with the observation that the EU has a broader internal base of high-tech chains than the US, China or Japan.

Paradoxically, given the natural potential, the population employed in agriculture and the relatively low level of pay, Romania has a low comparative advantage index in this sector. Neighboring countries Bulgaria and Hungary are much more competitive, which explains the cross-border supply systematically made by inhabitants of the big Romanian cities from the respective borders. At the opposite end, the most competitive fields in international comparisons are represented by the tobacco industry and wood, respectively wood products (but with a low level of processing), the index of comparative advantage for these sectors being 5.81, respectively 4.86, according to the European Competitiveness Report from 2014 (European Competitiveness Report, 2014). The index for furniture type products is lower, but nonetheless at a high level, 3.62 respectively, highlights this area's potential for the Romanian economy. In textiles, clothing, leather and footwear, Romania has a competitive manufacturing industry, a fact reflected by relatively high values of the comparative advantage index (tending to 2 for certain areas). These fields are supplemented by metal products and electrical equipment that record above-unitary indices. The year 2016 was on the trend of accentuating the current account deficit started in 2014, against the background of the deterioration of the balance of goods and primary incomes. Structural analysis of the balance of the trade balance, on groups of products from the Combined Nomenclature show deficits for: chemicals and plastics (5950 million euros), common metals (1908 million euros), mineral products (1742 million euros), textiles, clothing, footwear (1053 million euros), agro-food products (710 million euros), respectively surplus in: machinery, apparatus, equipment and means of transport (1563 million euros), wood products, paper (383 million euros) and other goods (185 million euros). By geographical area, the deficit in the balance of goods was generated almost entirely by intra-community trade (97.6 percent), the extra-community trade having an influence of only 2.4 percent.

Research methodology

To determine the revealed comparative advantage is used the indirect method based on the structure of the commercial flows, proposed by Belassa (1965). According to this method, starting from the structure of commercial flows, one identifies the product groups for which there is a comparative advantage. For calculating the comparative advantage, there are determined two indices: relative export performance and relative import-export performance. The analyze determines first the comparative advantage held by Central Region by using both

methods, determining the competitive groups of good at national level. The competitive sectors are determined in an objective way, being validated by the commercial flows and their evolution at national level. The analyze will continue with the determination of comparative advantage at county level, for counties of Central Region in order to identify in territory the competitive potential and to validate the decisions in supporting at county and regional level the investments strategies and the financial allocation that aim to support economic development.

The relative export performance at regional and county level is determined as follows:

$$RCA_{\text{Regional}} = (X_{ri} / X_{ni}) : (X_r / X_n) \quad (1)$$

where: X_{ri} – the regional export for the i group of goods;

X_{ni} – the national export for the i group of goods;

X_r – regional export; X_n – national export.

$$RCA_{\text{County}} = (X_{ci} / X_{ri}) : (X_c / X_r) \quad (2)$$

where: X_{ci} – the county export for the i group of goods;

X_{ri} – the regional export for the i group of goods;

X_c – county export; X_r – regional export.

According to this method, the region, respectively the county, has a comparative advantage over the national/regional level for a certain category of goods i , if this index is greater than 1. The higher the index than 1, the more the comparative advantage is picked up. If the index has values between 0 and 1, it means that for the specific group of goods, the respective region/county has no comparative advantage.

The relative import-export performance at regional and county level is determined as follows:

$$RCA_{\text{Regional}} = (X_{ri} / X_{ni}) : (M_{ri} / M_{ni}) \quad (3)$$

where: X_{ri} – the regional exports for the i group of goods;

X_{ni} – the national exports for the i group of goods;

M_{ri} – the regional imports for the i group of goods;

M_{ni} – the national imports for the i group of goods.

$$RCA_{\text{County}} = (X_{ci} / X_{ri}) : (M_{ci} / M_{ri}) \quad (4)$$

where: X_{ci} – the county exports for the i group of goods;

X_{ri} – the regional exports for the i group of goods;

M_{ci} – the county imports for the i group of goods;

M_{ri} – the regional imports for the i group of goods.

According to this method, in determining the comparative advantage both the supply (exports) and the demand (imports) are taken into account by groups of goods at regional and county level. Like the previous indicator, if it is positive, but smaller than 1, it means that the region/county analyzed has no comparative advantage over the national/regional level for a certain category of goods. If the index value is greater than 1, then there is a comparative advantage, the greater the value compared to 1, the higher the index, the bigger the advantage.

Results, conclusions and discussions

The analysis of the comparative advantage using the methods presented above, reveals the competitive categories of goods for Central Region. The detailed data for central Region are presented in Table no. 1. The indices determined through both methods revealed the following categories of goods: (1) the VIII and IX groups, respectively raw skins, tanned leathers, furs and products thereof and wood products, exclusively furniture, which have the highest level of the indicator (over 3) and a relatively constant trend during the period analyzed 2011-2016; a similar level for wood products is registered at the North-East Region level; (2) these groups are followed, from the perspective of the analyzed indicators, by groups X, XI and XIII, with values close to 2; similar values for these groups are recorded in the North-East, South and South-East regions; (3) the groups of goods for which the Central Region has a comparative advantage at the national level (a level of the indicators calculated over 1), during the analyzed

period, are: I, VI, XII and XVI. Similar values for the same product groups are recorded in the neighboring West and North-West regions. At the opposite pole, in the category of goods for which the Central Region has low levels of the analyzed indicators, the following categories of goods are observed: II, III, IV, V, VII, XV and XVII.

Table no. 1. Comparative Advantage determined for Central Region compared with national level according (using equation (1) and (3))

Category	2011 (1)	2012 (1)	2013 (1)	2014 (1)	2015 (1)	2016 (1)	2011 (3)	2012 (3)	2013 (3)	2014 (3)	2015 (3)	2016 (3)
I.	1.1520	1.1785	1.3424	1.4523	1.2981	1.1500	0.8527	0.9674	1.0725	1.2379	1.1217	1.0105
II.	0.0869	0.0830	0.0714	0.0580	0.0570	0.0596	0.1890	0.1838	0.1640	0.1122	0.1339	0.1562
III.	0.0972	0.0677	0.0822	0.0531	0.0104	0.0050	0.6034	0.4477	0.4003	0.2499	0.0658	0.0209
IV.	0.2026	0.2921	0.3114	0.2344	0.1725	0.2021	0.7431	1.2247	1.1353	0.8249	0.6788	0.7563
V.	0.0494	0.0421	0.0548	0.0666	0.0815	0.0901	0.1112	0.0858	0.2118	0.4376	0.5310	0.2500
VI.	1.4276	1.3995	1.3996	1.2541	1.3631	0.7007	1.5874	1.7823	1.5440	1.4614	1.7640	1.2337
VII.	0.5556	0.6066	0.6042	0.5726	0.5908	0.5742	0.6102	0.6437	0.6162	0.5587	0.5730	0.5671
VIII.	3.4496	3.6696	3.7194	3.5666	3.2508	2.9883	2.3827	2.5775	2.5143	2.4262	2.2563	2.2631
IX.	3.4779	3.3066	3.3182	3.1458	3.0658	2.9544	1.6086	1.4830	1.6327	1.5031	1.3839	1.3779
X.	1.8300	1.6332	1.6678	1.6372	1.7513	1.4251	2.0084	1.8220	1.7248	1.8898	2.0140	1.6151
XI.	1.6033	1.4002	1.2467	1.2395	1.1954	1.1082	1.2041	1.1959	1.1747	1.2004	1.1099	1.1339
XII.	1.1050	0.9618	1.0158	1.0095	1.0711	0.9789	1.6242	1.4843	1.6101	1.5734	1.4168	1.5927
XIII.	1.9784	1.9093	2.0302	1.8603	1.8969	1.6853	3.2439	3.1209	3.1753	3.0629	3.0211	3.1354
XV.	0.6273	0.6629	0.7040	0.7342	0.7339	0.8195	0.6528	0.7113	0.7656	0.7418	0.7197	0.7777
XVI.	1.0942	1.1728	1.1718	1.1818	1.2467	1.3055	1.5228	1.5286	1.4692	1.4424	1.4948	1.5267
XVII.	0.8449	0.8185	0.9253	1.0844	0.9281	1.0463	1.0962	1.0203	1.1284	1.3358	1.6799	1.9444
XVIII.	1.5965	1.0035	0.8086	0.6628	0.5501	0.3689	2.4143	1.1951	0.9688	0.8176	0.7602	0.4606
XX.	1.1321	1.0111	0.9267	0.8885	0.9620	0.9263	2.0884	2.0702	2.0842	2.0402	2.2800	2.4738
XXII.	1.0297	0.6851	0.8228	0.9934	0.9720	0.9760	0.9952	1.0600	1.0620	1.5678	1.8450	2.0974

Source: author's own computation based on imports and export available at www.insse.ro

Notation: I. Live animals and animal products, II. Vegetable products, III. Animal or vegetable fats, IV. Prepared foodstuffs, beverages and tobacco, V. Mineral products, VI. Products of the chemical industry, VII. Plastics, rubber and articles thereof VIII. Raw hides and skins and leather, furs and manufactures thereof, IX. Wood products, excepting furniture, X. Paper and articles of paper, XI. Textiles and textile articles, XII. Footwear/headgear/umbrellas/walking/seat-sticks/whips/riding-crops, parts; prepared feathers/ articles; artificial flowers; articles of human hair, XIII. Articles of stone, plaster, cement, asbestos, mica or similar materials; ceramic products; glass and glassware, XV. Base metals and articles of base metal, XVI. Machinery/mechanical appliances; electrical equipment; parts; sound recorders/reproducers, tv image, sound recorders/reproducers, parts/accessories, XVII. Vehicles, aircraft, vessels and associated transport equipment, XVIII. Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof, XX. Miscellaneous manufactured articles, XXII. Goods non-included in Combined Nomenclature other sections

Corroborating the analysis with the evolution of main macroeconomic indicators, observing in detail the foreign trade activity at a regional level, for the Central Region in 2011-2016, for the two elements of import and export structure, it is relevant that the evolution was positive. It should be noted that the balance of the trade in the Central Region is positive, the exports are higher than the imports during the analyzed period, with a tendency to increase this balance. At regional level, Braşov county maintains a contribution of approximately one third in the total of the regional exports, followed closely by Sibiu, with a contribution of 30%, on average. The third place is occupied by Alba County with an average contribution of 15% followed closely by Mureş County with an average contribution of 12%. Modest contributions are coming from Covasna and Harghita with an average of 4% in regional exports.

The evolution is relatively similar in terms of imports, with minor exceptions. Braşov county owns approximately 36% of the regional imports, followed closely by the county of Sibiu, with an average of 28%. Thus, the share of imports is higher than the share of exports in the regional total for Braşov County, while for Sibiu County it is lower. The third place is occupied by the county of Mureş with an average contribution of 16% of the total of regional imports, followed by Alba county with an average contribution of 9%. Covasna and Harghita counties have lower contributions, with an average of 5% in the formation of regional imports, a higher contribution than the exports registered at the county level. These comparisons

regarding the structure of imports and exports and a correlation between them at regional level in order to determine the efficiency of the foreign trade activity at regional and county level, must be complemented by a careful analysis by commodity groups in order to establish the relevant comparative advantages at both regional and county levels, in order to be able to formulate proposals for future regional development directions (Table no. 2).

Table no. 2. Minimum and maximum values for Comparative Advantage determined for counties in Central Region (using equation (2) and (4) for 2010-2016)

Category	AB (2)	AB (4)	BV(2)	BV (4)	CV (2)	CV (4)	HR (2)	HR (4)	MS (2)	MS (4)	SB (2)	SB (4)
I.	0.94/1.34	0.57/0.91	0.81/1.20	0.86/1.20	6.10/8.50	4.50/12.0	0.36/1.77	0.36/1.49	0.51/0.84	0.20/0.32	0.21/0.41	0.98/1.98
II.	1.01/1.94	1.08/2.33	0.27/0.43	0.42/0.69	0.14/1.65	0.04/0.64	2.12/5.76	0.73/1.67	1.47/3.26	0.42/1.56	0.15/0.99	0.59/7.93
III.	0.22/2.17	0.79/5.73	0.69/2.24	1.50/5.32	0.00/2.64	0.00/1.16	0.01/7.19	0.00/0.96	0.15/1.09	0.18/0.58	0.04/0.45	0.06/0.63
IV.	1.46/2.44	2.28/4.13	0.58/0.94	0.84/1.28	0.33/2.77	0.25/1.78	1.61/2.55	0.31/0.51	0.78/1.68	0.34/0.99	0.55/0.74	1.03/1.59
V.	0.01/0.18	0.01/1.98	1.57/2.65	2.19/10.67	0.01/0.31	0.01/3.47	0.11/0.76	0.52/6.31	0.01/0.41	0.01/0.08	0.25/1.16	0.31/3.25
VI.	0.17/0.44	0.29/0.80	0.38/1.14	0.33/0.89	0.02/0.11	0.06/0.46	0.06/0.23	0.07/0.45	4.12/6.86	1.67/3.40	0.05/0.54	0.16/0.82
VII.	0.61/1.15	1.77/3.60	1.44/1.61	1.33/1.66	0.86/1.10	0.36/0.53	0.59/0.98	0.27/0.48	0.43/0.75	0.31/0.54	0.58/0.71	0.67/0.81
VIII.	0.46/0.78	0.75/1.22	0.10/0.31	0.15/0.38	0.01/0.04	0.08/0.39	0.71/0.98	0.91/1.30	0.36/0.45	0.55/0.84	2.38/2.70	1.34/1.44
IX.	3.51/4.31	1.17/2.08	0.53/0.60	0.41/0.61	0.27/0.54	0.67/1.31	1.12/2.01	1.17/1.56	0.57/1.14	1.14/3.27	0.05/0.11	0.31/0.50
X.	2.43/3.05	0.98/1.61	0.44/0.66	0.94/1.45	0.27/0.34	0.09/0.56	4.17/7.38	0.94/1.48	0.07/0.27	0.11/0.23	0.30/0.47	0.75/1.28
XI.	0.41/0.56	0.92/1.13	0.40/0.56	0.54/0.78	4.08/6.41	1.37/1.83	3.02/4.15	1.13/1.38	0.92/1.36	0.72/1.09	0.67/1.10	0.96/1.04
XII.	1.76/2.30	1.05/1.22	0.83/1.10	1.22/1.63	0.00/0.12	0.00/1.72	0.21/1.75	0.23/0.69	0.70/1.09	0.68/0.93	0.62/0.77	0.65/0.89
XIII.	2.93/4.20	2.51/3.71	0.10/0.18	0.12/0.18	0.85/1.17	0.71/1.15	0.07/0.41	0.04/0.30	2.07/2.63	2.32/3.33	0.20/0.42	0.25/0.38
XV.	0.20/0.32	0.39/0.76	1.35/1.61	1.11/1.40	0.22/0.49	0.42/0.92	0.56/0.90	0.33/0.63	0.58/1.32	0.51/1.18	0.83/1.14	0.99/1.12
XVI.	0.36/0.46	0.60/1.50	0.96/1.06	0.94/1.07	0.35/0.81	0.47/0.90	0.07/0.24	0.12/0.36	0.58/0.76	0.67/1.15	1.57/1.64	1.01/1.19
XVII.	0.04/1.39	0.21/1.35	1.57/2.13	0.88/1.15	0.20/0.32	0.24/0.64	0.23/0.39	0.22/0.87	0.26/0.36	0.28/0.53	0.59/1.10	1.14/3.04
XVIII.	0.05/2.21	0.27/2.19	0.68/0.87	0.70/1.28	0.20/0.58	0.06/0.59	0.19/0.41	0.24/0.40	1.48/2.84	0.97/2.56	0.55/1.73	0.62/1.52
XX.	0.94/1.14	1.48/2.15	0.20/0.45	0.20/0.50	0.90/1.09	0.41/0.56	3.76/4.17	1.63/1.86	2.00/2.23	1.05/1.40	0.64/1.16	0.97/1.98
XXII.	1.59/4.62	3.62/7.66	0.60/1.21	0.94/1.53	0.00/0.11	0.01/1.27	0.00/0.25	0.00/0.67	0.82/2.49	0.26/0.59	0.03/0.27	0.09/1.17

Source: author's own computation based on imports and export available at www.insse.ro
 Notation: Alba – AB, Braşov – BV, Covasna – CV, Harghita – HR, Mureş – MS, Sibiu – SB.

The results calculated both at the regional and county level, aim to determine the comparative advantages of the Central Region at the national level, and at the county level, to identify the comparative advantages of the counties within the Center Region. Surprisingly, although for first two categories, I and II, Romanian economy is not competitive at international level, still for the first category Central Region is competitive at national level (confirmed through the results obtained for all indices). Deepening the analysis on the counties of Central Region, there can be observed that county Covasna records high level of the indices (according to both methods of calculating), compared to the modest results obtained for the other counties. Practically, the competitiveness of the Central Region for group I is determined by Covasna county. For the second group and II, Central Region is not competitive at national level, but the territorial analysis reveals high level of the indices calculated according to first method for Harghita and Mureş counties, that reveals the performance of exports for vegetable products. But the results are not being confirmed according to the results for the second method, which means that these results show competitiveness at small scale, but at national level, according to the large amount of the imports for this category, the advantage is lost. Situation is similar for III and IV groups. Although at regional level the indices do not show relevant comparative advantages, still, the counties analysis reveals performances for group III. Animal and vegetable for Harghita county, for export performance (first method), but not for the import-export performance (second method). Relevance for import-export performance is being shown for Alba and Braşov counties, but not confirmed in terms of export performance. Situation is similar for group IV, for which Harghita county has relative export performance, while Alba county has relative import-export performance. For group V although Central Region is not competitive at national level, still, Braşov county records high values both for export performance and import-export performance. Similar results are recorded also for group VII, where Mureş county has relative export performance,

while Alba county has relative import-export performance, in the framework in which Central Region is not competitive at national level. Central Region is being competitive at national level for VI, confirmed by the analysis for Mureş county through both methods. Mureş county records a tradition in this area, together with human resources trained in this area and investments made. For the next two groups VIII and IX, Central Region is being competitive at national level according to both methods, recording values over 2. For group VIII, Sibiu county has relative export and import-export performance, while Harghita county gains relative import-export performance, with good perspectives for development. For IX Alba and Harghita counties are confirmed by both methods, while Mureş county is gaining relative import-export performance. Groups X and XI are confirmed as competitive at national level for Central Region, but high performances are being recorded by Alba and Harghita counties for paper and articles of paper, respectively Covasna and Harghita counties for textiles and textile articles. Relative export performance for textiles and textile articles is being recorded also by Mureş county. Central Region is being competitive for group XII confirmed at county level for Alba and Mureş counties for relative export performance and Alba and Braşov counties for relative import-export performance. High level of competitiveness at national is recorded for group XIII, confirmed through both methods at regional level and county level for Alba and Mureş counties. Similar results are recorded also for group XVI. Although at national level, Central Region has no comparative advantages, still at regional level, groups XV and XVII records comparative advantages for Braşov and Sibiu counties, being sectors supported at regional level. Similar situation is recorded also for XVIII, where Mureş county outstands with its performances.

Overall, the analysis shows the strengths and opportunities for future development for each region, according with the group of goods that are not competitive both at national and regional level. This information should be considered by the stakeholders that are designing and preparing the financial instruments for regional development together with the main objective for future development and connections with national development strategy and strategic documents for competitiveness. In general, the two calculation methods lead to approximately the same results. The discrepancies may occur when there are significant differences between the two levels analyzed (region / county and country / region) in terms of policy measures in the commercial field, but also in consumer preferences.

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