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# THE ROLE OF EUROPEAN UNION FUNDS IN THE ECONOMIC DEVELOPMENT OF SZEKLERLAND

**Abstract:** The most significant part of the Hungarian population in Transylvania lives in Szeklerland. In the other regions, the population can be considered as scattered, constituting a minor, and in most cases negligible, Hungarian minority presence. However, Szeklerland is not an administratively recognized territory; it has, so to speak, psychological borders, the lines of which are drawn by ethnic and cultural characteristics. The future development of this region can be said, without exaggeration, to be directly linked to the well-being and survival of the Hungarian minority in Romania. This paper shows which administratively recognized development region it belongs to nationally, where it lags behind in terms of global economic mechanisms, and its level of development according to macroeconomic indicators at the national (mainly Transylvanian) level in relation to other regions. The EU's aid policy could provide a solution in terms of correcting the shortcomings and gaps identified and in achieving future development, which offers significant potential resources for the catching-up of similar regions. However, when exploring the opportunity for economic development, we cannot ignore the unparalleled potential of the region under analysis, embodied by its natural beauty, biodiversity, value-preserving traditions, multiculturalism, and strategic geographical location.

#### About Szeklerland

Szeklerland is a historical region in the eastern part of Transylvania, forming an integral part thereof. In general terms, historical Transylvania, also known as Inner Transylvania, covers an area of 57,000 km<sup>2</sup>, not extending to the regions known as Banat and Partium. The total area of Transylvania as we know it today, which does include Banat and Partium, spans 100,293 km<sup>2</sup>. According to the latest final and officially published census data (taken in 2011), it has a population of 6,789,250, of which 77.2% is Romanian, 19.5% Hungarian, 1.6% Roma, 0.4% German, and 1.4% other. The largest and most important cities are Cluj-Napoca, Timisoara, Arad, Brasov, Târgu Mures (with a Hungarian population of around 46%, the largest number of Hungarian-speaking inhabitants in Transylvania), Odorheiu Secuiesc (with a Hungarian population of around 95%), and Miercurea Ciuc

(82% Hungarian-speaking inhabitants). Its natural beauty is unparalleled, with 33.7% of the total area covered by forests, and its traditions and multiculturalism also make it stand out.<sup>1</sup> Here, the decline, emigration, and peripheralization of the Hungarian-speaking minority are indisputable facts, supported by scientific demographic and statistical data. The reasons for this, in addition to the cultural and ethnic aspects, are linked to subsistence: namely, of an economic nature. Identifying and analyzing the main factors that perpetuate the problem and developing alternative strategies leading to a solution have become indispensable in this field.

In Transylvania, more than 70% of the Hungarian-speaking population lives in Szeklerland, forming the largest coherent group of Hungarians remaining in Transylvania. Therefore, this paper focuses predominantly on this region as its area of analysis. However, Szeklerland is not recognized as a separate region administratively; it is made up of three counties (i.e., Mureş, Harghita, and Covasna), but even their boundaries do not delineate its territory, since Mureş County is only partially included in the region (the northern part of the county in question, Târgu Mures, and its wider surroundings are included in the region under analysis). Partly due to the predominantly Hungarian ethnic population and partly due to historical events, the inhabitants perceive this geographical unit as a region with no administrative borders, yet certainly one with psychological borders.



#### Map 1: Location of Szeklerland<sup>2</sup>

<sup>1 &</sup>quot;Szeklerland," Erdélystat Statistics, accessed November 25, 2022, http://statisztikak.erdelystat.ro/data-sheets/seklerland/3284.

<sup>2 &</sup>quot;Hol van Székelyföld? Székelyföld elhelyezkedése Románia és Magyarország viszonylatában" [Where is Szeklerland? Location of Szeklerland in relation to Romania and Hungary], Székelyföld Térképek [Szeklerland Maps], accessed November 20, 2022, http://szekelyfold.terkepek.net/.



Map 2: Detailed map of Szeklerland<sup>3</sup>

However, since Szeklerland, as already mentioned, is not an officially recognized administrative territory, it is necessary to examine to which development region it belongs according to the scheme in place in Romania, since the funds available for development are primarily aimed at this wider region and can, within this framework, be used for the development of the region under scrutiny.

Romania is administratively divided into eight development regions, each with a Management Authority (Autoritatea de Management; AM), and within these there are so-called Regional Development Agencies (Agenția pentru Dezvoltare Regională; ADR). The development regions are divided as follows:<sup>4</sup>

• Northeastern Region (includes the counties of Bacău, Botoșani, Iași, Neamț, Suceava, and Vaslui)

<sup>3 &</sup>quot;Székelyföld települései, székely városok, székely falvak [Settlements in Szeklerland, Szekler towns, Szekler villages], Székelyföld Térképek [Szeklerland Maps], accessed November 20, 2022, http://szekely-fold.terkepek.net/.

<sup>4 &</sup>quot;Date de contact ale celorlalte ADR din Romania" [Contact details for the other ADRs in Romania], Agenția pentru Dezvoltare Regională Centru [Central Regional Development Agency], accessed November 23, 2022, http://www.adrcentru.ro/contact-2/date-de-contact-ale-celorlalte-adr-din-romania/.

- Southeastern Region (includes the counties of Brăila, Buzău, Constanța, Galați, Vrancea, and Tulcea)
- South Muntenia Region (includes the counties of Argeş, Călăraşi, Dâmbovița, Giurgiu, Ialomița, Prahova, and Teleorman)
- Southwest Oltenia Region (includes the counties of Dolj, Gorj, Mehedinți, Olt, and Vrancea)
- Western Region (includes the counties of Arad, Caraş-Severin, Hunedoara, and Timiş)
- Northwestern Region (includes the counties of Bihor, Bistrița-Năsăud, Cluj, Maramureș, Satu Mare, and Sălaj)
- Central Region (includes the counties of Vojvodina, Brasov, Covasna, Harghita, Mureş, and Sibiu; importantly, this development region also includes Szeklerland)
- Bucharest–Ilfov Region (includes Bucharest and Ilfov County).

The above data shows that Szeklerland belongs to the Central Region (Regiunea de Dezvoltare Centru). The Central Region covers a total area of 34,100 km<sup>2</sup>, 14.3% of Romania's total area, with a population of 2,317,151, of which 28.6% are Hungarian, 61.2% Romanian, and 4.7% Roma, in terms of ethnicity<sup>5</sup>. Due to its geographical location, it is directly connected to six of the other seven development regions, which (as its name suggests) is due to its central location. In terms of population, it ranks fifth out of the eight development regions, with a population density of sixty-eight inhabitants per square km and an urban population of 57.7%, making it the most urbanized region in the country behind Bucharest–Ilfov and the Western regions. Most cities have around 20,000 inhabitants, Brasov being the largest in this region with 200,000 inhabitants, followed by Sibiu and Târgu Mureş with between 100,000 and 200,000 inhabitants.

It is an area rich in natural resources, with reserves of natural gas, non-ferrous metals, salt, basalt, andesite, marble, coal, and mineral water, but it also has a significant water supply and vast forested areas (approximately one third of the region's territory).

The region's economy has changed significantly over the past ten years, with agriculture and the extractive industries declining in importance but still employing a significant number of people. This has been offset by remarkable development in other sectors, with the service industry currently accounting for 57.4% of the PPP-deflated regional GDP per

<sup>5 2020</sup> data

capita, while industry makes up 32.5%. The largest share of industry is represented by the automotive, metalworking, food, woodworking, and light industries, but the IT sector and aeronautics have also been developing rapidly. In 2019, GDP per capita was 66% of the EU average at &20,500, ranking third nationally among the regions, behind Bucharest–Ilfov and the Western Region.

In terms of transport infrastructure, the region has 11,534 km of roads, 1,340 km of railways (671 of which are electric), and 178 km of motorways, as well as two operational airports (Sibiu and Târgu Mureş) and one under construction (in Braşov).

It is important to highlight the region's significant tourism potential, including for mountain, spa, cultural, and village tourism. In terms of tourism attractiveness, the region is first in the regional ranking, with 1.53 million tourists visiting the region in 2020, representing 24% of the total number of tourists in the country.<sup>6</sup>



#### Map 3: The map of the central region<sup>7</sup>

<sup>6 &</sup>quot;Központi Régió bemutatása" [Presentation of the Central Region], Agentia Pentru Dezvoltare Regionala Centru [Agency for Central Regional Development], accessed January 15, 2023, http://www. adrcentru.ro/prezentare-regiunea-centru/.

<sup>7 &</sup>quot;A Központi régió: Általános bemutatás" [The Central Region: General presentation], accessed November 25, 2022, http://centruregion.com/wp-content/uploads/2018/03/Regiunea\_Centru.pdf.

Specifically, the region of Szeklerland includes the counties of Harghita and Covasna and the northern part of Mureş County, an area of 10,349 km<sup>2</sup>,<sup>8</sup> where 71.72% of the population is Hungarian.<sup>9</sup>

## The global space and identifying gaps

When analyzing the development potential of a region, we cannot ignore its immediate environment nor its wider environment, which is the context in which it is embedded and on which its development paths and opportunities depend to a large extent. Szeklerland is no exception, as it is situated in a global space and is therefore significantly influenced by the processes and mechanisms and laws that operate there. At the same time, we must take into account that, in a narrower sense, it is part of the EU, and within it also forms an integral part of Romania. In all of these respects, performing a purely internal (endogenous) analysis is a pointless exercise and divorces the country from reality. In the course of my previous analyses and studies, I have come to the conclusion that the elements that can be defined as generating development in the global space, and therefore also as affecting the regions it comprises, are: the axial division of labor, global supply chains, interconnectedness, research and development (R&D), innovation, and digitalization.

The axial division of labor (core–periphery relationship) is based on the presence of industry (with the associated services) and, respectively, its development, and to a large extent this is the cause of the differences in economic development between countries and regions. Economic fluctuations are perhaps best illustrated by the Kondratiev cycle, where phases of expansion and stagnation or recession follow each other in succession<sup>10</sup>. In today's modern economic system, the Kondratiev cycle has caused the spatial divergence and temporal convergence of the two (extensive and intensive) phases, which is to say that innovations in the core are almost continuous (the most advanced countries and regions; the intensive phase). Moreover, shortly after the new technology is introduced, they expand and settle towards regions with lower wage levels (peripheral, less-advanced countries and regions;

<sup>8 &</sup>quot;Szeklerland," Erdélystat Statistics, accessed November 25, 2022, http://statisztikak.erdelystat.ro/datasheets/seklerland/3284.

<sup>9 &</sup>quot;Date recensământ 2013" [Census Data 2013], Recensamantul Populatiei si Locuintelor [Population and Housing Censurs], accessed November 24, 2022, https://web.archive.org/web/20160118131243/ http://www.recensamantromania.ro/wp-content/uploads/2013/07/sR\_Tab\_8.xls.

<sup>10</sup> Immanuel Wallerstein, *Bevezetés a világrendszer-elméletbe* [World-Systems Analysis: An Introduction], Budapest: L'Harmattan Publishers, 2010).

the extensive phase), covering increasingly larger areas. All this serves to further cement the roles to which states are relegated by the core–periphery paradigm. The peripheral countries have underdeveloped productive bases and are therefore stuck in the extensive phase of the return on capital cycle.<sup>11</sup> All of this means that R&D overwhelmingly takes place in countries with a stake in industrial production (these are the core countries), while countries with cheaper labor and a lower degree of development (semi-periphery and periphery) are where production takes place, albeit using capital from the core. The result is that a significant part of the profits generated in the periphery do not stay in the place where they are generated but rather are transferred to the core, where they are used to develop and innovate, thus maintaining the wage and living standard differentials between the two camps.

Knowledge, innovation, and creativity have been shown to be a growth driver at a global level in certain countries and regions, also bearing in mind the crucial importance of digitalization. Their inclusion in education and R&D, alongside technological progress, will lead to an increasing contribution of cultural and creative industries to GDP.<sup>12</sup> The importance of innovation is also highlighted by Ayesha Khanna and Paragh Khanna, who argue that innovation has a greater impact on the future of a nation than its military strength or GDP.<sup>13</sup> Because technology has become such an important part of people's physical and social lives, it is impossible for policy planning in various areas of education, health, and security not to take it into account as a driving force.<sup>14</sup> The consequence of innovation and R&D is technological progress, which is the main driving force for industry, productive enterprises, and the economy as a whole. Its importance was demonstrated by Samuelson and Nordhaus when they analyzed the contribution of labor, capital, and technological development to growth. The analysis showed that technological advancement contributed more than five times as much to economic growth as the simple accumulation of capital.<sup>15</sup>

Interpreting the laws of the core-periphery relationship, the country/region capable of achieving breakthrough development and guaranteeing economic security is the one that is based on industrial production. This means that it has a stake in industry and carries out

<sup>11</sup> Annamária Artner, *Töke, munka és válság a globalizáció korában* [Capital, labour and crisis in the age of globalisation], Budapest: Akadémiai Kiadó, 2014).

<sup>12</sup> Lóránt Zsombor Kocsis, "Global economic mechanisms and Szeklerland," Köz-Gazdaság 17, no. 2 (August 2022): 181–202, https://doi.org/10.14267/RETP2022.02.09.

<sup>13</sup> Parag Khanna and Ayesha Khanna, *Hybrid reality: Thriving in the Emerging Human-Technology Civilization*, New York: TED Conferences, 2012.

<sup>14</sup> Csizmadia Norbert, *Geopillanat – A 21. század megismerésének térképe* [Geo-moment: mapping the exploration of the 21st century], Budapest: L'Harmattan Publishers, 2016.

<sup>15</sup> Paul A. Samuelson and William D. Nordhaus, *Közgazdaságtan* [Economics], Budapest: Akadémiai Kiadó, 2012.

production either in its own territory or a different geographical area but by nevertheless using its own capital. Industrial production represents the tangible and palpable added value that constitutes the basis for all further values around which services are also, for the most part, organized. Hence, all the value produced in the economy can be traced back, directly or indirectly, to industrial production. Innovation and R&D play a major role in maintaining and increasing production and will be discussed in more detail below. The validity of this logical deduction is also supported by statistical data. I analyzed correlations between the existence of industry, the nominal GDP, and wages in the wider environment of Szeklerland, namely, Transylvania.<sup>16</sup>

The value of GDP per capita for the two main counties of Szeklerland is  $\notin$ 7,947 per person in Covasna County,  $\notin$ 8,019 per person in Harghita County,  $\notin$ 9,102 per person in Mureş County (only a small part of which comprises the region analyzed),  $\notin$ 13,364 per person in Braşov County,  $\notin$ 15,801 per person in Cluj County,  $\notin$ 12,122 per person in Sibiu County, and 13,747 per person in Timiş County. The weight of the complex industry sector is only 16% in Szeklerland (the lowest in the region), 25% in Central Transylvania and Partium, 37% in South Transylvania, 38% in Banat, and 28% in Northern Transylvania. Furthermore, the net per capita earnings in 2019 were 2,505 lei per person in the Szeklerland region, 2,530 lei per person in Partium, and 3,277 lei per person in Central Transylvania.<sup>17</sup>

The data analyzed show that regions with a higher number of industrial firms (since the level of industrial development is not taken into account) have both a higher GDP and higher incomes.

If we take into account social factors (education and life expectancy) in addition to economic values, and if we look at the Human Development Index (HDI; comprising GDP, education, and life expectancy), the three Szeklerland counties perform better and become mid-range actors. At any rate, the region can be considered semi-peripheral at the national level.<sup>18</sup>

In exploring the elements that generate development, we cannot ignore the interconnected nature of the world and the global supply chain. The establishment of extensive

<sup>16</sup> Kocsis, "Global economic mechanisms and Szeklerland," 181-202.

<sup>17 &</sup>quot;2020-ban Erdély hat megyéjében csökkent átlag alatt a GDP" [GDP fell below the average in six Transylvanian counties in 2020], Erdélystat Statistics, accessed November 10, 2022, http://statisztikak. erdelystat.ro/cikkek/2020-ban-erdely-hat-megyejeben-csokkent-atlag-alatt-a-gdp/81.

<sup>18</sup> Benedek József, "Területi polarizáció és periferializáció Romániában, székelyföldi perspektívából" [Territorial polarization and peripherialization in Romania, from a Szeklerland perspective], Magyar kisebbség 21, no. 79 (2016), http://epa.niif.hu/02100/02169/00051/pdf/EPA02169\_magyar\_kisebbseg\_2016\_1\_077-098.pdf.

links between countries, regions, and continents is not merely one of several possible options; instead, it has become a vital necessity in the present. The fostering of relationships is ensured by infrastructural networks, represented by internet cables, pipelines, electrical grids, gas pipelines, motorways, railways, bridges, tunnels, and airports. This system of global shipping, communication, and energy networks enables and facilitates the creation of an ever-expanding flow of people, goods, data, and capital. In this increasingly complex web of interconnections, cities will become economically more important than states, and state armies will be tasked with protecting trade chains as well as borders. The infrastructure comprising the framework and the circulatory system of interconnectedness is the driving force behind the global economy; its development is bolstered through contributions in the order of several trillions of USD.<sup>19</sup> This interconnectivity is largely responsible for the creation and global establishment of so-called supply chains. Their main characteristic is that the links are often located in different geographical areas, where the solution to the task at hand is the most optimal and ensures the greatest efficiency. The process of the supply chain extends from extraction through production activities to the sale of the finished product. It is in fact part of the value chain, which, in addition to internal logistics, manufacturing, and marketing, also includes corporate infrastructure, human resource management, R&D, and investment.<sup>20</sup> Supply chains are systems of transactions, with links appearing as "micro-interactions," the thoroughfares of the world, where everyone and everything is on the move. Cities, regions, and countries that are left out of supply chains lose their connections to the world economy (or, one might say, to economic reality), thus not only minimizing their chances of development, but also significantly reducing their chances of survival.

However, in order for a region (including Szeklerland) to be able to integrate into the global economy, and thus become part of the world of supply chains, the importance of creating an transport infrastructure cannot be overstated.

What follows is a presentation of motorway and rail networks and airports.

Regarding motorways, official data show<sup>21</sup> that Romania has 995 km of motorways at the moment (early 2023), with 525 km under construction (the planned completion date

<sup>19</sup> Parag Khanna, Konnektográfia [Connectography], Budapest: HVG Publishers, 2017.

<sup>20</sup> Csaba B. Illés, Marian Garcia, József Lehota, Nigel Poole, and Claire Skinner, "Az értéklánc és ellátási lánc benchmarkingja az Egyesült Királyság és Magyarország friss zöldség-gyümölcs import piacán" [Supply and Value Chain Benchmarking on the Fresh Fruit & Vegetables Import Market of the United Kingdom and Hungary], *GAZDÁLKODÁS: Scientific Journal on Agricultural Economics* 47, no. 1 (2003): 52–60, https://ageconsearch.umn.edu/record/225947.

<sup>21 &</sup>quot;Informații autostrăzi românești [Romanian highways information], 130km, accessed October 11, 2022, http://www.130km.ro/harta.html.

is set for 2024–2027). This network completely bypasses the counties of Harghita and Covasna, tracing a clearly visible U-shape around them. Mureş County also only has an approximately 40–45-km section of the A3 running through it, but this is already outside of the Szeklerland region. However, even more troubling is the fact there are no motorways in the aforementioned counties as of the beginning of 2023, and none are even being planned. The Southern Transylvania region is in the best position, and Northern Transylvania follows closely behind, but certain sections of motorway still only appear as being under construction or in the planning stages.<sup>22</sup>

As for rail infrastructure, Romania's railway network currently comprises nine main lines, which constitute the backbone of railway transport, and to which the branch lines connect. In Transylvania, these main lines pass through the following settlements, which are also the most important railway nodes: Braşov, Sibiu, Arad, Curtici, Sighişoara, Teiuş, Războieni, Cluj-Napoca, Oradea, Siculeni, Deda, Dej, Baia Mare, and Satu Mare.<sup>23</sup> Szeklerland is only represented by one railway node of any significance, namely Siculeni, from which it follows that the region is avoided by the main railway lines as well.

The counties of Harghita and Covasna, which make up the largest area of Szeklerland, clearly lack airports suitable for transporting people and goods, which is partly mitigated by the Aeroportul Internațional Transilvania Airport found in Târgu Mureș.<sup>24</sup> All of this shows that the region under analysis is lagging behind and is at a disadvantage compared to not only the European average, but also the Romanian, which has a negative impact on its growth potential.

From the perspective of economic development, given the natural beauty of Szeklerland, we cannot forget the importance of tourism—although it does not have the same weight as industry and innovation. Still, tourism could become a driving industry were it to be combined with the cultural and creative industries.<sup>25</sup> This would entail blending elements of museums, libraries, exhibitions, festivals, celebrations, theatre, dance, film, radio, books, press, other publications, digital space, architecture, fashion, painting, sculpture, photography, and antiques, and the promotion of the cultural and natural beauty of the region.<sup>26</sup>

<sup>22</sup> Kocsis, "Global economic mechanisms and Szeklerland," 181-202.

<sup>23</sup> Ministerul Transporturilor şi Infrastructurii (Ministry of Transport and Infrastructure of Romania) (2022): source: https://web.archive.org/web/20090207182728/http://www.mt.ro/statistici/feroviar. html#, Retrieved: 20/04/2022.

<sup>24</sup> Kocsis, "Global economic mechanisms and Szeklerland," 181-202.

<sup>25</sup> Kocsis, "Global economic mechanisms and Szeklerland," 181-202.

<sup>26</sup> Csizmadia, Geopillanat.

To sum up, based on the analysis performed on the mechanism of the core-periphery relationship, one of the most important conditions for development is industrialization, the creation and continual improvement of local industry, taking into account comparative advantages. Comparative advantage refers to the-sometimes traditional-activities that lend themselves best to a region and that can be carried out with the greatest efficiency compared to other regions. In the case of Szeklerland, this could be the food industry, extractive industries, light industry (such as textiles), and more recently, the IT sector. It is also essential to establish centers for innovation, research, and education as well as incubators with the aim of advancing innovation, technology transfer, technological development, and R&D. Following the law of interconnectedness, one of the fundamental prerequisites of integration into supply chains (even at a regional level) and access to the world economy is infrastructure development. Our previous studies have shown that, unfortunately, Szeklerland lags behind in this area even within Romania; thus, economic development is made almost impossible.<sup>27</sup> Examples from abroad also show that linking financial institutions, universities, innovation and research centers, and businesses is very effective in terms of economic development. Of course tourism can also contribute to development, but as mentioned in the paper, it can only be effective provided it is connected to the creative industries.

Farole, Rodríguez-Pose, and Storper have produced outstanding and significant work in the field of regional development, dividing the regions of the world into three broad groups based on access to available technological knowledge<sup>28</sup>. Thus, we can distinguish between central regions (at the technology frontier), regions that lie further from the core, and peripheral regions. The differences between the groups are mainly determined by the education level of the workforce, access to capital, and the ability (both institutional and cultural) to deploy new technology. For the EU, the aforementioned authors have divided the regions into five distinct groups, determining for each the distance from the technology frontier and the potential to realize agglomeration and, separately for each, the interventions expected to achieve cohesion.<sup>29</sup>

<sup>27</sup> Kocsis, "Global economic mechanisms and Szeklerland," 181–202.

<sup>28</sup> Thomas Farole, Andrés Rodríguez-Pose, and Michael Storper (2011): "Cohesion Policy in the European Union: Growth, Geography, Institutions" *Journal of Common Market Studies* 49(5): 1089-1111.

<sup>29</sup> Kengyel Ákos, *Kohéziós politika és felzárkózás az Európai Unióban* [Cohesion policies and convergence in the European Union], Budapest: Akadémiai Kiadó, 2015.

	Region type	Distance from the technological frontier and agglomeration potential	Nature of interventions needed for cohesion
1.	Centrally located metropolitan regions (such as London, Paris, Berlin, Randstad, Hamburg, Milan, Copenhagen)	<ul> <li>On/near the technology frontier</li> <li>Strong agglomeration force</li> </ul>	<ul> <li>Growth promotion (Europe 2020 strategy)</li> <li>Facilitating ongoing adjustment and innovation along the frontier</li> </ul>
2.	Regions adjacent to core metro regions and secondary metro regions in the EU's core (such as Yorkshire, Scotland, Tuscany, Rhône-Alpes)	<ul> <li>Near the technology frontier</li> <li>Moderate potential to realize agglomerations</li> </ul>	<ul> <li>Promotion of endogenous innovation development</li> <li>Promotion of integration with core metro regions</li> <li>Improving agglomeration potential (institutional deepening: encouraging venture capital, business services, R&amp;D institutions)</li> </ul>
3.	Metro regions at the top of urban hierarchy in lagging and peripheral areas (such as Lisbon, Athens, Warsaw, Bucharest)	<ul> <li>Moderately far from the technology frontier</li> <li>Moderate potential to realize agglomerations in distinctive technology fields</li> <li>Reasonable home market effect to promote scale</li> </ul>	<ul> <li>Promoting institutional modernization</li> <li>(encouraging venture capital, business services, R&amp;D institutions)</li> <li>Targeted sectoral policies</li> </ul>
4.	Underdeveloped or peripheral, often semi- rural regions (such as Calabria, Andalusia, Ipeiros, Podlaskie)	<ul> <li>Far from the technology frontier</li> <li>Limited potential to realize innovative agglomerations</li> <li>Limited home market effect for scale</li> <li>Limited potential to generate significant productive activity in the short term</li> </ul>	<ul> <li>Public goods provision to facilitate development and retention of human capital and home market</li> <li>Productivity-enhancing interventions at the sector/firm level (tailored to exploiting local sources of comparative advantage)</li> <li>Infrastructure connectivity, to link with leading regions and become attractive to delocalizing production activities</li> <li>Institutional modernization</li> </ul>

### Table 1: European Union region types and recommended intervention areas

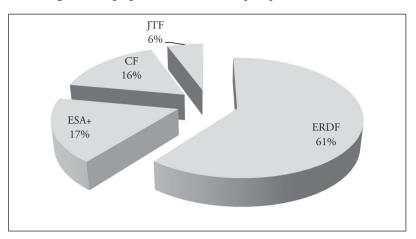
5. Relatively sparsely populated rural and peripheral regions (such as Basilicata, Extremadura, Alentejo, East Macedonia, Upper Norrland)	<ul> <li>Far from the technology frontier</li> <li>Limited potential to realize innovative agglomerations</li> <li>Limited home market effect for scale</li> <li>Limited potential to generate significant productive activity in the short term</li> </ul>	<ul> <li>Public goods provision (enhancing quality for equity purposes, encouraging mobility through the appropriate development of education and housing policies)</li> <li>Promoting social enterprise</li> <li>Institutional modernization and deepening for social openness</li> <li>Promoting innovation in niche market segments</li> <li>Increasing education levels</li> <li>Strengthening links to metropolitan areas for knowledge transfer</li> </ul>
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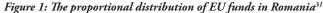
The analysis of the paper so far shows that according to this classification, Szeklerland belongs to the fourth type of region, called "Underdeveloped or peripheral rural regions." In this case, economic development requires the expansion of industrial activities (including services based on these), increased productivity, innovation and R&D, infrastructure development (ensuring interconnectedness and integration into supply chains), up-skilled human capital, and institutional modernization.

## Romanian funding sources for the 2021–2027 budgetary period

Romania is expected to receive  $\in 32$  billion in the current budgetary period (2021–2027) under the Investment for Jobs and Growth (IJG) objective. This objective will receive  $\in 17.346$  billion from the European Regional Development Fund (ERDF),  $\in 6.152$  billion from the European Social Fund Plus (Fondul Social European +; ESF+),  $\in 3.462$  billion from the Cohesion Fund (Fonduri de Coeziune; CF), and  $\in 2.054$  billion from the EU's Just Transition Fund (Fondul de Tranziție Justă; JTF). So far,  $\in 29.015$  billion has been approved, which, including the national contribution amounting to  $\in 14.568$  billion, brings the total budget to  $\notin 43.584$  billion.<sup>30</sup>

<sup>30 &</sup>quot;EU budget (2023): 2021–2027: Cohesion policy EU budget allocations", European Commission Official Website, accessed January 20, 2023, https://cohesiondata.ec.europa.eu/stories/s/2021-2027-EU-allocations-available-for-programming/2w8s-ci3y.





In terms of institutional structure, at the EU level, the European Commission (EC) oversees and manages the European funds and aid instruments, while in Romania this role is performed by the Ministry of European Investments and Projects (Ministerul Investițiilor și Proiectelor Europene, also known as the Ministry of European Funds [Ministerul Fondurilor Europene; MEF]). At the same level as and in cooperation with the MEF, the Audit Authority (Autoritatea de Audit) and the Ministry of Public Finance (Ministerul Finanțelor Publice; MPF) have a prominent role, the latter being responsible for the accounting function in all operational programmed (except for the Operational Program for Cross Border Cooperation [Program Operațional Cooperare Transfrontalieră; PO CT]). Operational programs are detailed plans, further broken down into priority axes (*axe prioritare*) in which EU Member States define exactly how they will spend the support budget allocated to them over a given funding period.

The Ministry of Development, Public Works, and Administration (Ministerul Dezvoltării, Lucrărilor Publice și Administrației; MDPWA), which is responsible for the operational coordination of the development and implementation of the Regional Operational Programmes (Programul Operațional Regional; ROP), mainly funded by the European Regional Development Fund (Fondul European de Dezvoltare Regională; ERDF), plays an important role at the next level (subordinate to the above-mentioned institutions).

<sup>31 &</sup>quot;Cohesion Open Data Platform," European Commission, accessed February 9, 2023. https://cohesiondata.ec.europa.eu/countries/RO/21-27.

The MDPWA will also play a role in the implementation of the PO CT, which will also be supported by the ERDF. The specific functions of the ministry in this case are Managing Authority, National Authority, National Contact Point, Certifying Authority, First Level Control, and Danube Strategy Secretariat.

The MEF, as mentioned above, has, in addition to its general supervision and management functions, specific responsibilities for the management of the ERDF, ESF+, and the JTF. The following operational programmed are supported by these funds in the current budgetary period in Romania:<sup>32</sup>

- The Operational Program for Smart Growth, Digitalization, and Financial Instruments (Programul Operațional Creștere Inteligentă, Digitalizare și Instrumente financiare; POCIDIF) is mainly supported by the ERDF. In this case, the MEF may delegate certain responsibilities to so-called Intermediary Bodies (Organisme Intermediare). The Managing Authorities of the Member States may appoint one or more Intermediary Bodies to carry out certain tasks (as agreed), such as: assisting potential beneficiaries, monitoring, information, and communication.
- The Operational Program for Sustainable Development (Programul Operațional Dezvoltare Durabilă; PO DD) is mainly supported by the ERDF and CFs. In this case, the MEF may delegate powers to so-called Regional Infrastructure Directorates (Direcții Regionale Infrastructură; DRI), in which case they act as Intermediary Bodies (as described above).
- The Operational Program for Inclusion and Social Dignity (Programul Operațional Incluziune și Demnitate Socială; PO IDS), is mainly funded from the ERDF and ESF+. Its main objective is social inclusion and assistance to the disadvantaged. The MEF may delegate powers to Intermediary Bodies.
- The Operational Program for Health (Program Operațional Sănătate; PO S), is mainly funded by the ERDF and ESF+. The managing authority may delegate certain responsibilities to Intermediary Bodies.
- The Operational Program for Technical Assistance (Programul Operațional Asistență Tehnică; PO AT), is supported by the ERDF, ESF+, and the CF.

<sup>32 &</sup>quot;Perioada 2021–2027" [Period 2021–2027], Ministerul Investițiilor și Proiectelor Europene [Ministry of European Investments and Projects], access November 20, 2022, https://mfe.gov.ro/minister/perioade-de-programare/perioada-2021-2027/; "Programe operaționale" [Operational programs], Fonduri Structurale [Structural Funds], accessed January 24, 2023, https://www.fonduri-structurale.ro/.

As can be observed, the last three operational programs, namely the PO IDS, PO S, and PO AT, will be financed in combination mainly from the ERDF and ESF+ in the 2021–2027 budgetary period.

A list of operational programs that are also directly managed by the MEF is as follows.

• The Operational Program for Education and Employment (Program Operațional Educație și Ocupare; PO EO) is mainly funded by ESF+ and has a total of seven Intermediary Bodies throughout the country which assist the MEF in the following cities:

Cluj Napoca Piatra Neamț Alba Iulia Brăila Craiova Timișoara Călărași

• The Operational Program for Just Transition (Program Operațional Tranziție Justă; PO TJ) is specifically supported by the JTF, and in this case, the managing authority may delegate certain powers to Intermediary Bodies.

The next important managing authority (MA) for the management of EU funds is the Ministry of Transport and Infrastructure (Ministerul Transporturilor și Infrastructurii; MTI), which specifically manages the Operational Program for Transport (Program Operațional Transport - PO T), which is supported by the ERDF and the CF for the current budgetary period. At the same time, the Regional Operational Program (Programul Operațional Regional) is also of great importance for regional development, including Szeklerland, and the Operational Program for Cross-border Cooperation (Programul Operațional Cooperare Transfrontalieră; PO CT), which is part of the European Territorial Cooperation Program, is also of great importance for cooperation between border regions, as are the Transnational Cooperation, Interregional Cooperation, and Cooperation Between Ultraperipheral Regions programs.

So far we have dealt with the main funds and operational programs implementing cohesion policy in Romania according to the EC's breakdown, but two MAs will be highlighted for the management of the so-called "other funds," namely, the Ministry of the Interior (Ministerul Afacerilor Interne; MAI) and the Ministry of Agriculture and Rural Development (Ministerul Agriculturii și Dezvoltării Rurale; MADR). The former is in charge of the National Internal Policy Programs (Programe Naționale Afaceri Interne; PNAI), which are funded from the following EU funds:

- Internal Security Fund (Fondul Securitate Internă; FSI)
- Refugee, Integration and Migration Fund (Fondul Azil, Migrație și Integrare; AMIF)
- Instrument for Border Management and Visa Policy (Instrumentul pentru managementul frontierelor și politica de vize; BMVI).

The managing authority may delegate powers to the designated Intermediary Bodies for all three funds.

In the current budgetary period, it is important to highlight three other support instruments that are not specifically part of the operational programs but are part of the standard support programs. They are as follows.

- The National Recovery and Resilience Plan (Planul Național de Redresare și Reziliență; PNRR) is managed by the Ministry of European Investment and Projects. It is a financial measure created by the EC to counter the negative effects of COVID-19.
- Rural Development (Dezvoltare Agricolă, National Agricultural Strategy, Common Agricultural Policy [Planul Național Strategic, Politică agricolă comună; PAC]) is managed by the Ministry of Agriculture and Rural Development.
- The Aquaculture and Fisheries Program, officially referred to as an operational program in the previous budgetary period, is now referred to only as a "program," supported from the Fisheries Fund and financed by the European Maritime, Fisheries, and Aquaculture Fund.

The following table shows some of the main differences between the 2014–2020 and the 2021–2027 budgetary periods of the ERDF, as this is one of the most important EU funds for regional development.<sup>33</sup>

<sup>33 &</sup>quot;Perioada 2021-2027" [Period 2021–2027], Ministerul Investițiilor și Proiectelor Europene [Ministry of European Investments and Projects], access November 20, 2022, https://mfe.gov.ro/minister/perioadede-programare/perioada-2021-2027/.

2014–2020	2021–2027
Rate of co-financing: - 85% from the ERDF for less developed regions (of which seven regions are in Romania) - 80% from the ERDF for more developed regions (of which one is in Romania: Bucharest-Ilfov) Note: There are no transition regions in Roma- nia. The types of regions and their details can be found in the previous sections of this paper. Thematic concentration: 50% for the first four	Rate of co-financing: - 70% from the ERDF for less developed regions - 40% from the ERDF for more developed regions Thematic concentration: 65% for the first two
<ul> <li>thematic objectives (grouped by region):</li> <li>research-development-innovation</li> <li>information and communication technology</li> <li>small and medium-sized enterprises (SMEs)</li> <li>reduce carbon dioxide (CO<sub>2</sub>) emissions</li> </ul>	<ul> <li>policy objectives (POs; at the national level): <ul> <li>A more competitive and smarter Europe (PO1): innovation, digitalization, research (35%)</li> <li>A greener Europe: reducing carbon dioxide (CO2) emissions (30%)</li> <li>within the ERDF, 35% of funding will go to the other three policy objectives (a connected Europe, a more social Europe, and a Europe closer to its citizens)</li> </ul> </li> <li>Note: a detailed presentation of the policy objectives can be found in the previous sections of this paper.</li> </ul>
Urban development aid: minimum 5% of the ERDF envelope	Urban development aid: minimum 6% of the ERDF envelope
The N+3-year rule: commitments entered into in supported projects can be followed up for three years	The N+2-year rule: commitments entered into for funded projects can be followed up for two years

### Table 2: ERDF in the previous and current budgetary periods

The following is a brief description of one of the most important support instruments for the development of Szeklerland, namely, the Regional Operational Program (ROP).<sup>34</sup>

Operational programs are divided into priority axes (*axe prioritare*), each with a clearly defined objective and areas of investment, through which calls for proposals are made. In Romania, the ROP for the Central Region (Regiunea Centru) is divided into the following priority axes:

Priority 1: A competitive region through innovation and dynamic enterprises for a smart economy:

- Specific Objective (*Objectiv specific*) 1.1: Develop and enhance research and innovation capacities and the use of advanced technologies. The intervention aims at regional R&D, strengthening innovation capacities, technology transfer, fostering business-to-business cooperation, achieving a low-carbon economy, helping adaptation to climate change, achieving a circular economy, and supporting SMEs. The main beneficiaries are: entrepreneurs, researchers, R&D, private and public innovation centers, universities, technology transfer centers, local administrations, companies, NGOs, and clusters.
- Specific Objective (*Objectiv specific*) 1.3: Increase sustainable growth and the competitiveness of SMEs and create jobs within them, including productive investment. One aim is to develop SMEs through investment, industrial modernization, technological development, and the promotion of a sustainable regional economy; another is to develop support structures for SME development.
- Specific Objective (*Objectiv specific*) 1.4: Develop the skills necessary for smart specialization, industrial transition, and entrepreneurship. Its primary aim is to support education and training related to the specific objectives listed.

Priority 2: A digital region (O regiune digitală):

- Specific Objective (*Objectiv specific*) 1.2: Bring the benefits of digitalization to citizens, businesses, research organizations, and public administrations.
- Specific Objective (*Objectiv specific*) 1.4: Develop the skills necessary for smart specialization, industrial transition, and entrepreneurship. In Priority 2, this is a complementary intervention aimed at increasing the capacity to create added value for the supported projects (the same name is used for Priority 1).

<sup>34</sup> Central Region Development Official Document, accessed November 25, 2022, http://regio-adrcentru. ro/wp-content/uploads/2022/11/Programul-Regional-Centru-aprobat-1.pdf.

Priority 3: A region with environmentally friendly communities (*O regiune cu comunități prietenoase cu mediul*):

- Specific Objective (*Objectiv specific*) 2.1: Promote energy efficiency and reduce greenhouse gas emissions.
- Specific Objective (*Objectiv specific*) 2.7: Enhance measures to protect and conserve nature, biodiversity, and green infrastructure, including urban areas, and reduce all forms of pollution.

Priority 4: A region with sustainable urban mobility (*O regiune cu mobilitate urbană durabilă*):

• Specific Objective (*Objectiv specific*) 2.8: Promote sustainable multimodal urban mobility as part of the transition to a zero-carbon economy.

Priority 5: An easily accessible region (O regiune accesibilă):

• Specific Objective (*Objectiv specific*) 3.2: Develop and improve climate-resilient, sustainable national, regional, and local mobility, including improved access to TEN-T and cross-border mobility.

Priority 6: An educated region (O regiune educată):

• Specific Objective (*Objectiv specific*) 4.2: Improving access to inclusive and quality services in education, training, and learning through the development of accessible infrastructure, including the promotion of distance and online education and training flexibility

Priority 7: A region with sustainable tourism (O regiune cu turism sustenabil)

• Specific Objective (*Objectiv specific*) 4.6: Increasing the role of culture and sustainable tourism in economic development, social inclusion, and social innovation.

Priority 8: An attractive region (O regiune atractivă):

• Specific Objective (*Objectiv specific*) 5.1: Promote the integrated and inclusive development in the social, economic, environmental, and cultural fields; natural heritage, sustainable tourism, and security in urban areas.

The level of development of the country's regions and counties has been strongly influenced by the absorption rate of EU funding in the 2014–2020 budgetary period. These grant funds could be used for infrastructure development, education, or even business development, but the absorption rate also reflects how prepared, modern, and open-minded a region or a county is to take advantage of the opportunities on offer. The following is an analysis of the amount of EU funds that each county was able to access in the central region in the last budget period (2014–2020), broken down by county.

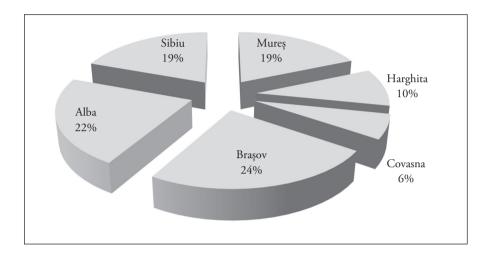


Figure 2: Proportions (in percentages) of the amount of EU funds accessed by each county in the central region<sup>35</sup>

The following table gives a breakdown (from the same source) of the values in terms of the amounts of EU funds accessed (in millions of euros) and the number of projects implemented.

County (central region)	Amount of funds accessed (in millions of euros, 2014–2020 period)	Number of projects implemented (2014–2020 period)
Mureş	341.85	211
Harghita	178.12	164
Covasna	114.95	73
Brașov	440.84	257
Alba	409.33	204
Sibiu	357.63	159

Table 3: Amount of funds accessed and the number of implemented projects in different counties

<sup>35 &</sup>quot;Date proiecte contractate" [Contracted projects data], MySMIS2014 – Public data, accessed November 22, 2022, https://www.fonduri-ue.ro/statistici?fbclid=IwAR3sq5PsygLY2TitrfTlg7w5YUgi9HOzxB4 gfGV8WkAT4ySxzV-C0m0X9Gs).

From the data analyzed, the two counties that make up the largest part of Szeklerland (Harghita and Covasna) are the worst performers in terms of accessing funds (and they are also where the need for development in all areas is the greatest), but even Mureş County is only fourth in this respect. By far the best performing county in the region is Braşov, followed by Alba and Sibiu, and then the aforementioned stragglers.

The paper highlights the shortcomings of the region analyzed and the interventions needed to overcome them. In the following table, each major intervention is matched with an EU support instrument that could make a significant contribution to the practical implementation of improvements.

Type of intervention	EU support instrument
Developing human capital (this will ensure that R&D and innovation can take place)	<ul> <li>Regional Operational Program - Central Region:</li> <li>Priority 1: Specific Objective (<i>Obiectiv specific</i>) 1.4: Develop the skills necessary for smart specialization, industrial transition, and entrepreneurship.</li> <li>Priority 6: Specific Objective (<i>Obiectiv specific</i>) 4.2: Improving access to inclusive and quality services in education, training, and learning through the improvement of accessible infrastructure, including the promotion of distance and online education and training flexibility.</li> <li>Operational Program for Education and Employment</li> </ul>
Industrial development, including sectoral and firm- level interventions to improve productivity (adapted to exploit local sources of comparative advantage)	<ul> <li>(Program Operațional Educație și Ocupare; PO EO)</li> <li>Regional Operational Program - Central Region: Priority 1: <ul> <li>Specific Objective (<i>Obiectiv specific</i>) 1.1: Develop and enhance research and innovation capacities and the use of advanced technologies.</li> <li>Specific Objective (<i>Obiectiv specific</i>) 1.3: Increase sustainable growth and the competitiveness of SMEs and create jobs within them, including productive investment.</li> </ul> </li> <li>Operational Program for Smart Growth, Digitalization, and Financial Instruments (Programul Operațional Creștere Inteligentă, Digitalizare și instrumente financiare; PO CID).</li> </ul>

#### Table 4: Major interventions and EU support instruments

Connecting infrastructure networks, linking to leading regions to attract productive activity (this will ensure efficient integration into supply chains)	Regional Operational Program - Central Region: Priority 5: Specific Objective ( <i>Obiectiv specific</i> ) 3.2: Develop and improve climate-resilient, sustainable national, regional, and local mobility, including improved access to TEN-T and cross- border mobility. Operational Program for Transport (Program Operational	
	Transport; PO T). Operational Program for Cross-border Cooperation (Programul Operațional Cooperare Transfrontalieră; PO CT).	
Institutional modernization	Regional Operational Program - Central Region:	
	<ul> <li>Specific Objective (<i>Objectiv specific</i>) 1.1: Develop and enhance research and innovation capacities and the use of advanced technologies.</li> <li>Specific Objective (<i>Objectiv specific</i>) 1.2: Bring the benefits of digitalization to citizens, businesses, research organizations, and public administrations.</li> </ul>	
	Operational Program for Smart Growth, Digitalization, and Financial Instruments (Programul Operațional Creștere Inteligentă și Digitalizare; PO CID).	
Rural tourism and agricultural development	Rural Development (Dezvoltare Agricolă, National Strategy for Agriculture, Common Agricultural Policy – Planul Național Strategic – Politică agricolă comună; PAC).	

The table above thus simplifies and clarifies the necessary interventions that can generate development for the region under study in the first column, while the second column identifies and designates the operational programs through which EU funding can be called upon to alleviate or address the gaps identified.

## Conclusions

Our world at present operates in a complex and intricate socio-political-economic context, made even more complex and unpredictable by the aftermath of the recent outbreak of COVID-19 and the war that has unfolded in Europe. The world seems to be increasingly fragmented, and fault lines are emerging, which are also having an impact on economic developments, as evidenced by runaway inflation. In this context, although the world today

is not as open as it was a few years ago, the processes, mechanisms, and laws of the global economy are still at work and determine the further development of countries and regions. Therefore, when we talk about regional development, as in the case of Szeklerland, we must take into account not only the endogenous potential but also the functioning of the environment in which the region under analysis is located. Following the same logic, this paper explores global mechanisms and development elements, without taking into account which regional development concepts are not realistic. The guidelines identified here are supported by Farole's internationally recognized study. The exploration of global trends and regional characteristics has shown that, in the case of Szeklerland, it is essential to grow and improve its industrial presence and develop related services, using its own capital or attracted investments (taking into account comparative advantages); expand adult education; and implement R&D and innovation, digitalization, integration into supply chains (which also implies infrastructure development), and institutional modernization. For each of the problems identified, there is at least one support instrument available to Romania under the EU's cohesion policy, including the development of the Central Development Region, of which Szeklerland is a part. Chief among these are the sub-measures of the Regional Operational Program mentioned in the study; the Operational Program for Transport; the Operational Program for Smart Growth, Digitalization, and Financial Instruments; the Operational Program for Education and Employment; the Operational Program for Cross-border Cooperation; and the Rural Development Programs, which provide significant support to both enterprises and official institutions. Possessing proper knowledge of all of these and the effective use of the opportunities they provide could contribute to the realistic development of Szeklerland as well as to an improvement in the living standards and living conditions of the Hungarian minority living there.