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Ethnic and Economic-Geographical Correlations of Hungarian Foreign Direct Investment in Slovakia

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THESIS BOOKLET

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Research Background and Rationale for the Topic

In the globalising world economy, as state borders become increasingly permeable, transport develops and cross-border movements intensify, economic cooperation between countries is playing an ever greater role (SAVANYA P. 2013). This may be particularly true of the Carpathian Basin, which is divided among several states, yet whose regions are linked by countless historical and ethnic ties. Through cross-border movements, however, not only foreign direct investment moves across national borders, but it also affects the identity of the society of the host country (KOVÁLY K. 2019).

In the development of the economic spaces constituting the Carpathian Basin, the political changes and economic restructuring of the 1990s triggered processes moving in different directions. The gradual and difficult spread of the market economy led to strong territorial differentiation in all countries of the Carpathian Basin (HARDI T. 2009). The collapse of the former economic structure and the construction of the new economy affected individual regions differently; territorial disparities began to increase, and the advantages of the systemic transformation were not distributed evenly in space.

With the intensification of the transnational activities of small and medium-sized enterprises, a new group of theories emerged that emphasised the importance of personal relations (IMRE, 2013). Investment activity opens the door to regional cooperation, which significantly influences the economic relations of a given area and the development of its trade networks. The main driving forces of these networks are personal relationship networks, which therefore also influence the territorial location of individual companies' establishments (KOVÁLY K. 2019).

International and Hungarian research in economic geography, economics and the social sciences has shown from many perspectives that social capital – and, within it, relational capital – is one of the fundamental, elementary resources of enterprises, and this is especially true in the specific ethnic spatial structure of the Carpathian Basin. Although studies on autochthonous Hungarian minority communities beyond Hungary's borders have become increasingly prominent in Hungarian academic literature, politics and public discourse since the regime change, they typically focus on the demographic, political and legal aspects of these communities. Research focusing on the economic situation of Hungarian minorities is available in much more limited numbers (KISS T. 2010; PÉTI M. et al. 2020).

This is even more pronounced in regions and settlements inhabited predominantly by Hungarians, where Hungarian communities play a significant, even dominant role in shaping and implementing their visions for the future and development aspirations. Moreover, these areas are of outstanding importance for the long-term survival of Hungarians; therefore, targeted research into their socio-economic situation is of fundamental importance from a national-strategic perspective (BORBÉLY M. 2024).

The present dissertation provides an example of analyses at a more detailed territorial level and of the quantitative and qualitative examination of cross-border “Hungarian–Hungarian” economic relations through the case of Hungary and Slovakia.

Although the two countries are mutually extremely important economic partners, related foreign economic analyses also confirm that considerably less attention is paid to the role of cross-border “Hungarian–Hungarian” relations and to the weight and changing role of economic ethnocentrism and relational capital from the independence of Slovakia to the present day.

In my view, examining the international and East-Central European flows of “Hungarian capital” is of particular importance in the context of national-economic and national-strategic challenges.

The present doctoral dissertation primarily seeks to answer the question of whether relationships can be identified between the ethnic spatial structure of Slovakia and foreign direct investment arriving from Hungary. To answer this question, it is first necessary to clarify the concepts of ethnic capital and ethnocentrism, their specific features within general social capital, and their economic role.

A further sub-question is whether, in economic competition with other Central European countries, Hungary plays a role in investment into the prospering economic environment of its northern neighbour that corresponds to its specific geographical proximity and historical relations. The conceptual framework of this research is provided by the analysis of time- and space-specific economic processes and their determinants from the establishment of independent Slovakia to the present day.

The analysis of Hungarian investment flows into Slovakia, a country with a Hungarian minority of approximately half a million people, raises the possibility of ethnic capital. As a further sub-question, the present doctoral dissertation seeks to determine whether a relationship can be identified at district (okres) or regional (kraj) level between the location of companies with Hungarian interests and the locally significant ethnic presence of the Hungarian population.

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Methods Used

Based on the literature reviewed, economic ethnocentrism and ethnic relational capital can be examined through a combination of several methods. The theoretical approach to relational capital (ORBÁN & SZÁNTÓ, 2005), questionnaire-based examination of relationship networks and their mobilisation (GÖDRI, 2007), comparative analysis of ethnic relational capital (ALBERT & DÁVID, 2004), index-based measurement and regression analysis of economic ethnocentrism (CSATA & DEÁK, 2010), analysis of investor motivations (IMRE, 2014), and approaches based on qualitative interviews and mixed methods (KOVÁLY, 2019) provide complementary methodological frameworks.

On this basis, the present research adopts a multidimensional interpretation of economic ethnocentrism in which ethnicity-based economic partner preferences, intra-ethnic trust, ethnic relational embeddedness and actual economic behaviour can all be examined.

The quantitative analysis consists of several successive methodological steps. Descriptive statistical analysis serves to reveal the basic characteristics of the variables examined, with particular attention to the temporal evolution of FDI flows, foreign trade and macroeconomic indicators. This is followed by time-series analysis, which makes it possible to identify trends, cyclical movements and structural breakpoints, particularly in the context of European integration and economic crises.

The central element of the research is multivariate econometric modelling aimed at identifying the determinants of foreign direct investment. The models examine the combined effects of economic, geographical and ethnic variables, creating an opportunity for the empirical testing of causal relationships. Particular attention is paid to analysing the extent to which the ethnic spatial structure explains the territorial distribution of investments.

The spatial dimension is examined using spatial statistical and geographic information system methods. The analysis of spatial concentration, regional inequalities and cluster formation makes it possible to compare economic and ethnic patterns. Visualisation and spatial modelling are carried out using ArcGIS and QGIS software.

The methodological framework is complemented by a network-analysis approach that examines the structure of economic relations. This is particularly relevant for exploring cross-border economic relations and the operation of ethnicity-based relational capital.

The quantitative analysis relies on internationally recognised official statistical databases. The primary data source of the doctoral research is Eurostat, the Statistical Office of the European Union, which provided gross domestic product (GDP) data, foreign trade statistics and other macroeconomic indicators for the analyses. A supplementary source for macroeconomic variables is the International Monetary Fund World Economic Outlook (IMF WEO) database, which provided inflation indicators, public-debt data and other stability indicators. For the analysis of bilateral FDI flows, the research relied on statistics from the United Nations Conference on Trade and Development (UNCTAD). The Observatory of Economic Complexity (OEC) database provided the basis for analysing the structure of trade. FDI and population data in territorial breakdown were obtained from the datasets of the Statistical Office of the Slovak Republic (ŠÚ SR).

The information base of the doctoral research, which is fundamentally built on secondary statistical analyses, was also supplemented by qualitative methodology based on semi-structured interviews (Appendix 1). The interview guide is included in Appendix 1. The interviewees were employees or owners of five enterprises that had established a location in different parts of Slovakia for a business already operating in Hungary.

The anonymous data collection took place between 27 February and 2 August 2026, either in person or via online video calls. The natural reason for preserving the anonymity of the respondents is that, in several cases, interviewees shared sensitive information, discussing nationality and ethnicity as well as business information.

The research applies a complex, multidimensional quantitative and qualitative analytical framework integrating time-series, econometric, spatial and network approaches. This methodological structure makes it possible to examine simultaneously the dynamics, spatial characteristics and economic determinants of foreign direct investment, thereby ensuring the empirical grounding and analytical depth of the research.

Scientific Results of the Dissertation

The new, or novel, results of the dissertation are summarised in the following theses:

Thesis I

One of the most significant empirical results of the dissertation is the spatial correlation identified on the basis of district-level analyses.

In the southern regions of Slovakia – particularly in the Csallóköz–Mátyusföld and Komárom areas – a marked co-movement can be observed between the proportion of the Hungarian population and the share of FDI arriving from Hungary.

This phenomenon cannot be explained solely by geographical proximity, but also by ethnic relational capital operating through linguistic, cultural and relationship networks.

In this sense, economic ethnocentrism is not exclusionary; rather, it can be interpreted as a transaction-cost-reducing mechanism based on network embeddedness.

Thesis II

The research points out that FDI stock in Slovakia shows a significant regional concentration, with approximately 60 per cent concentrated in the Bratislava Region.

This central dominance poses a structural challenge for the southern and eastern regions of Slovakia, where the demographic weight of the Hungarian minority is greater, but the pace of economic convergence lags behind that of the western regions.

The SWOT analysis shows that the competitiveness of Hungarian-owned companies operating in Slovakia is primarily strengthened by geographical proximity and ethnic relational capital, while the limited capital strength of the SME structure, regional and intra-country economic inequalities, and the dominance and exposure of machinery manufacturing and the automotive industry may represent the most important operational constraints.

Thesis III

The analysis of bilateral Hungarian–Slovak economic relations presents a differentiated picture.

On the one hand, Slovakia is one of Hungary’s most important trading partners, and the volume and structure of bilateral trade show signs of deep integration (MARITY P. – MAGY M. G. 2025).

On the other hand, the flow of foreign direct investment from Hungary to Slovakia cannot be regarded simply as a business-cycle-following process.

The quantitative analysis shows only a weak, although statistically detectable, relationship between Hungarian GDP and Hungarian FDI directed to Slovakia, suggesting that capital outflows are primarily linked to corporate strategies, production chains and cross-border rationalities.

Thesis IV

Based on the results of the dissertation, it can be stated that Slovakia is not merely a neighbouring state, but one of the most important external dimensions of Hungarian national strategy.

The Hungarian–Slovak economic space can be interpreted not as a contact surface between two separate national economies, but as a functionally integrated regional system.

Ultimately, the results of the dissertation support the conclusion that, for Hungary, Slovakia is not merely a foreign economic partner, but a national-strategic space.

The economic effect of ethnic relational capital can be demonstrated empirically and represents a structural resource that, within an appropriate policy framework, may contribute to strengthening the economic cohesion of the Carpathian Basin and the Hungarian communities living within it.

Overall, the dissertation formulates three main conclusions.

- First, ethnic relational capital has a demonstrable and measurable spatial effect on foreign direct investment flows.
- Second, Hungarian–Slovak economic relations show deep integration, but the structure of Hungarian outward investment is organised primarily along microeconomic and network logics.
- Third, Slovakia's economic development and European integration have created a stable macroeconomic environment that makes our northern neighbour a relevant strategic partner for Hungary in the long term.

Summary

The central undertaking of the doctoral dissertation was to examine whether spatial relationships can be identified between the ethnic geography of Slovakia and the patterns of foreign direct investment (FDI) arriving from Hungary, and whether transnational ethnic relational capital has specific regional-development effects that go beyond classical theories of social capital. The theoretical basis of the research was provided by the conceptual framework of social capital, ethnic relational capital and economic ethnocentrism, interpreted within the historical and geopolitical specificities of the Carpathian Basin.

The historical-empirical analysis showed that Slovakia's ability to attract FDI lagged significantly behind the leading states of the region in the 1990s. Political and institutional uncertainty, infrastructure deficiencies and structural economic weaknesses moderated foreign capital inflows in the initial period. After the turn of the millennium, however, the shift in economic policy – particularly the development of the investment-promotion system, export-oriented industrial policy and the deepening of European integration – resulted in structural change. Within a short period, Slovakia became one of the most successful industrial-export models in Central Europe, culminating in its accession to the euro area.

The results of the dissertation show that foreign direct investment from Hungary to Slovakia should not be interpreted merely as an economic phenomenon, but as part of complex spatial and social processes in which geographical proximity, historical relations and ethnic relational capital all play a determining role.

The research confirms that cross-border economic cooperation, particularly in the southern regions of Slovakia, is capable of creating economic networks that go beyond classical investment logic and point towards regional integration based on social relations.

All this suggests that, for Hungary, Slovakia is not merely a foreign economic partner, but a strategic economic space where the deliberate development of economic and social relations can contribute to strengthening the economic cohesion of the Carpathian Basin.

The challenge for the future is therefore not merely to maintain existing investments, but to expand them in a spatially balanced and institutionally supported manner that is capable of integrating the region's historical and social resources alongside economic rationality.

Discussion

The findings of the dissertation demonstrate that the spatial structure of foreign direct investment (FDI) flows from Hungary to Slovakia cannot be explained exclusively by conventional macroeconomic factors and traditional determinants of investment location. One of the key findings of the research is that, although a statistically identifiable relationship exists between Hungarian GDP and Hungarian FDI flows to Slovakia, the strength of this relationship is relatively weak. This suggests that, in addition to cyclical macroeconomic developments, outward investment is significantly influenced by corporate strategies, production and business networks, as well as specific characteristics arising from geographical and social proximity. Accordingly, Hungarian–Slovak economic relations should not be interpreted merely as external economic interactions between two neighbouring national economies, but rather as a deeply integrated regional system organised across multiple spatial and economic levels.

The most significant empirical contribution of the dissertation derives from the district-level spatial analyses. In southern Slovakia, particularly in the Csallóköz–Mátyusföld (Žitný ostrov–Matúšova zem) and Komárom (Komárno) regions, a pronounced spatial correspondence can be observed between the proportion of the Hungarian population and the territorial presence of FDI originating from Hungary. The findings indicate that this pattern cannot be attributed solely to geographical proximity. Shared language, cultural background, personal and business networks, and the ethnic social capital generated through these relationships may also contribute to the spatial orientation of investment. In this context, economic ethnocentrism does not primarily imply the exclusion of other ethnic groups; rather, it can be interpreted as a network-based mechanism capable of generating economic advantages by facilitating information flows, strengthening trust and reducing transaction costs.

This finding also highlights the broader scientific relevance of the research. The relationship between Hungarian FDI and the ethnic spatial structure of Slovakia has so far received relatively limited attention in Hungarian regional science and social geography. The research therefore addresses an underexplored and original field of inquiry. A shared ethnic background, language and culture may facilitate the establishment and operation of cross-border economic relationships and may consequently influence the spatial organisation of economic activity.

At the same time, the findings demonstrate that the influence of ethnicity cannot be separated from Slovakia's highly uneven economic spatial structure. Approximately 60 per cent of the country's FDI stock is concentrated in the Bratislava region, while southern and eastern Slovak regions with substantial Hungarian populations have experienced slower economic convergence. This provides an important interpretative framework: ethnic social capital may influence individual investment decisions and local networks, but it does not, in itself, override macroregional centre–periphery relations. Instead, it can be regarded as a complementary locational resource whose effects emerge in interaction with other economic and spatial factors.

On this basis, the dissertation identifies three interrelated conclusions at both the macroregional and microregional levels.

Macroregional level:

1. Slovakia's East-Central European FDI network is highly concentrated and hierarchical, and geographical proximity alone does not explain the intensity of capital flows. The regional FDI structure is characterised by the dominant position of the Czech Republic and Austria, indicating that historical, institutional and corporate network relations are at least as important as geographical distance itself.
2. Hungary's geographical and historical proximity to Slovakia does not automatically translate into a dominant macroregional investment position, while the relative importance of Hungarian capital within the regional competitive environment can be characterised as moderate and weakening over time. Hungary's relative macroregional weight is therefore lower than might be expected on the basis of geographical adjacency, historical linkages and the intensity of bilateral trade.
3. The significance of Hungarian–Slovak economic relations consequently derives not primarily from Hungary's position in the macroregional FDI ranking, but from the distinctive micro- and meso-level spatial structure of capital flows. This finding underlines the necessity of complementing macroregional analysis with a microregional perspective.

Microregional level:

1. Ethnic social capital may exert an identifiable and measurable spatial effect on foreign direct investment flows.

2. Hungarian–Slovak economic relations exhibit a high degree of integration, while a significant part of Hungarian outward investment is organised according to microeconomic and network-based mechanisms.
3. Slovakia's economic development and European integration have created a stable macroeconomic environment that makes the country strategically important for Hungary in the long term. The findings of the dissertation therefore suggest that the presence of Hungarian FDI in Slovakia should be interpreted simultaneously as an economic, geographical and socio-network phenomenon. The integration of these three dimensions constitutes one of the principal contributions of the research.

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