



Structured Abstracts of 'Regional Development and Economic Policy II.' session

Investigating the Role of Hungarian Research Universities in Public Education and Their Regional Commitment

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Background and introduction: Some Hungarian higher education institutions also serve as maintainers of public education institutions, offering unique opportunities to enhance the quality of education. This study examines the role of public education networks maintained by the University of Debrecen, the University of Pécs, and the University of Szeged, with a particular focus on regional engagement and institutional competitiveness. The central research question explores the long-term benefits of university-maintained public education institutions and their potential impact on regional education systems.

Objective: The primary objective of this research is to assess the advantages that higher education institutions (HEIs) as maintainers can provide to public education institutions. Special emphasis is placed on the impact of strong links to teacher education, particularly regarding pedagogical innovation, the development of teaching methodologies, and teacher supply. Furthermore, the study investigates the optimal scale of these institutional networks and the potential benefits of a regionally embedded governance model.

Methodology: This study employs both qualitative and quantitative research methods. A document analysis will be conducted to examine the structure, functioning, and development of the public education networks managed by the three universities under investigation. Additionally, interviews will be conducted with school leaders and educators from a selected university's public education institutions, while a questionnaire survey will be administered to students and parents. Moreover, we will analyze the ranking trends of these university-maintained public education institutions across different national school ranking systems.

Results: Since the research is still in progress, the anticipated results are as follows:

1. Public education institutions maintained by universities have a competitive edge over state-maintained schools due to the direct influence of teacher education.
2. The accelerated adoption of innovative pedagogical approaches and the continuous supply of qualified educators contribute to the improvement of educational quality.
3. Defining the optimal size of the institutional network can enhance the effective utilization of governance-related advantages.

Conclusions: The expected results will highlight that the involvement of higher education institutions in maintaining public education can be a sustainable and advantageous model for the broader education system. The findings may contribute to national and international educational policy discussions, particularly regarding optimizing cooperation between higher education and public education institutions.

Limitations and future research directions: One limitation of this study is its focus on three Hungarian universities, which restricts the scope for international comparisons. Further research should explore similar governance models in other countries. Additionally, longitudinal studies spanning several years would be necessary to analyze the long-term effects of university involvement in public education governance.

Keywords: university of science, institutional sustainability, regional impact, teacher education, competitiveness, governance role

Game Changer: Exploring the Impacts of Sports Development on Sustainable Cities

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Background and introduction: Brownfield redevelopment is central to EU urban policy, with Hungary updating its legislation to prioritise the reuse of brownfields. Between 2010 and 2021, significant state-funded investments in sports reshaped urban areas. This study examines how sports infrastructure—particularly through brownfield rehabilitation—can contribute to sustainable urban and transportation development, drawing on insights from international mega-events such as the Olympics.

Objective: This research examines the impact of sports infrastructure developments on promoting sustainable urban development in Hungary, with a specific focus on brownfield areas. Through a mixed-methods approach, the study assesses environmental, economic, and social impacts, aiming to identify best practices and challenges in aligning sports investments with broader sustainability goals.

Methodology: This study employs a mixed-methods research design. It analyses over 100 sports facility projects across Hungary (2010–2021) using quantitative data analysis, qualitative case studies, and policy document reviews. The research evaluates environmental, economic, and social impacts to assess the role of sports infrastructure in sustainable urban development.

Results: Analysis of over 100 sports infrastructure projects in Hungary indicates that developments on brownfield sites can support sustainable urban goals, including land reuse, improved mobility, and community engagement. Case studies suggest that integrating sports facilities into urban planning contributes to long-term social and environmental benefits.

Conclusions: Sports infrastructure developments can significantly support sustainable urban transformation, especially when implemented on brownfield sites. The research highlights the importance of strategic planning, policy alignment, and community engagement. Findings provide practical insights for urban planners and policymakers aiming to integrate sports projects into broader sustainability frameworks.

Limitations and future research directions: This study's reliance on available project data and qualitative case studies limits generalizability. Quantitative environmental and social impact metrics were limited in scope. Future research should include broader geographic scopes, and detailed impact assessments. Investigating community perspectives and economic outcomes over time could lead to a deeper understanding of sports infrastructure's role in sustainable urban development.

Keywords: sustainability, urban development, sport, well-being



Urban-rural happiness paradox – is it exists in Hungary?

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Background and introduction: Happiness has not been the subject of scientifically valuable empirical for a long time. The empirical literature on the economic determinants of happiness is largely based on a variety of spatial observations, but the spatial dimensions of happiness were less researched area Empirical studies show that the happiness of the urban population is lower than that of those living in rural areas. Our research question is whether this is true for Hungary as well.

Objective: Previous research has extensively examined whether residing in urban or rural areas results in higher subjective well-being, typically measured as life satisfaction. This phenomenon is called urban-rural happiness paradox, meaning that cities, despite being centres of wealth and opportunity, often report lower subjective well-being than do rural areas. We would like to examine whether this paradox exists in Hungary-

Methodology: Using spatial data of the Hungarian Central Statistical Office, firstly we would like to present life satisfaction in different spatial areas and settlement types in Hungary. Then using control variables (like income and level of education) we would like to examine whether the difference in urban and rural areas are exists purely because of the inhabitants different socio-economic status, or because of spatial reasons.

Results: Life satisfaction in Hungary is higher in the capital and larger cities than in small towns and villages, so if we ignore all other factors, the paradox does not apply in Hungary. However, if we apply control variables (e.g. income status, education), the differences between settlements decrease, which suggests that in terms of subjective well-being, the impact of these factors is strong, and not only the type of settlement is the determining factor.

Conclusions: Our findings challenge the simplistic assumption that urbanization inherently results in greater life satisfaction, as although in Hungary life satisfaction is higher in larger cities and in the capital, it seems to be strongly connected to the individual aspects of life satisfaction like income and education level. At the same time the results also challenge the urban-rural paradox, as the greater happiness level of rural areas is not as obvious in Hungary as in Western European countries.

Limitations and future research directions: The main limitation is that we use only the settlement size to define urban and rural areas. There is an absence of a universally accepted definition of urban areas; classifications vary significantly across national contexts and research objectives. Further research can classify more precisely the urban and rural areas within the country. Other limitations include the limited number of used control variables, further research can use other variables to explore the complex dynamics.

Keywords: happiness, urban-rural paradox, life satisfaction

Evaluation of Macro-economic Factors and Impact on Economies

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Background and introduction: Macroeconomic indicators such as GDP, inflation, CPI, imports, and exports are essential for assessing the resilience and performance of economies. Understanding how these variables interact helps explain growth differences across nations. This study explores whether structural differences exist between developed and emerging economies, focusing on how price dynamics and trade flows influence GDP and shape macroeconomic stability.

Objective: The study aims to evaluate structural differences in macroeconomic performance across 15 countries, including Kenya and its top trading partners across Africa, Asia, EU, American and the Gulf. Specifically, it investigates the interdependencies among inflation, CPI, imports, and exports, and their effect on GDP. The objective is to determine whether distinct economic structures can be identified and whether countries can be meaningfully grouped based on their macroeconomic and trade profiles.

Methodology: The analysis uses 2023 data from 15 countries spanning Africa, Asia, Europe, the Middle East, and North America. Variables are grouped into GDP (dependent), price indicators (inflation, CPI), and trade indicators (imports, exports). Methods include correlation (relationships), regression (predictors of GDP), factor analysis (underlying dimensions of trade and price), and cluster analysis (grouping countries by macroeconomic similarity).

Results: Emerging economies display higher inflation volatility and unstable trade patterns, while developed economies exhibit greater macroeconomic stability. Regression confirms inflation and trade as significant predictors of GDP. Factor analysis identifies two latent structures: price stability and trade performance. Cluster analysis distinguishes groups of countries aligned with regional and developmental characteristics, highlighting common growth drivers and vulnerabilities.

Conclusions: The study demonstrates that multivariate analysis effectively uncovers structural differences in macroeconomic performance. Inflation and trade are critical drivers of GDP across both developed and emerging economies. The findings highlight distinct policy challenges: developed countries focus on sustaining stable growth, while emerging economies face volatility management. The results provide a useful framework for understanding cross-country economic resilience and performance.

Limitations and future research directions: The study is limited to a 2023 cross-sectional dataset of 15 countries, which restricts generalizability. Some indicators may reflect temporary shocks or data inconsistencies across sources. Future research should expand to multi-year datasets and include additional macroeconomic variables such as interest rates, employment, and exchange rates. Broader coverage will improve robustness and enable deeper analysis of structural economic dynamics.

Keywords: Macroeconomics, GDP, inflation, CPI, trade, analytics, multivariate statistics

Advancing Sustainable Development through Education in a Thai Local Community

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Background and introduction: Education plays a central role in addressing sustainability challenges and promoting community development. However, much of the existing research focuses on formal education and the role of schools, overlooking the contributions of non-formal and informal initiatives, as well as the involvement of community members outside school contexts.

Objective: The study emphasizes the importance of recognizing local leaders as key actors in shaping community-based educational strategies.

Methodology: This case study employed a participatory ethnographic approach based on a ten-day fieldwork project in Nong Bua, Thailand, as part of an international research program. Data were collected through interviews with local leaders, observations, and group discussions, and analyzed using Grounded Theory to explore the role of education in sustainable community development.

Results: The findings demonstrate how education in Nong Bua contributes to sustainability by fostering a shared mindset, encouraging participation, and supporting community-driven initiatives in formal, non-formal, and informal settings. Values associated with sustainability, such as mutual care and collective responsibility, are embedded in everyday community life, even if they are not explicitly recognized as such

Conclusions: Practices rooted in local culture, such as festivals, volunteering, and peer mentoring, create inclusive opportunities for engagement for all generations. Furthermore, supporting community-based education in non-formal and informal settings can help engage diverse groups, particularly marginalized ones, and promote sustainable development that is locally relevant, inclusive, and oriented toward reducing social inequalities.

Limitations and future research directions: Limitations include the single-community focus, brief fieldwork period, and limited representation of diverse voices. Future research should adopt comparative, longitudinal, and mixed-methods approaches while incorporating broader community perspectives to strengthen the understanding of community-based education for sustainability.

Keywords: community-based education, Grounded Theory, non-formal education, participatory ethnographic research, sustainable community