

## TOPICS FOR DOCTORAL (PHD.) THESIS FOR ACADEMIC YEAR 2023/2024

Field of study: 8. Economics and Management Study program: Spatial and Regional Economics

no. 1 Supervisor	doc. Ing. Peter Burger, PhD.
Title	CLUSTER POLICY SUPPORT AND INDUSTRIAL CLUSTER FINANCING MODELS
Detailed description of the topic (annotation or abstract)	<ol> <li>Theoretically define cluster policy, clusters, their contribution to the development of the country and regions, and describe cluster policy support rules and the implementation of cluster programmes in the world.</li> <li>Analyse the legislative framework and rules related to the support of cluster policy and clusters in countries with a high degree of implementation of cluster policy.</li> <li>Analyse the economic impacts of cluster policy support and public funding of clusters on the degree of competitiveness of selected countries and regions.</li> <li>Propose a statistical model capturing the efficiency of public spending on cluster activities in selected countries.</li> <li>Propose, on the basis of scientific methods and procedures, a system of cluster policy support rules and a statistical model of optimal cluster funding in Slovakia, including their impact on the state budget.</li> </ol>

no. 2 Supervisor	doc. Ing. Peter Burger, PhD.
Title	PERFORMANCE EVALUATION OF NATURAL INDUSTRY CLUSTERS AND INSTITUTIONALIZED CLUSTERS
Detailed description of the topic (annotation or abstract)	<ol> <li>Theoretically define clusters, natural industry clusters, cluster organizations, institutionalized clusters and describe the methods of creating and supporting them.</li> <li>Analyze the methods for measuring the innovation and financial performance, efficiency and competitiveness of both natural industry clusters and institutionalized clusters.</li> <li>Compare the differences in the innovation and financial performance of natural industry clusters and institutionalized clusters.</li> <li>Evaluate the effects of financial support for institutionalized clusters from public resources at the level of regional competitiveness.</li> <li>Propose a statistical model which captures the efficiency of spending public funds on the activities of institutionalized clusters.</li> </ol>

no. 3	Supervisor	doc. Ing. Peter Džupka, PhD.
Title		ALLIANCES OF EUROPEAN UNIVERSITIES AND THEIR IMPACT
		ON THE COMPETITIVENESS OF EUROPEAN HIGHER
		EDUCATION INSTITUTIONS
Detail	ed description of	The main goal is to analyze the impact of the European Universities
the top	oic (annotation or	initiative on the competitiveness of higher education institutions (HEIs)
abstra	ct)	in Europe. In order to achieve the main goal of the work, it will be
		necessary to understand the concept of the competitiveness of
		universities, primarily with focus on key factors of HEIs

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competitiveness. At the same time, it will be necessary to analyze in detail the main goals of the European Universities initiative as well as the goals of existing alliances. The analytical part of the work will be focused on analyzing the impact of HEIs participation in alliances of European universities on their competitiveness. The contribution of the work should primarily be the evaluation of the goals of the European Universities initiative and at the same time the identification of key prerequisites (areas) of cooperation that contribute to increasing the competitiveness of European HEIs

no. 4	Supervisor	doc. Ing. Peter Džupka, PhD.
Title		SMART GOVERNANCE" TOOLS AS A SUPPORT OF DECISION MAKING PROCESSES
	ed description of pic (annotation or ct)	The main objective of the dissertation thesis is to develop and validate a methodology for supporting key decisions in the area of operational spending, investment and local policy modeling, based on data-supported modeling and aimed at increasing the efficiency and societal benefits of decision-making processes in local governments. Thesis will map the currently available data (primary, secondary and online data) needed to support selected key decision-making processes. At the same time, it will map the available IOT / IOE technologies, that will allow cities and self-government regions to generate new decision support data. Another part of the thesis will be the modification of methods based on the evidence-based policy making and value for money approaches, which will enable effective decisions in several areas at the local and regional level in Slovakia. The output of the project will be the methodological instructions for changing decision-making processes based on data and current methods, which will ensure higher efficiency of the allocation of public resources and increase the benefit for the citizens

no. 5 Supervisor	prof. RNDr. Oto Hudec CSc.
Title	THE IMPACT OF INEQUALITY AND SOCIAL POLARISATION
	ON ECONOMIC GROWTH AND QUALITY OF LIFE
Detailed description of	The topic of the dissertation first focuses on research on the impact of
the topic (annotation or	income inequality in relation to economic growth and quality of life.
abstract)	Social polarisation based on political identity (Fukuyama and others) can
	also be an important factor that influences political, social and economic
	decisions in countries. Different dividing lines appear in society,
	splitting it not only by income, but also by nationality, education,
	political opinion, ethnicity, etc. Identity politics manifests itself as the
	protection, promotion and glorification of a particular group at the
	expense of others, which can have a strong impact on economic growth
	and quality of life, especially for oppressed groups. We therefore
	consider the hypothesis that social polarisation leads to the division of
	society into isolated groups that have different access to resources,
	opportunities and services, leading to even greater inequality and
	consequently to a deterioration in economic indicators and life
	satisfaction. Exclusion from mainstream society can lead to feelings of
	inferiority, frustration and anger, with negative consequences for mental

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health. If an 'us and them' mentality is promoted, social polarisation can
contribute to increasing income and geographical inequalities, leading to
anti-systemic activities, populism and social conflicts (indigenous and
refugee populations; nationalists and liberals; urban and rural, etc.).

no. 6 Super	visor	doc. Ing. Matúš Kubák, PhD.
Title		AGENT-BASED MODELING OF SOCIO-ECONOMIC PHENOMENA ASSOCIATED WITH MARKET FAILURE
Detailed desc the topic (and abstract)		The aim of the dissertation is to create a complex agent-based simulation with a heterogeneous agents. Specified simulation will allow observation of the given socio-economic phenomenon with respect to different set up of parameters. Outputs of the simulation will be quantitatively processed to identify the laws and principles that brings the system into equilibrium, respectively deviate system from equilibrium.

no. 7 Supervisor	doc. Ing. Miriam Šebová, PhD.
Title	CLIMATE JUSTICE AND SUSTAINABLE CITIES
Detailed description of the topic (annotation or abstract)	The effects of climate change (environmental, economic, social) will affect humans, species and spaces in different ways. The majority of people live in cities, and climate justice as a balance between environmental sustainability and social vulnerability is becoming critical in the transition to sustainable cities.
	The dissertation aims to conceptualize climate justice in an urban environment and apply it to Slovak cities. The objective is to formulate climate justice indicators and factors in cities, identify the most vulnerable localities and communities affected by climate change, and analyze the local measures to support them.

no. 8	Supervisor	doc. Ing. Miriam Šebová, PhD.
Title		GENDER EQUALITY IN RESEARCH AND SCIENCE
	ed description of pic (annotation or ct)	Despite strong support for European gender policies, science and research are among the sectors that persist in significant differences in opportunities between men and women. Horizontal and vertical segregation is strongly present in the Slovak academic environment. Equal opportunities significantly affect any organization's competitiveness, economic performance, and social cohesion. The objective of the dissertation is to conceptualize the topic of equal opportunities in science and research, to examine in depth its various aspects and indicators that will help understand their interrelationships and formulate recommendations to reduce gender inequalities. The work will also focus on the effects of the Covid pandemic on gender equality.

no. 9 Supervisor	doc. Ing. Miriam Šebová, PhD.
Title	ACCESSIBILITY TO CULTURE AND CULTURAL HERITAGE
Detailed description of	Digital technologies are changing production and consumption patterns
the topic (annotation or	in the cultural and creative industries. Digital media enables audience
abstract)	interaction and new forms of audience development. On one side, they





can make culture more accessible, but on the other side, they can also deepen barriers based on the digital divide and digital skills.  The dissertation is focused on various dimensions of accessibility (e.g. spatial, economic, social, digital) and their evaluation concerning the diversity of cultural visitors and inclusiveness.  The dissertation aims to analyze accessibility to culture and cultural heritage, their relationships, and various types of effects (social, economic, cultural) to identify barriers and recommendations for
cultural policies.

no. 10	Supervisor	doc. Ing. Nataša Urbančíková, PhD.
Title		THE IMPACT OF SOCIAL CAPITAL ON THE ATTITUDES OF THE LOCAL POPULATION TOWARDS REFUGEES AND IMMIGRANTS.
	d description of c (annotation or )	The topic of this dissertation focuses on the intense public and political debate on cultural diversity, social cohesion and immigration in societies, with a case study of Slovak and Ukrainian refugees. Social capital is a key concept for assessing the relationship between the hospitality reps. inhospitality of the home population towards immigrants. The concept of social capital derives from the prevailing ideological climate and can be used as a tool for bridging two communities, strengthening social cohesion. The theme responds to the growing concerns and potential dangers to social cohesion caused by increasing immigration flows and cultural diversity. Research is therefore needed to study these factors and their impact on social progress and the subjective well-being of the population. A case study of Ukrainian expats in Slovakia is envisaged.

no. 11	Supervisor	doc. Ing. Tomáš Želinský, PhD.
Title		DETERMINANTS OF SUBJECTIVE WELL-BEING
	d description of c (annotation or )	In the past, there was an ambiguous view, or even scepticism, in economics towards the research of subjective phenomena. However, the study of subjective well-being (SWB) is now an essential part of economic research, as evidenced by the increasing number of studies on SWB in economics. Nevertheless, the problematic issue of endogeneity in regression models relying on survey data often limits the interpretation of results to conclusions about the relationships between variables because demonstrating the causal effects of selected variables on SWB or the effects of SWB on other variables is not trivial. Therefore, the dissertation aims to use appropriate identification methods to investigate the (causal) effects of selected variables on SWB or the effects of SWB on chosen aspects of individuals' lives.

no. 12	Supervisor	doc. Ing. Tomáš Želinský, PhD.
Title		EXPLORING THE POTENTIAL OF DATA ANALYTICS METHODS
		IN POVERTY MEASUREMENT
Detailed description of		The increase in living standards brings the need to re-evaluate commonly
the topic (annotation or		used approaches to assessing the quality of life and identifying
abstract)		individuals/households at risk of poverty. Although the income-based





concept of poverty can still be considered the most commonly used, most experts lean towards defining poverty using multiple dimensions. Commonly used approaches to measuring poverty work with a limited number of variables. In contrast, the availability of a large volume of data related to poverty allows the use of modern data analytics methods. The dissertation aims to address this challenge and explore the possibilities of using modern data analytics methods in defining and measuring poverty. To successfully complete the dissertation, it is essential to have an excellent grasp of advanced methods in applied econometrics and a willingness to learn and apply modern data analytics techniques in social sciences.

