TOPICS FOR DOCTORAL (PHD.) THESIS FOR ACADEMIC YEAR 2022/2023

Field of study: 8. Economics and Management
Study program: Finance

č. 1	Supervisor	**doc. Ing. Alena Andrejovská, PhD.**
Title		TAX COMPETITION OF THE EU MEMBER STATES IN THE CONTEXT OF CORPORATE TAXATION
Detailed description of the topic (annotation or abstract)		EU countries are trying to increase their competitiveness and tax attractiveness to attract foreign investors. Therefore, the dissertation will focus on the issue of effective corporate taxation and its impact on tax competition within the member states of the European Union. The work will point out the differences between the statutory and effective tax rates and further analyze the methods and determinants of the impact on tax competitiveness in corporate taxation in EU member states. Last but not least, the work will evaluate the impact of individual determinants on tax competitiveness concerning the structure of tax systems of individual countries, which are heterogeneous and lead to differences and competition between EU countries.

č. 2	Supervisor	**doc. Ing. MVDr. Ján Buleca, PhD.**
Title		PREDICTION OF THE EFFECTS OF THE ECONOMIC CYCLE ON AGRICULTURAL PRODUCTION IN THE EU
Detailed description of the topic (annotation or abstract)		Monitoring and predicting business cycles become particularly important during the global economic crisis. In addition to providing relevant data to ensure the stability of the economic environment, they are closely linked to issues of sustainability, security and self-sufficiency of countries in terms of agricultural production and related food production, as necessary commodities to ensure the nutrition of the population. The dissertation thesis will focus on the analysis and comparison of current composite indicators to predict the impact of the business cycle on the agri-sector, analysis of their predictive ability within the European Union, analysis of the impact of available factors on the business cycle, and in the last part a proposal of a leading composite indicator for EU countries.

č. 3	Supervisor	**doc. Ing. MVDr. Ján Buleca, PhD.**
Title		EFFECT OF PRODUCTION POTENTIAL OF EUROPEAN AGRICULTURAL HOLDINGS TO THEIR ECONOMIC SITUATION
Detailed description of the topic (annotation or abstract)		The volume of the world's population, together with the increase in its income, reflects the increased need to provide essential food components. Consumption of agricultural products, its quantity and also quality reflect the level of national wealth. Exports of agricultural production represent a significant part of the agricultural and food trade. Goals:

	• To define the production potential of enterprises in selected sectors of agricultural production. • To analyse the current economic situation of agricultural production in selected countries of the world. • To compare the parameters of agricultural production efficiency in the selected countries. • To propose a classification of agricultural holdings according to their production potential.

č. 4	Supervisor	**doc. Ing. Radoslav Delina, PhD.**
Title		THE RESEARCH OF BEHAVIORAL PATTERNS ON BIG DATA WITHIN PUBLIC AND COMMERCIAL PROCUREMENT WITH NEGATIVE IMPACT ON EFFICIENCY OF PROCUREMENT PROCESSES
Detailed description of the topic (annotation or abstract)		The essence of the thesis is the implementation of data-supported behavioral research in order to identify the potential of large-scale data, data science and data services for diagnostics and prediction of unfair practices, cartel and collusion signals, or non-standard patterns of behavior, analysis of their impact, prediction of occurrence and analysis and prediction of results or other characteristics of public and commercial procurement. In addition to expanding the current state of knowledge, the research results will be transferable to the real environment of data services and policies in the field of public procurement, antitrust and monitoring, etc. The main goal of the thesis is to diagnose, predict and analyze the impacts of non-standard practices in public and commercial procurement using data science and behavioral research and data living lab development as well as to analyze the potential of large data for the required level of prediction performance, classification and causal methods.

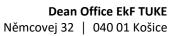| č. 5	Supervisor	**doc. Ing. Júlia Ďurčová, PhD.**
Title		STRUCTURAL CHANGES AND IMPACTS OF FOREIGN TRADE IN THE CENTRAL AND EASTERN EUROPE COUNTRIES
Detailed description of the topic (annotation or abstract)		The Covid 19 pandemic crisis, which was a huge shock to world trade and global value chains, highlighted questions about the impact of change and the importance of individual sectors for each country. Some sectors was partially shut down as a result of lock-downs, so the concerns about the reactions this will have on the overall economy have been raised. As a result of global value chains, cross-sectoral links are strong not only within a country but across the region, even within countries from other continents, measures and changes introduced in one country spread across countries and may manifest themselves in different ways. After the year 2000, within the countries of Central Europe, a significant production cluster was established. This cluster is concentrated in production of industries that are strongly export-oriented. Therefore, external shocks (such as technological change, protectionism, shipping problems, etc.), which may also come from

		another region, can be strongly transmitted through sectoral links and affect the domestic economy. It is possible to estimate what the impact on the economy might be if one sector completely ceased to produce as a result of the external shock. And also to show how strong are the links of one sector with the rest of the economy as well as to compare the strength of links between individual sectors and thus to evaluate their importance for a country.

č. 6	Supervisor	**doc. Ing. Jozef Glova, PhD.**
Title		INTELLECTUAL CAPITAL AND PRODUCTIVITY
Detailed description of the topic (annotation or abstract)		The topic focuses on conceptualising the components of intellectual capital at the micro-and macroeconomic level. The main goal of the thesis is to define theoretically and empirically examine the impact of intangible assets in the broadest sense (intellectual capital) on the growth of productivity and economic performance of the country. The thesis's output should provide knowledge about the level of intellectual capital in the Slovak Republic in terms of human capital quality, innovation performance, ICT infrastructure and its impact on the economic and innovation performance of regions. Furthermore, the thesis will answer several research questions focused on assessing intellectual capital in the Slovak Republic and EU countries. Finally, the thesis should draft a methodological framework for uniform valuation of intellectual capital components at the regional level and define the relationship between the value of human capital and economic performance.

č. 7	Supervisor	**doc. Ing. Jozef Glova, PhD.**
Title		HUMAN CAPITAL EFFICIENCY IN HIGHER EDUCATION
Detailed description of the topic (annotation or abstract)		The topic focuses on human capital and its effectiveness as one of the organization's intellectual capital components. The main goal of the research is the effectiveness of human capital in individual universities in the Slovak Republic. For this reason, in this dissertation, it is necessary to process and create your methodology for such evaluation, collect secondary and eventual primary data, and statistically evaluate, analyze and interpret the results appropriately. Several research questions are to be answered in the thesis, which focuses on evaluating human capital levels at universities in the Slovak Republic. The methodological framework for uniform evaluation of university human capital components will be proposed. The relationship between human capital value and economic performance at the university level will also be defined.

č. 8	Supervisor	**doc. Ing. Kristína Kočišová, PhD.**
Title		QUALITY OF INTEREST RATE PASS-THROUGH IN EUROPEAN UNION COUNTRIES
Detailed description of the topic (annotation or abstract)		• Summarize and critically discuss recent theoretical approaches examining the quality of the interest rate pass-through. • Analyze the development of central banks interest rates, interest rates on the interbank market, and interest rates provided by commercial banks. • Analyze the impact of selected bank-level variables and macroeconomic variables on the quality of the interest rate pass-through in the European Union countries. • Evaluate the results of the analysis.

č. 9	Supervisor	**doc. Ing. Kristína Kočišová, PhD.**
Title		SYSTEMIC RISK IN THE EUROPEAN BANKING SECTOR
Detailed description of the topic (annotation or abstract)		• Critically evaluate existing theoretical concepts for systemic risk analysis. • Define the traditional methods used to measure systemic risk. Apply selected techniques to a set of banks. • Analyze the impact of the pandemic, banking and macro variables on the evolution of the systemic risk of the analyzed banks in the European Union countries. • Evaluate the results of the analysis.

č. 10	Supervisor	**doc. Ing. Lenka Maličká, PhD.**
Title		SPENDING EFFICIENCY OF MUNICIPALITIES
Detailed description of the topic (annotation or abstract)		Decentralized allocation function of public finances is usually constrained legislatively and notably by the volume of municipal budgets. Budget principle of the efficiency advices the efficient use of public resources. Spending efficiency might be interpreted as ability to minimize municipality´s per capita spending to keep providing a fixed level of local public goods (Afonso and Venâncio 2022). Related foreign scientific literature quantifies the spending efficiency of municipalities as efficiency scores using the DEA (Geys and Moesen 2009; Da Cruz and Marques 2014; Drew, Kortt and Dollery 2015; Afonso and Venâncio 2022, frequently used is the input oriented vrsDEA). To identify the determinants of the spending efficiency, efficiency scores are involved as dependent variables to the panel regression, while regressors are of demographic, socio-economic or institutional nature.

č. 11	Supervisor	**doc. Ing. Lenka Maličká, PhD.**
Title		FISCAL STRESS AND FISCAL DISCIPLINE OF MUNICIPALITIES ACCORDING TO THE SIZE CATEGORY
Detailed description of the topic (annotation or abstract)		Municipalities face the fiscal stress due to several factors as external shocks (economic and non-economic), tax reforms, demographic changes or investment projects. Fiscal stress might affect their fiscal behavior and disturb the municipalities´ functioning in an important

		manner. In line with the fiscal stress and fiscal discipline, the municipal indebtedness is predominantly analyzed (Ribeiro and Jorge 2014; Balaguer-Coll, Prior and Tortosa-Ausina 2016; Ehalaiye, Botica-Redmayne and Laswad 2017). It is assumed, that municipalities smaller in population face higher financial vulnerability, but their access to loans is limited by their ability to answer for a debt with future revenues. Empirical research mainly focuses on determinants of municipal indebtedness. The panel regressions are usually run with regressors of demographic, socio-economic or institutional nature. Curious is the contribution of Kluza (2017), the municipal indebtedness is analyzed via DEA and municipalities with worsened risk profile are identified.

č. 12	Supervisor	**doc. Mgr. Grzegorz Michalski, PhD.**
Title		FINANCIAL LIQUIDITY MEASURES IN FULL OPERATING CYCLE FIRMS
Detailed description of the topic (annotation or abstract)		• The aim of the study is to determine the rules governing the modern cash management in small and medium enterprises with a full operating cycle with particular emphasis on environemental conditions influencing enterprises. • Having a full operating cycle is defined as a situation in which the small or medium enterprise has a stock of materials or raw materials, which then as a result of the technological process converts the finished products, offers them for sale through both cash sales and sales on the basis of the use of trade credit receivables.

č. 13	Supervisor	**prof. Srdjan Redzepagic, PhD.**
Title		DEVELOPMENT OF EUROPEAN ECONOMICS: FACTS AND FIGURES FROM THE RECENT YEARS
Detailed description of the topic (annotation or abstract)		This topic aims to summarize and critically discuss recent economic changes and development of European Union economies. Thru it, it will be given the analyze of selected economic policies and projects for the future, but also effects of the Euro Area member countries. It is aimed to identify economic problems in EU member states, thru proposal of alternative measures for reducing inequality within actual member states. Financial analysis is desired to be done too. Previsions, estimations, analysis are the main parts of this work.

č. 14	Supervisor	**prof. Ing. Tomáš Sabol, CSc.**
Title		IMPACT OF DIGITALIZATION AND ARTIFICIAL INTELLIGENCE ON COUNTRY ECONOMY
Detailed description of the topic (annotation or abstract)		• Analysis of relevant individual sectors of economy from the point of view of the PhD thesis topic • Analysis of economic impact of the digitalization and AI on economy • Design of an innovative methodology of economic impact evaluation in accordance with current technology trends in the area of AI & digitalization

č. 15	Supervisor	**doc. Ing. Marianna Siničáková, PhD.**
Title		EFFICACY OF THE UNCONVENTIONAL ECB MONETARY POLICY IN THE CONTEXT OF PANDEMIC CRISIS AND DIGITALIZATION OF MONEY
Detailed description of the topic (annotation or abstract)		• To characterize and evaluate the implementation of the single monetary policy before and during the pandemic crisis. • To analyze and evaluate the application of unconventional monetary policy in line with macroprudential policy. • To quantify equilibrium interest rates in the euro area countries. • To assess potential of the money digitization process in the euro area.

č. 16	Supervisor	**doc. Ing. Marianna Siničáková, PhD.**
Title		WAY OUT OF THE MIDDLE INCOME TRAP OF EU COUNTRIES
Detailed description of the topic (annotation or abstract)		• To analyze the nominal and real convergence of EU countries. • To identify the causes of entrapment in the middle income trap. • To quantify, estimate and assess the impact of the trap on economic cycles and the living standards of the population. • To suggest possibilities to reduce the trap through economic and public policy instruments. • To quantify, estimate and evaluate possible impacts of these solutions.

č. 17	Supervisor	**doc. Ing. Michal Šoltés, PhD.**
Title		ESG INVESTMENTS AND THEIR IMPACT ON PORTFOLIO PERFORMANCE
Detailed description of the topic (annotation or abstract)		The main objective of the thesis will be to examine the impact of the involvement of ESG investments in the portfolio on its performance. We want to analyse whether ESG investments have a real potential to bring significantly higher sustainable returns, or are only a consequence of global changes and the growing importance of ecology and environmental protection. We are interested in the relationship between the global theme in society and the real potential of ESG investments to bring returns for investors.