

**TOPICS FOR DOCTORAL (PHD.) THESIS FOR ACADEMIC YEAR 2020/2021**

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

No. 1	Supervisor	<b>Assoc. Prof. Alena ANDREJOVSKÁ, PhD.</b>
Title		IMPACT OF EFFECTIVE CORPORATE TAXATION ON INVESTORS DECISION
Goals		<ul style="list-style-type: none"> <li>To characterize existing theoretical findings and approaches of effective taxation and its impact on tangible and intangible assets.</li> <li>To make a comprehensive methodology for measuring individual components of effective average and marginal tax rates for types of assets.</li> <li>To assess the relationship between the effective average and marginal tax rates as a whole for selected assets and assess the attractiveness of the country for foreign investors with respect to taxation.</li> <li>To evaluate the effective corporate tax burden of companies in selected countries from the perspective of investors' decisions.</li> </ul>

No. 2	Supervisor	<b>Assoc. Prof. Jozef BUCKO, PhD.</b>
Title		RESEARCH OF BUSINESS INTELLIGENCE (BI) TOOLS IN ELECTRONIC COMMERCE
Goals:		<ul style="list-style-type: none"> <li>To examine the tools, methods and mechanisms of BI in various economical areas.</li> <li>To analyse the usage of BI in electronic commerce.</li> <li>To analyse and study data structure and methods for data collection and processing in order to use the right BI tools.</li> <li>To suggest the methodology of selection of suitable BI tools for analysis and examination of processes in electronic commerce.</li> <li>To analyse proposed methodology in terms of particular use cases.</li> </ul>

No. 3	Supervisor	<b>Assoc. Prof. Ján BULECA, PhD.</b>
Title		ECONOMIC IMPACTS OF GENDER INEQUALITY WITHIN THE EUROPEAN UNION COUNTRIES
Goals		<ul style="list-style-type: none"> <li>To define gender equality categories, their classification and methods of quantification.</li> <li>To analyse national and international differences in the level of income distribution with an emphasis on gender equality in selected European countries (clustering, regression analyses).</li> <li>To compare the portfolio of tools to mitigate the impact of gender inequality and the possibility of applying the most effective approaches in the Slovak Republic.</li> </ul>

No. 4	Supervisor	<b>Assoc. Prof. Ján BULECA, PhD.</b>
Title		EFFECT OF PRODUCTION POTENTIAL OF EUROPEAN AGRICULTURAL HOLDINGS TO THEIR ECONOMIC SITUATION
Goals		<ul style="list-style-type: none"> <li>To define the production potential of enterprises in selected sectors of agricultural production.</li> </ul>

	<ul style="list-style-type: none"> <li>• To analyse the current economic situation of agricultural production in European countries.</li> <li>• To compare the parameters of agricultural production efficiency in EU countries.</li> <li>• To propose a classification of agricultural holdings in Europe according to their production potential.</li> </ul>
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No. 5	Supervisor	<b>Assoc. Prof. Radoslav DELINA, PhD.</b>
Title		MODEL FOR DATA BASED LOCAL ECONOMIC DEVELOPMENT
Goals		<ul style="list-style-type: none"> <li>• To characterize determinants, barriers and potential for local economic development, short supply chains in the context of digital single market strategy.</li> <li>• To analyse potential and barriers of data based local economic development in Kosice region.</li> <li>• To propose model of data based local economic development of KSK.</li> <li>• To analyse, model and predict data based local economic development of KSK</li> <li>• To evaluate scenarios and formulate recommendations for KSK.</li> </ul>

No. 6	Supervisor	<b>Assoc. Prof. Radoslav DELINA, PhD.</b>
Title		DATA BASED SOCIALLY RESPONSIBLE ECONOMIC DEVELOPMENT
Goals		<ul style="list-style-type: none"> <li>• To characterize determinants, barriers and potential for socially responsible (SR) economic development in the context of digital single market strategy.</li> <li>• To analyse potential and barriers of data based SR economic development in Kosice region.</li> <li>• To propose model of data based SR economic development of KSK on the base of social enterprise, social public and commercial procurement concepts focused esp. On social and economic inclusion of disabled.</li> <li>• To analyse data model, to model and predict indicators of data based SR economic development of KSK.</li> <li>• To evaluate scenarios and formulate recommendations for KSK.</li> </ul>

No. 7	Supervisor	<b>Assoc. Prof. Radoslav DELINA, PhD.</b>
Title		BEHAVIOURAL MODELLING AND DATA SCIENCE DEVELOPMENT FOR FUTURE STRATEGIC AND OPERATIONAL SPEND MANAGEMENT AND PREDICTION AND ALERT MODEL DESIGN
Goals		<ul style="list-style-type: none"> <li>• To characterize data science potential for strategic and operational procurement and supply chain management.</li> <li>• To analyse current and potential data model for decision support modelling, prediction and automation of procurement processes and processes of strategic and operational procurement.</li> <li>• To propose model of data based decision making support, prediction, classification, alerts and other purposes of smart supply chain and spend management.</li> <li>• To realise experiments on real data.</li> </ul>

	<ul style="list-style-type: none"> <li>To evaluate experiments and models from the aspects of practical adoption in real corporate and public environment.</li> </ul>
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No. 8	Supervisor	<b>Assoc. Prof. Radoslav DELINA, PhD.</b>
Title		BEHAVIOURAL MODELLING AND DATA SCIENCE FOR CARTEL AND UNFAIR MARKET BEHAVIOUR DETECTION AND ANALYSIS
Goals		<ul style="list-style-type: none"> <li>To characterize behavioural patterns of unfair practices on the market and in supply chains and to analyse data science potential for detection and management.</li> <li>To analyse current and potential data model for behavioural modelling, prediction and diagnostics of unfair behavioural patterns.</li> <li>To propose experiments for behavioural modelling and data mining modelling for prediction, classification and diagnostics of unfair behavioural patterns.</li> <li>To realise experiments on real data</li> <li>To evaluate experiments and models from the aspects of practical adoption in real corporate and public environment.</li> </ul>

No. 9	Supervisor	<b>Prof. Dejan ERIC, PhD.</b>
Title		POST MERGERS PERFORMANCES OF EU BANKS
Goals		<ul style="list-style-type: none"> <li>Theoretical background in area of post-merger performance analysis.</li> <li>Reasons and motives for Banking M&amp;A within the EU.</li> <li>To analyse current trends in M&amp;A banks.</li> <li>To summarize and critically discussing different approaches to post merger performance evaluation.</li> <li>To define of sample and methodology of research.</li> <li>To predict of future trends.</li> </ul>

No. 10	Supervisor	<b>Prof. Dejan ERIC, PhD.</b>
Title		THE INTERDEPENDENCE OF REGULATORY REFORMS WITHIN THE EUROPEAN FINANCIAL SYSTEM AND THE DEVELOPMENT OF FINANCIAL MARKETS
Goals		<ul style="list-style-type: none"> <li>New developments in EU financial regulation.</li> <li>To analyse of the determinants of financial markets development.</li> <li>Interaction of financial regulation and development of financial systems.</li> <li>Empirical evidence of interdependence.</li> </ul>

No. 11	Supervisor	<b>Prof. Vladimír GAZDA, PhD.</b>
Title		DECENTRALIZED SCHEDULING OF THE RESOURCES USING THE METHODS OF THE ARTIFICIAL INTELLIGENCE
Goals		<ul style="list-style-type: none"> <li>Main goal is to propose ant to test a decentralized system of the resources scheduling among the autonomous economy agents.</li> <li>The proposed model is to be tested and applied in a particular environment.</li> </ul>

No. 12	Supervisor	<b>Assoc. Prof. Jozef GLOVA, PhD.</b>
Title		DETERMINANTS OF INVESTMENTS AND INNOVATION EXPENDITURES IN MANUFACTURING INDUSTRIES
Goals		<ul style="list-style-type: none"> <li>• To analyse investments in terms of their direction to R&amp;D as well as their relation to innovation. Define the determinants of impact on the basis of a recherche analysis.</li> <li>• To select a group of countries and make comparisons in industry, define similarities and differences.</li> <li>• To define research questions on the basis of the analysis and research carried out, verify their possible impacts using appropriate methods of multivariate statistics and, on the basis of the results, express your recommendations for economic policies at the enterprise level.</li> </ul>

No. 13	Supervisor	<b>Assoc. Prof. Kristína KOČIŠOVÁ, PhD.</b>
Title		QUALITY OF INTEREST RATE PASS THROUGH IN EUROPEAN UNION COUNTRIES
Goals		<ul style="list-style-type: none"> <li>• To summarise and critically discuss recent theoretical approaches examining the quality of the interest rate pass through.</li> <li>• To analyse the development of central banks interest rates, interest rates on the interbank market, and interest rates provided by commercial banks.</li> <li>• To analyse the impact of selected bank-level variables and macroeconomic variables on the quality of the interest rate pass through in the European Union countries.</li> <li>• To evaluate the results of the analysis.</li> </ul>

No. 14	Supervisor	<b>Assoc. Prof. Lenka MALIČKÁ, PhD.</b>
Title		THE FLYPAPER EFFECT IN THE SR
Goals		<ul style="list-style-type: none"> <li>• To analyse the literature on the flypaper effect and to explain its relate to vertical fiscal imbalance, financial autonomy of lower government levels, soft budget constraint, etc.</li> <li>• To test empirically the flypaper effect in the SR on the sample of municipalities employing the econometric analysis (dynamic panel model).</li> <li>• To evaluate the results of the empirical analysis and to formulate the conclusions and recommendations for the financing the municipalities in the SR on the research basis.</li> </ul>

No. 15	Supervisor	<b>Assoc. Prof. Rajmund MIRDALA, PhD.</b>
Title		IMPACT OF EURO ADOPTION ON INTERNATIONAL TRADE WITHIN THE HETEROGENEOUS EURO AREA
Goals		<ul style="list-style-type: none"> <li>• To summarise and critically discuss recent theoretical and methodological approaches examining an impact of the exchange rate on international trade.</li> <li>• To analyse an international trade among the Euro Area member countries considering issues based on the effects of heterogeneity and exogenous shocks.</li> <li>• To clarify effects of heterogeneity and exogenous shocks on the Euro Area member countries' international trade before and after the euro adoption</li> </ul>

	<ul style="list-style-type: none"> <li>To evaluate effects of the euro adoption on the international trade of the Euro Area member countries.</li> </ul>
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No. 16	Supervisor	<b>Assoc. Prof. Rajmund MIRDALA, PhD.</b>
Title		FINANCIAL STABILITY AND MACROPRUDENTIAL POLICY IN THE EUROZONE
Goals		<ul style="list-style-type: none"> <li>To summarise and critically discuss recent theoretical and methodological approaches to examine financial stability of the economy.</li> <li>To explore mutual relationship between the quality of banking sector and financial stability of the economy from the view of macroprudential policy.</li> <li>To analyze financial stability of the selected Euro Area member countries.</li> <li>To evaluate effects of banking and sovereign risks on the financial stability of the selected Euro Area member countries.</li> </ul>

No. 17	Supervisor	<b>Assoc. Prof. Rajmund MIRDALA, PhD.</b>
Title		REAL EXCHANGE RATE MISALIGNMENTS IN THE EURO AREA
Goals		<ul style="list-style-type: none"> <li>Summarize and critically discuss recent theoretical approaches to examine the size and persistence of real exchange rate misalignments from the levels implied by economic fundamentals.</li> <li>Analyze the size and implications of the real exchange rates misalignments in the EU member and non-member countries.</li> <li>Analyze effects of institutional and regulatory frameworks on the size and persistence of the real exchange rates misalignments in the EU member and non-member countries.</li> <li>Propose and critically discuss mechanisms to reduce the real exchange rates misalignments in the EU member and non-member countries</li> </ul>

No. 18	Supervisor	<b>Prof. Tomáš SABOL, PhD.</b>
Title:		IMPACT OF DIGITAL TRANSFORMATION ARTIFICIAL INTELLIGENCE METHODS ON ECONOMY
Goals:		<ul style="list-style-type: none"> <li>To Identify and analyse potential application sectors of Artificial Intelligence (AI) applications in economy.</li> <li>Economic impact analysis of digital transformation and AI applications.</li> <li>Design of a methodology for economic impact analysis of digital transformation and AI.</li> </ul>

No. 19	Supervisor	<b>Assoc. Prof. Marianna SINIČÁKOVÁ, PhD.</b>
Title		MONETARY UNIONS IN THE WORLD, THEIR RELEVANCE AND EVOLUTION
Goals		<ul style="list-style-type: none"> <li>To analyse current state of monetary integration in the World, from the perspective of monetary unions, substitutional currencies, digitalization of money.</li> <li>To identify main trends, obstacles and incentives in evolution of monetary unions.</li> <li>To quantify, estimate and evaluate impacts of monetary unions from the point of view of world trade, digitalization of money and their sustainability in future.</li> </ul>

	<ul style="list-style-type: none"> <li>To suggest recommendations for (common) monetary policy.</li> </ul>
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No. 20	Supervisor	<b>Prof. Srdjan REDZEPAGIC, PhD.</b>
Title of thesis		DEVELOPMENT OF EUROPEAN ECONOMIES: FACTS AND FIGURES FROM THE RECENT YEARS
Goals		<ul style="list-style-type: none"> <li>To summarize and critically discuss recent economic changes and development of European Union economies.</li> <li>To analyse selected economic policies and projects for the future</li> <li>To analyse effects of the Euro Area member countries.</li> <li>To identify economic problems in the EU member states.</li> <li>To propose alternative measures for reduction of inequality within actual member states.</li> <li>Previsions, estimations, analysis.</li> </ul>

No. 21	Supervisor	<b>Prof. Srdjan REDZEPAGIC, PhD.</b>
Title of thesis		EXTERNAL TRADE AND FINANCIAL STRUCTURE OF THE EU
Goals		<ul style="list-style-type: none"> <li>To summarize and critically discuss external trade of the European Union economies.</li> <li>To analyse selected trade policies and financial structure of EU member states.</li> <li>To analyse effects of the Euro Area member countries.</li> <li>To identify trade problems in the EU countries and to perform forecasts.</li> <li>To identify financial markets in the EU and to perform forecasts.</li> <li>To research why trade openness has noticeably increased since 2004</li> <li>Previsions, estimations, analysis.</li> </ul>

No. 22	Supervisor	<b>Assoc. Prof. Michal ŠOLTÉS, PhD.</b>
Title		PHENOMENON OF CRYPTOCURRENCIES – ECONOMIC, SOCIAL, MORAL IMPACTS
Goals		<ul style="list-style-type: none"> <li>Research will be focused on explanation of systems of the cryptocurrencies, analysis of their development and their impact on economics, society and people, pros and threats, which cryptocurrencies bring.</li> </ul>

No. 23	Supervisor	<b>Assoc. Prof. Michal ŠOLTÉS, PhD.</b>
Title		MODEL OF EVALUATION OF MARKET POTENTIAL OF HOCKEY CLUBS' ENVIRONMENT IN SLOVAKIA
Goals		<ul style="list-style-type: none"> <li>To develop a model of evaluation of market potential of hockey clubs in Slovakia with ambition of long-term transformation of legislative and economic forms of clubs to the new, more competitive and advantageous forms, which bring new possibilities and opportunities.</li> </ul>

No. 24	Supervisor	<b>Prof. Martin Užík, PhD.</b>
Title		DIGITAL MARKETING IN PROFESSIONAL SPORT
Goals		<ul style="list-style-type: none"> <li>Based on the new technology and data driven analytic tools professional sport clubs are able to rise sales and operating profit. The goal of the</li> </ul>

	<p>research work is to analyse, which variables influence the sport clubs sales and how the sport club could manage actively the business process.</p> <ul style="list-style-type: none"><li>• As the sport clubs and professional sportsman are interesting merchandising platforms, the second goal of the research work is to analyse the relationship between marketing and the property rights in the digital world.</li></ul>
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