

Dissertation thesis topic	External debt sustainability in light of illicit capital flows issue
Annotation	<p>The problem of external debt sustainability has again come to the forefront of economic research due to the recent outbreak of the balance of payments crisis in euro area countries. At the same time, the latest scandals (Panama papers, Paradise papers) have highlighted the growing problem of illicit capital flows not only in emerging but also economically developed countries. The need to adapt the existing models and to introduce new approaches to analysis of external debt sustainability that will include the potential impact of illicit capital flows represents a significant step towards improvement of the predictive power of early warning systems. Within both, the EU's economic area and the wider region of Europe, this is the key step to setting up a single mechanism for a European governance framework, e.g. in the context of the Macroeconomic Imbalances Procedure. In the dissertation, existing models of optimal current account estimation will be modified using current account gap models and models based on net foreign asset stabilization approach. These approaches will serve as inputs in order to enhance the most recent models based on the stock-flow adjustment by Lane and Milesi-Ferretti (2017), after the integration of illicit capital flows estimates using the residual balance of payments method and misreporting in foreign trade.</p>
Mode of study	full time/part time
Supervisor	prof. Dr. Ing. Menbere Workie Tiruneh, PhD.
Study programme	Economic Theory
Dissertation thesis topic	Modelling of Slovak regional development by integrated Econometric Input-Output model

Annotation	<p>Slovakia belongs to the EU countries with the largest regional disparities, albeit every government had listed mitigation of regional disparities amongst its priorities. National economic policy tends to underestimate specific effects of measures implemented at the regional level. Relatively limited attention is also paid to analytical support for regional decision making and forecasting. In this respect, only a few regional models have been practically applied in Slovak conditions (e.g. Radvanský et al. 2016). The aim of these models is limited not only by applied methodology, but often by the limited availability of relevant regional data. The aim of this thesis is to create and develop a regional model of Slovakia on NUTS 3 level (VÚC) suitable for forecasting of structural development using integrated Econometric Input-Output model.</p> <p>Time series based econometric models with their dynamic character are generally suitable for forecasting, but they have limited application in structural analysis (models of NBS, IFP MF SR, Infostat, SAV). In contrast, the structural models (Input-Output, CGE) are suitable for structural analysis, but with limitation in dynamics. Part of these limitations can be avoided by a combination of these two approaches, thus by integration of econometric and IO approach (e.g. Rey, 1999). The application of this approach is limited by the absence of multi-regional IO tables based on available data (non-survey methods, e.g. Flegg and Tohmo, 2013, Kronenberg and Tobben, 2011, or the review of the approach at the Czech conditions in Radvanský and Lichner, 2018). Estimation of these tables is a prerequisite for achieving the goal of the proposed thesis.</p>
Mode of study	full time
Supervisor	Ing. Marek Radvanský, PhD.
Study programme	Economic Theory
Dissertation thesis topic	Modelling the sustainability and adequacy of the pension system in the perspective of Slovak population ageing

Annotation	The sustainability of the pension system became a topic which is more and more present in the policy discourse in all developed countries. For the purpose of modelling the sustainability, several models at the European (EUROMOD) as well as Slovak level (SLOPEM) were developed. The ability of existing models in grasping the dynamics of the wage structure to assess the adequacy of the old-age pensions, using standard income inequality indicators, is limited. Such a microsimulation model is supposed to be able to simulate demographic processes together with processes related to economic activity, employment and earnings. The architecture of such a model assumes a knowledge of relevant literature from various fields of social research; starting from microsimulation modelling, through basic demographic concepts, as well as labour economics.
Mode of study	full time/part time
Supervisor	Mgr. Miroslav Štefánik, PhD.
Study programme	Economic Theory
Dissertation thesis topic	Impact evaluation of Slovak active labour market policy measures
Annotation	The lack of a skilled workforce is perceived with increasing urgency on the Slovak labour market. Investment in activating and re-skilling of available job seekers, thus, becomes more important. Resources flowing into active labour market policies (ALMP) present a scarce good; their effective allocation, therefore, remains a challenge for economic research. Thanks to the availability of administrative data, the impact of particular ALMP measures can be quantified using relatively reliable methods. Empirical microeconomics develops quite dynamically in this field; whether in the case of methods reconstructing a scientific experiment by matching participants to eligible applicants, panel data processing methods, or other regression-based types of analysis. The main task is going to be the description of intervention logic of ALMP measures provision in Slovakia, documenting its particular measures using available information sources and evaluating the efficiency of particular elements of Slovak ALMP, applying up-to-date techniques of counterfactual impact evaluation.
Mode of study	full time/part time

Supervisor	Mgr. Miroslav Štefánik, PhD.
Study programme	Economic Theory