Meeting of the Institute of Economic Research

3rd International Conference
Institute of Economic Research SAS

29.-30. November 2024
Smolenice, Congress Centre of SAS Smolenice, Slovakia

Conference Programme and Book of Abstracts

Organized by: Institute of Economic Research SAS

Institute of Economic Research, Slovak Academy of Sciences, Bratislava, Slovakia

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Contents

Foreword

Dear colleagues and participants,
We are pleased to present the proceedings of MIER 2024, which highlights the exchange of ideas and collaboration of experts in solving critical issues in various fields. This year's conference focused on critical issues including the socio-economic impact of environmental problems, Slovakia's economic development, inflation and price transmission, regional economic models, population aging, financial stability and the interplay between the traditional and shadow banking sectors.
MIER 2024 served as an important forum for the presentation of research findings and the promotion of meaningful dialog between experts. The papers included in this collection demonstrate a commitment to tackling complex challenges through comprehensive analysis and innovative thinking. These contributions advance academic understanding while providing practical insights that can influence policy, guide industry practice and inspire future research. By bringing together a broad range of perspectives and interdisciplinary approaches, the conference emphasized the importance of collaboration in addressing pressing economic and social issues.
We thank all contributors and participants who contributed to the success of this event and hope that this collection proves valuable for further research and discussion. We look forward to seeing you again at MIER 2025.

Bratislava, November 2024
MIER 2024 Organizing Committee

Conference Programme

Ekonomický ústav SAV
Institute of Economic Research SAS

Ekonomický ústav SAV, v.v.i.
Institute of Economic Research SAS

Programme MIER 2024

Meeting of the Institute of Economic Research – International Conference

Monday 28. 10. 2024

17:30 - 18:00	**Early Registration**
18:00 - 20:00	**Dinner**

Tuesday 29. 10. 2024

9:00 - 9:30	**Registration**
9:30 - 9:40	Conference opening (M. Štefánik) - **CONGRESS HALL**
9:40 - 10:30	Plenary session: **Fidrmuc Jarko** - Loan and Trust Behavior in CEECs

Parallel Sessions	CONGRESS HALL	LECTURE HALL
10:30 - 12:30	**Traditional vs. Shadow Banking Sector** *Chair: Boris Fišera*	**Hybrid modelling system for regional policy evaluation: regional, industry and labour effects** *Chair: Radvanský Marek*
10:30 - 11:00	**Širaňová Mária** – *Non-bank Financial Intermediaries and Illicit Financial Flows*	**Výrost Tomáš** – *Cohesion Policy Grants and Corporate Performance: Insights from Slovakia*
11:00 - 11:30	**Braimah Abille Adamu** – *Illicit Financial Flows, Shadow Banking, and Financial Stability in Select EU Countries*	**Littera Ľuboš** - Effectiveness of procedures for the preparation and management of EU cohesion funds in the Slovak Republic
11:30 - 12:00	**Fabo Brian** – The Impact of Fixed Exchange Rate Regimes within the EMU on Inflation Tax and Economic Growth	**Miklošovič Tomáš** – *Activation of the labor force from marginalized Roma communities*
12:00-12:30	**Fisera Boris** – *Financial Deepening and Carbon Emissions Intensity: Evidence from a Global Sample of Countries*	**Radvanský Marek** – *Regional Labour Market Trends: Tools and Techniques for EU Labour Market Forecasting at regional level*

12:30 - 13:30	**Lunch**
13:30 - 16:00	**Trip to Driny Cave**
16:00 - 16:30	**Coffee Break**

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Parallel Sessions	CONGRESS HALL	LECTURE HALL
16:30 - 18:00	**Macro-financial topics** *Chair: Širaňová Mária*	**Regional Economic Modeling and Development** *Chair: Vakulenko Ihor*
16:30 - 17:00	**Výbošťok Ján** – *The price of housing in Slovakia and its socio-spatial consequences*	**Braimah Abille Adamu** – *Regional Trade Agreements and Intra-African Trade: Do Colonial Ties Matter?*
17:00 - 17:30	**David Kiss Gabor** – *Currency pricing: unconventional monetary instruments and contagions*	**Vokoun Jaroslav** – *Divergence and Migration*
17:30 - 18:00	**Širaňová Mária** – *Behind the curve – the application of Taylor rule to post-pandemic inflation dynamics*	**Vakulenko Ihor** – *Energy Transition Factors Shaping Differentiated EU Policy Implementation*

18:00-22:00	**Conference Dinner**

Wednesday 30. 10. 2024

Parallel Sessions	CONGRESS HALL	LECTURE HALL
9:00 - 10:30	**Financial Stability and Corporate Finance in Slovakia** *Chair: Lyócsa Štefan*	**Inflation and Price Transmision** *Chair: Lichner Ivan*
9:00 - 9:30	**Kupkovič Patrik** – *Credit Supply or Demand? The Changing Role of Structural Market Forces in Bank Lending*	**Senaj Matúš** – *Who was protected by capping energy prices from the risk of energy poverty*
9:30 - 10:00	**Baumöhl Eduard** – *Zombie firms in Slovakia: the role of corporate governance, foreign ownership and CEO gender*	**Hudcovský Martin** - Quantifying the Fiscal Impact of Energy Price Caps on Inflation Control in Slovakia
10:00 - 10:30	**Lyócsa Štefan** – *How important is sentiment to lending?*	**Lichner Ivan** – *Assymetries in pass-through of global oil prices to Slovak consumer prices*

10:30 - 11:00	**Coffee Break**

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Session	CONGRESS HALL	LECTURE HALL
11:00-12:30	**Transition from high to low dependence on public transfers in old age: can the multi-pillar pension system handle the negative consequences of population ageing?**	**Doctoral Colloquium**
	Chair: Domonkos Tomáš	*Chair: Štefánik Miroslav*
11:00 - 11:30	**Trommlerová Sofia** – *New Family Policy on the Block: The Effect of a Pregnancy Benefit on Births*	**Verdiyev Ramal** – *Fiscal Effects of Migration in Slovakia*
11:30 - 12:00	**Valachyová Jana** – *Evaluating the Impact of Consolidation Measures Using the Microsimulation Model TATRASK*	**Eleková Laura** – *On the Process of De-Anchoring of Inflation Expectations*
12:00 - 12:30	**Domonkos Tomáš** – *Costs of Unemployment (Age Structures of the Population)*	**Aleshchenko Andrei** – *On construction of exchange rate policy rule in high inflationary periods*
		Tabunshchiková Shakhlo

12:30 - 13:30 **Lunch**

SMOLENICKÝ ZÁMOK
• KONGRESOVÉ CENTRUM SAV •

Book of Abstracts

Activation of the labor force from marginalized Roma communities

Tomáš Miklošovič*, Daniel Gerbery
*Institute of Economic Research, Slovak Academy of Sciences

The article focuses on employment patterns in marginalised Roma communities in Slovakia. Employment rate in these communities is far below the average for total population, with unemployment rate reaching 46 % in 2021. Roma people face serious barriers that prevent them to take part in the (official) labour market. A significant part of Roma persons report experience with discrimination when looking for a job as well as directly at workplaces. The study brings out analysis what determines labour market participation in marginalised Roma communities, using data from so-called MRK-SILC - a statistical survey that was carried out by the Statistical Office of the Slovak Republic in marginalised Roma communities and that was constructed on the basis of the EU SILC. It was built on the same methodology, using the same concepts and questions. The study compares various geographical settings within the Roma marginalised communities, which differ by an extent of segregation. It shows what kinds of mechanisms lie behind employment of marginalised Roma people and how their role differ in various settings. Moreover, it also pays attention to the fact that being employed is not satisfactory conditions to exit poverty, when living in marginalised communities. Our findings helps to understand a nature of employment of people who live in areas with a high risk of social exclusion and can help to further elaborate policy responses.

This work was supported by projects no. APVV-20-0621 and 09I03-03-V04-00536

Assymetries in pass-through of global oil prices to Slovak consumer prices

Ivan Lichner*, Sergei Kharin*, Martin Hudcovský*
*Institute of Economic Research, Slovak Academy of Sciences

In this research we investigate exposure of the households to the changes of global oil prices through the price transmission mechanisms. The results of the previous studies suggest two main possible channels through which the price pass-through could materialize: direct and indirect. Findings of previous research indicate that asymmetric reactions of local price levels are more frequent. This was confirmed also by our results for analysed commodities and services categories. Results of this research suggest significantly more frequent occurrence of asymmetric reactions both in long- and short-term. Finally, the findings demonstrate the more profound reactions of the local prices on the oil price growth and suggest that local consumer prices are less responsive to decreases in the global oil prices. On the basis of the findings of the paper, several policy recommendations can be made to mitigate the adverse effects on households and the broader economy. Options for

further research in the topic include testing the impacts of additional explanatory variables (e.g. exchange rates, level of production), search for methodological advancements, wider geographical coverage (e.g. V4 countries) and better visual representation of the results.

This work was supported by projects VEGA no. 2/0158/24 and APVV-20-0621

Behind the curve – the application of Taylor rule to post-pandemic inflation dynamics

Maria Siranova*, Gabor David Kiss**
*Institute of Economic Research, Slovak Academy of Sciences, **University of Szeged

Over the recent years, both researchers and policymakers have started to discuss the issue of the central bank being 'behind the curve' (BHC). That is a situation, when the central bank does not respond quickly or sufficiently enough to the changing economic environment and as a result, its overall monetary policy stance becomes either too restrictive or too expansionary (Borio and Levy, 2022). This is all the more important during the periods of sudden inflation surges, such as the last post-pandemic inflation in 2022. We construct long-T-small-N panel model with monthly data for 9 European inflation targeters, eurozone included. We empirically model the monetary policy stance as the difference between the actual monetary policy stance and the optimal monetary policy stance, as predicted by a Taylor-like interest rate rule (Melecky and Melecky, 2010). Such a measure of overall monetary policy stance may be used as an identifier of central bank being 'behind the curve', by calculating the number of months where the official path of the key policy rate differs from the optimal policy stance. This measure is used as a potential predictor of inflation rates in the post-BHC periods.

This work was supported by project no. GV-2022-4-P15-Z2

Cohesion Policy Grants and Corporate Performance: Insights from Slovakia

Tomáš Výrost*, Eva Výrostová
*Institute of Economic Research, Slovak Academy of Sciences

The evaluation of the EU Cohesion policy's effectiveness in the literature is usually macroeconomic in nature. As recent studies highlight the importance of conducting analyses also at the micro-level, this paper estimates the effect of EU Cohesion policy grants on firms' performance in Slovakia. Our firm-level database is based on Slovak firms' financial statements and business activities combined with a dataset of enterprises receiving EU funding from Cohesion policy grants. We

compare two groups of enterprises: those that obtained support from EU funds and a control group of non-participating entities. Our results show that the major differences for participating firms include a significant increase in debt ratio dynamics in the initial years, higher debt levels that are persistent over longer periods, a significant increase in total assets, and a decrease in profitability and rentability. The main takeaway from our analysis, which seems to be quite robust also with respect to the matching procedure and size of the matched samples, is that engaging in EU-funded projects does have consequences, both short-term and persistent longer-term ones, particularly the increased need for external financing. Companies planning or willing to participate in EU-funded projects should critically evaluate their debt capacity and resilience with respect to the pressure the reimbursement schemes would put on their capital structure.

This work was supported by projects no. 09I03-03-V04-00429/2024/VA and VEGA 1/0837/21 and VEGA 1/0182/20

Credit Supply or Demand? The Changing Role of Structural Market Forces in Bank Lending

Patrik Kupkovič
National Bank of Slovakia

The Global Financial Crisis, the European Debt Crisis, and the recent COVID-19 Crisis have repeatedly demonstrated that disruptions in credit markets can have serious macroeconomic consequences. This paper aims to assess the structural drivers of the bank lending market to non-financial corporations using the structural VAR methodology in a small, open and bank-based euro area economy - Slovakia. The results show that credit demand shocks (loans demanded by firms) are at least as important as credit supply shocks (loans supplied by banks) in the lending market, and that this importance changes over the cycle. These findings have important policy implications, as responding to these shocks may require different policy measures. There are three contributions to the literature. First, the new and detailed empirical evidence on the changing role of structural loan demand factors relative to structural credit supply factors. Second, the changing role of credit supply and credit demand shocks on the state of the economy requires different policy prescriptions, which are thoroughly examined. Third, a new country-specific modification of the structural VAR methodology to account for the modeling peculiarities of Slovakia as a new member of the monetary union.

This work was supported by project no. APVV-20-0621

Currency pricing: unconventional monetary instruments and contagions

Gabor David Kiss
University of Szeged

Using a panel vector autorcorrelation (VAR) model, we assess foreign exchange rate pricing in the Central-East European and West Balkan countries. Literature defines contagion as an increased common movement on a stressed market, estimated by dynamic graph centralities. We show that currency pricing are driven not only by the monetary policy but also by inflation and closeness indicator which signs a contagious behavior. We also find evidence that the balance sheet structure difference better describes the monetary policy shocks than the uncovered interest parity (UIP). Such balance sheet shocks had a stabilizing impact while UIP had a controversial effect. Thus, this paper makes a new contribution to the debate of central bank instruments' indirect impact on exchange rates, while highlighting the importance of contagions.

Divergence and Migration

Jaroslav Vokoun
Institute of Economic Research, Slovak Academy of Sciences

The global economy has experienced sustained growth for an extended period. However, development trajectories vary significantly across regions, resulting in a center-periphery relationship. Historically, Europe's socioeconomic transformation since the 16th century led to a substantial divergence, where European nations and the United States emerged as dominant economic and military powers, partly due to colonial policies. Today, challenges include geopolitical shifts, technological advancements, climate change, and demographic trends. The United Nations' "Sustainable Development Goals" prioritize different aspects for countries at varying levels of economic development. It serves as a valuable guide for assessing progress and measuring changes in various development parameters.
Peripheral countries that fail to achieve economic development often exhibit divergence, characterized by poverty, violent conflicts, human rights violations, corruption, etc. Climate change and technological backwardness exacerbate these challenges. Poverty reduction and inequality alleviation necessitate economic growth. A consequence of these negative phenomena is increased emigration. Human security and quality of life indices partially shed light on "South-North" migration flows. Sub-Saharan Africa is an example of a region of poor countries with low economic growth and a significant tendency of the population to emigrate. Large-scale migration presents a challenge to the EU, prompting it to seek solutions through political dialogue with African governments. The EU plays a

pivotal role in global affairs, sharing responsibilities with its partners. There is significant untapped potential for cooperation with peripheral countries.

This work was supported by project no. VEGA 2/0060/23

Efficiency of the processes of preparation and management of EU Cohesion Policy funds in the Slovak Republic

Ľuboš Littera

The effectiveness of the implementation of individual programmes for EU Cohesion policy funds depends on the existence of policies, rules and measures that work together to achieve specific objectives. National institutional frameworks and political traditions that shape policy approaches and structures are key factors for the effective use of EU funds. In the current period, the need for EU Cohesion policy to adopt reform measures to improve effectiveness and to respond to the challenges facing the European Union through a locally focused approach is being highlighted. If countries do not have sufficiently developed institutions at regional and local level, centrally planned interventions may be ineffective and not lead to the desired economic returns. For the practical part of the research, a questionnaire survey will be used with questions focusing on the process of preparation, management, implementation and control of EU Cohesion policy funds in Slovakia. After the evaluation of the questions, the questionnaire survey will form the basis for a possible increase in the efficiency of the use of EU funds at national level. The results of the questionnaire will provide recommendations for improving the efficiency of the use of EU funds, including simplification of processes, better coordination between the levels of state and public administration, prioritisation of investments and support for regional and local participation.

This work was supported by project no. APVV-20-0621

Energy Security and Green Transition in the CEE Region: Implication for Slovakia

Shakhlo Tabunshchikova
Institute of Economic Research, Slovak Academy of Sciences

This dissertation explores the complex interplay between energy security needs and environmental sustainability goals in the Central and Eastern European region, with a specific focus on Slovakia. The study aims to analyse how immediate energy security demands, particularly regarding natural gas supplies, intersects with long term environmental objectives such as carbon emissions reduction and the transition to renewable energy sources. By examining policy frameworks, investment trends, and strategic responses within the region, this research seeks

to uncover how CEE countries, with a particular emphasis on Slovakia, address the tension between short-term energy needs and sustainable development goals.
The research will investigate the impact of external dependencies, regional geopolitical dynamics, and EU environmental commitments on Slovakia's energy strategies. The study aims to contribute to a better understanding of the challenges and opportunities associated with aligning energy policy with environmental imperatives in Slovakia and the broader CEE region.

Energy Transition Factors Shaping Differentiated EU Policy Implementation

Ihor Vakulenko
Institute of Economic Research, Slovak Academy of Sciences

This study analyzes the influence of key energy transition factors on the formation and implementation of energy policies in European Union countries. Based on panel regression analysis of data from 24 EU countries for 2007-2021, we assess the impact of CO_2 emissions, primary energy consumption, and the Human Development Index (HDI) on the share of alternative and nuclear energy in total energy consumption. The results reveal complex relationships between these factors, which vary depending on the country's development level and the current state of renewable energy sources (RES) implementation.
Based on the findings, recommendations are proposed for adapting EU energy policy, including developing differentiated strategies, strengthening international cooperation, and integrating energy policy with broader sustainable development strategies. These conclusions emphasize the need for flexible, context-specific approaches to accelerating the energy transition and achieving climate neutrality goals.

This work was supported by projects no. 945478 - SASPRO 2 and VEGA 2/0003/23

Evaluating the Impact of Consolidation Measures Using the Microsimulation Model TATRASK

Jana Valachyová*, Zuzana Siebertová, Norbert Švarda, Alexandra Putzová, Matúš Senaj*
*Council for Budget Responsibility

In this conference contribution, we present our insights into assessing the impact of recently implemented consolidation measures using the newly developed microsimulation model, TATRASK. Developed by the Secretariat of the Council for Budget Responsibility, TATRASK is a cutting-edge tool for simulating tax-benefit

policies. It draws on comprehensive administrative datasets collected by governmental bodies, enabling accurate modeling of personal income tax, social and health insurance contributions, and social transfers. The current version of the model, based on 2022 data, provides a robust foundation for evaluating fiscal policy interventions. Our analysis focuses on the distributional impacts of the consolidation measures, examining their effects on households across different income levels and family types. By offering detailed insights into how various groups are affected, our findings contribute to a deeper understanding of the social and economic consequences of fiscal policy changes.

Financial Costs of Unemployment

Tomáš Domonkos*, Miroslava Jánošová*
*Institute of Economic Research, Slovak Academy of Sciences

The study examines the economic and non-pecuniary costs of unemployment with a particular focus on Slovakia. The economic costs are divided into direct costs, including the loss of public revenue due to unpaid taxes, social and health contributions, as well as expenditure on unemployment benefits, benefits in kind and health insurance. Indirect costs are also taken into account, i.e. the reduction in indirect taxes such as VAT resulting from the reduced purchasing power of the unemployed. The analysis estimates that the monthly cost per unemployed person in Slovakia is between €573 and €903 and varies depending on the level of education, with the highest tax burden observed for people aged 30 to 49. The non-pecuniary costs are assessed using the life satisfaction approach, using EU-SILC data from 2013, 2018 and 2021. Using ordinal probit models, the study shows a pronounced decline in subjective well-being due to unemployment, with long-term unemployment having a particularly strong negative impact.
The study highlights the double burden of unemployment and underlines the critical importance of implementing targeted active labor market policies (ALMPs). Such measures, including retraining programs and employment incentives, are important not only to reduce public costs, but also to address the deep-rooted problems of well-being among the unemployed, particularly the long-term unemployed.

This work was supported by projects no. APVV-23-0125 and VEGA 1/0668/22

Financial Deepening and Carbon Emissions Intensity: Evidence from a Global Sample of Countries

Boris Fisera*, Martin Melecky, Dorothe Singer
*Institute of Economic Research, Slovak Academy of Sciences

Financial deepening contributes to economic development, but its effect on the carbon intensity of production is an open empirical question. This paper thus studies the impact of financial deepening—an increased provision of bank credit as a share of gross domestic product—on carbon dioxide emissions per dollar of gross domestic product in a global sample of 125 economies from 1990 to 2019. Using a local projections approach, the paper finds that, on average, financial deepening leads to a relative increase in carbon dioxide emissions intensity, indicating that financial institutions finance relatively more carbon-intensive investments and consumption. However, a better institutional environment mitigates this adverse effect of financial deepening: conditional local projections reveal that in countries with more environmental regulations, a stronger rule of law, and a financial system that is relatively more market- than bank-based, financial deepening does not lead to higher carbon dioxide emissions intensity. Specifically, the results show that countries with an initially lower carbon intensity of production can mitigate the average adverse effect of financial deepening on carbon dioxide emissions by improving their general institutional environment proxied by adherence to the rule of law. By contrast, countries with an initially higher carbon intensity of production are better off focusing on environmental regulations to mitigate the unconditional adverse effect of financial deepening on carbon dioxide emissions intensity.

This work was supported by projects no. VEGA 2/0165/24

Finding a way out: balancing consumer interests and carbon neutrality priorities

Daneš Brzica*, Jaroslav Vokoun*
*Institute of Economic Research, Slovak Academy of Sciences

Countries are committed to reducing their national carbon footprint. The Slovak/European approach to carbon neutrality must be balanced reaching a compromise between ambitious carbon neutrality priorities and legitimate consumer claims and interests. The conflicting nature of interests is reflected in important areas such as housing, individual transport, housing and the environment. Sustainable approach to reaching ambitious environmental goals must be deeply embedded into the solid political and economic framework.
One of the characteristic features of the European transformation is the process of continuous expansion of conceptual proposals and the resulting goals and (binding) tasks for the member states. Recently, however, in addition to the growing awareness of citizens in environmental issues, there has also been counter-pressure logically resulting from the overly dynamic pace of change and the population's fear of lowering the user standard in the context of the cost-benefit scale.

The presentation/paper/ aims to analyze and present some of the most challenging issues affecting the successful delivery of the required intentions (and global goals) to reduce carbon emissions.

This work was supported by projects no. VEGA No. 2/0060/23

Fiscal Effects of Migration in Slovakia

Ramal Verdiyev
Faculty of Social and Economic Sciences

Slovakia, traditionally a country with a significant departure of labor force, has recently experienced a shift due to economic expansion and a growing demand for a qualified workforce. Once not a prime destination for foreign labor, Slovakia saw a notable increase in immigration, with the number of foreign workers rising from 88,000 in 2016 to 141,000 in 2019. This dissertation aims to quantify the fiscal effects of this immigration trend. The literature on this topic follows two main approaches: a static view, which analyzes fiscal impacts for a particular year, and a dynamic view, which assesses long-term effects on public finances. The dynamic approach is further divided into two streams. The first, grounded in generational accounting, uses a partial equilibrium model, while the second applies general equilibrium models. By addressing the gap in quantitative economic research on migration in Slovakia, this study intends to offer valuable insights into the fiscal impacts of immigration on the country's economy.

Foreign Trade Returning to 'Normal'?

Ivana Šikulová
Institute of Economic Research, Slovak Academy of Sciences

The paper discusses the latest developments in Slovakia's foreign trade and the factors driving these changes. After a significant drop in the foreign trade balance recorded in 2022, the balance returned to positive territory the following year, even reaching its highest level since 2014. Several factors contributed to this reversal or return to "normal". The large surplus in the foreign trade balance was primarily driven by a much lower deficit in the Mineral Fuels category year-on-year, as a result of falling prices of imported energy commodities, coupled with a higher surplus in the Machinery and Transport Equipment category. However, the decline in imports was not solely due to changes in the prices of imported energy commodities but also largely due to a drop in domestic demand. Overall, developments across SITC categories were mixed. Half of the categories showed year-on-year growth, while the other half experienced year-on-year declines in exports, and the same pattern was observed in imports. In 2023, the value of

goods exported in the most-traded Machinery and Transport Equipment category recorded the highest year-on-year increase within the last decade, significantly raising its share of total exports. Positive monthly trade balances have also been recorded in 2024 so far. However, since March, they have been lower year-on-year, largely due to weaker export dynamics, particularly in the automobile sector, reflecting reduced demand from Slovakia's key trading partners.

This work was supported by project no. VEGA 2/0042/23

How important is sentiment to lending?

Štefan Lyócsa*, Zuzana Košťálová*, Boris Fišera*
*Institute of Economic Research, Slovak Academy of Sciences

We explore the role of consumer sentiment in driving the future levels of new household loans. In contrast with previous research, we argue that consumers' perception of past, present and future economic conditions should be treated separately. Moreover, we identify shocks to sentiment using machine learning techniques; penalized regressions, complete subset regressions and random forest. More specifically, we use the machine learning techniques to forecast the expected component of sentiment and we take the forecast errors as the unexpected (shock) component of sentiment. Next, we use the local projections approach to study the effect of shocks to consumers' sentiment with regards to past, present and future economic conditions on bank lending. Within this framework, we also investigate the role of macroprudential and monetary policies. Our empirical results are based on data for a group of Central European countries that experienced considerable expansion in bank lending over the past decade; an environment which we find suitable for identifying the contribution of sentiment. Moreover, the consequences of the pandemic and the post-pandemic inflation surge are also captured within our data.

This work was supported by project no. APVV-22-0472

Illicit Financial Flows, Shadow Banking, and Financial Stability in Select EU Countries

Adamu Braimah Abille
Faculty of Social and Economic Sciences

The 2007-2008 Global Financial Crisis ignited debates about the role of shadow banks in the financial system. While some studies have examined the effects of non-bank financial institutions on financial sector stability, none considered the role of illicit financial flows (IFFs) in this outcome. Using unbalanced panel data

from 2000 to 2021 for about 25 EU countries in a dynamic system-GMM framework, we observed that (i) shadow banking negatively affects the Z-score measure of financial stability and is robust to the inclusion of country-specific macroeconomic and financial sector variables, (ii) net trade misinvoicing and the residual capital flight negatively and significantly affect financial stability, and the growth of the shadow banking system could heighten these effects. In light of these findings and Global Financial Integrity's observation about the prominence of trade misinvoicing, we call regulators' and policymakers' attention to the implication of IFFs, shadow banking, and their interplay for EU financial sector stability.

This work was supported by projects no. APVV-20-0499

New Family Policy on the Block: The Effect of a Pregnancy Benefit on Births

Sofia Trommlerova
Faculty of Natural Sciences of the Comenius University

I evaluate the effects of a new type of family policy – a prenatal pregnancy benefit – on women's fertility behavior. The pregnancy benefit was introduced in Slovakia in 2021. It is paid to working women and students during two trimesters of their pregnancy on top of any other income. I examine the effects of this benefit on births using high-quality, population-wide, administrative microdata and combining a difference-in-differences approach with a regression discontinuity in time design. After the introduction of the benefit, births increased by roughly 4% but only in the very short run – during the first 3 months. The contemporaneous second wave of the COVID-19 pandemic seems to have negated any positive birth effects beyond 3 months. The effect is driven by low and middle-income women. Overall, 402 additional children were born, each costing at least €311,000. To my knowledge, this is the first evaluation of a novel, targeted prenatal cash transfer on fertility, as opposed to evaluations of traditional postnatal policies.

This work was supported by projects no. 101064385

Non-bank Financial Intermediaries and Illicit Financial Flows

Maria Siranova*, Martin Hodula, Adamu Braimah Abille, Ngoc Anh Ngo**
*Institute of Economic Research, Slovak Academy of Sciences, **Faculty of Social and Economic Sciences

This paper investigates the role of non-bank financial intermediaries (NBFIs), commonly referred to as shadow banks, in facilitating illicit financial flows (IFFs). To explore this relationship, we build a panel dataset of EU countries covering the

period from 2011 to 2021 for which we gather data on size of the shadow banking sector. We differentiate between inflows and outflows of illicit capital measured as the change in 'abnormal' FDI assets and liabilities. Our findings reveal a positive association between the expansion of the NBFI sector and the growth of illicit financial activities, with the link being significantly stronger in countries experiencing worsening of their regulatory framework. In contrast, the growth of traditional banking is negatively associated with IFFs. We argue that the opaque and less regulated nature of shadow banking makes it particularly susceptible to illicit activities, fostering both outflows and inflows of illicit funds through mechanisms such as regulatory arbitrage, money laundering or tax optimization.

This work was supported by projects no. APVV-20-0499

On construction of exchange rate policy rule in high inflationary periods

Andrei Aleshchenko
Institute of Economic Research, Slovak Academy of Sciences

Itskhoki and Mukhin (2022) theorized that the combination of standard monetary policy through adjustments in the key interest rate and a complementary exchange rate policy is essential for achieving an efficient allocation of resources in open economies, especially when financial markets are segmented. This insight underlines the importance of considering both interest rate and exchange rate strategies in tandem. In such economies, where financial market imperfections are present, a multifaceted policy approach can help mitigate distortions, particularly those arising from external shocks or exchange rate fluctuations. The dissertation aims to explore how an exchange rate rule should be structured under various scenarios involving different degrees of exchange rate regime flexibility, levels of capital openness, and the use of the key interest rate as the standard monetary policy instrument (Khatat et al., 2020). In addition, the study will address potential nonlinearities that may arise during high-inflation periods, which can complicate the policy framework. Furthermore, uncertainty in exchange rate policy decision-making will also be a key focus, as it often exacerbates volatility in both the financial and real sectors of the economy. This research will contribute to a better understanding of how policymakers can navigate these complexities while designing effective exchange rate rules, especially in environments characterized by inflationary pressures and market segmentation.

On the Process of De-Anchoring of Inflation Expectations

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Under the influence of pandemic-induced inflation, the question of whether inflation expectations may become de-anchored has sparked significant debate. While the process of anchoring inflation expectations through heightened monetary policy credibility and transparency has been extensively explored in the existing literature, the reverse process—de-anchoring within an inflation-targeting framework—remains under-researched. The aim of this dissertation is to address this gap by providing a comprehensive historical narrative of episodes where inflation expectations have de-anchored, drawing from both advanced and emerging economies. Additionally, it seeks to investigate the theoretical underpinnings of how such a de-anchoring process could be modeled, with a particular focus on identifying structural shifts or shocks that may trigger a departure from anchored expectations. Moreover, the dissertation will conduct an empirical analysis to determine the key drivers that increase the likelihood of de-anchoring, including factors such as diminishing central bank credibility, external shocks, and policy missteps, while also considering the role of global economic interdependencies and public trust in monetary institutions.

Pre- and Post-Pandemic State of EU Convergence: Human Capital and Labour Market Context

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The paper serves as an introductory theoretical and methodological contribution to a research project focused on monitoring convergence in the EU, with particular emphasis on the impact of demographic trends and the pandemic crisis.
Given the heterogeneity of the integration grouping, we identified clusters of countries that share relatively similar socio-economic conditions and/or trends. Results for individual members or clusters can be compared to the EU average or benchmark country, which in our case is Germany. Convergence trends can be monitored both within individual clusters and across the integration bloc. To differentiate the impact of the pandemic crisis, we selected two time periods for trend comparisons: 2010 to 2019 and 2020 to 2023. For indicators where the most recent data are unavailable, the second period will alternatively be 2010-to the most recently available year.
Regarding the choice of methods to express convergence trends, a straightforward approach involves calculating indices relative to the benchmark country (where the indicator value for Germany = 100). For more illustrative graphical representation, beta-convergence can be used, while sigma-convergence is well-suited for a simple depiction of the convergence trend over time.
Since our segment of the project focuses on human capital and labour market, our selection of monitored indicators aligns with this orientation. Chosen indicators can be categorized into five groups. Performance indicators include labour productivity

and the number of hours worked per employee; the LM situation is characterised by the employment/unemployment rate (including long-term unemployment) and the participation rate within selected population cohorts; demographic transition is expressed through standard ageing indicators; the quality of human capital is approximated by the share of young people with tertiary education; and finally, income situation is represented by household disposable income per capita in PPP terms.

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Quantifying the Fiscal Impact of Energy Price Caps on Inflation Control in Slovakia

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This paper investigates the financial implications of Slovakia's government intervention in regulating household electricity and gas prices during the 2021–2023 energy crisis. Slovakia uniquely maintained full energy price regulation for households, allowing an assessment of how much it cost the state to mitigate consumer inflation compared to a scenario without regulatory measures. By analyzing the regulatory framework and comparing pre- and post-intervention periods, the study estimates that reducing overall inflation by one percentage point through energy price caps cost approximately 156.6 million euros. Additionally, the paper explores the impact of these measures on the national budget deficit, revealing that more than a quarter of the high public deficit in 2023 can be attributed to capping household energy prices. The analysis contributes to the broader discourse on the efficacy of blanket energy subsidies, suggesting that while such policies effectively controlled inflation, they imposed significant costs on public finances, potentially distorting long-term economic stability.

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Regional Trade Agreements and Intra-African Trade: Do Colonial Ties Matter?

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Most African countries rarely trade with one another, with intra-African exports estimated at only about 14 % in 2022. Some studies attribute this to colonial infrastructure, which connects these countries more to their colonizers than to each other. African nations have entered various regional economic agreements such as ECOWAS, COMESA, and SADC to counter this. While the impacts of these agreements have been widely studied, the moderating influence of colonial ties on intra-African trade remains under-explored. Using bilateral trade data from 1948 to 2021 for global and African countries within a structural gravity framework and employing a Poisson pseudo-maximum likelihood estimator (PPML) with multi-way fixed effects, we observe the following: (i) the effect of FTA for colonies and non-colonies on trade is positive and much higher for the colonies in the global sample, and (ii) the interaction effect of regional trade agreements and a common colonizer is significantly negative for African countries.

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The price of housing in Slovakia and its socio-spatial consequences

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Slovakia's housing market experienced a pronounced price escalation during the COVID-19 pandemic. Transaction prices surged by 16.6% while offering prices rose by 25.5% from 2021 to 2022. This upward trend was driven by shifts in European Central Bank interest rates, resulting in heightened property purchases and increased household indebtedness. Despite income growth and government support in 2023, elevated interest rates tempered lending activities. The rental market also witnessed price hikes due to high demand and limited supply, exacerbated by migration patterns. Slovakia's rental housing sector remains underdeveloped, constituting only 6.4% of the housing stock, one of the lowest rates in the EU. Private landlords predominantly control the sector despite governmental initiatives and struggle with affordability issues. Homeownership remains the preferred choice, driven by perceived long-term financial benefits despite escalating ownership costs. Vacant investment properties were believed to exacerbate housing shortages, particularly in urban areas where affordability is more constrained, although the preliminary results do not conclusively support this claim. Regional disparities in housing affordability are evident, with (socially deprived) southern and eastern Slovakia offering more affordable options than urbanized western regions. This study employs data sourced from property prices and rents via an insertion portal (nehnutelnosti.sk and reality.sk), utilizing spatial interpolation methods to underscore significant spatial variability in housing affordability factors. Key determinants include construction activity, educational attainment, and migration patterns. The findings underscore the need for targeted, region-specific policies to address housing affordability concerns across Slovakia effectively.

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Who was protected by capping energy prices from the risk of energy poverty

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We apply one of many definitions of energy poverty to data on the expenditure of Slovak households. We show that in the common year, energy poverty overlaps with income poverty and affects the poorest households in the first income decile. We also show that if households were not protected from huge jumps in energy prices in 2023, the energy poverty indicator would increase from 6% to 13% and a significant proportion of households in second to fourth income decile would also have a problem with access to energy. The generous price cap on energy prices, adopted in 2023, has reduced the energy poverty rate to 5% (i.e. lower than 6 % in 2022).
In both years 2022 and 2023, mainly young households (in which the head of households are aged between 18 and 30 years) were exposed to energy poverty. While not capping the rise in energy prices, the biggest risk of energy poverty would be in groups older than 62 years.
We also show that the untargeted price cap on energy prices was a very costly measure, with a price tag of €2.6 billion, in terms of protecting the most vulnerable households. Lower energy prices for only a third of the lowest-income households would be enough to keep the indicator of energy poverty at the same level as in 2022. The cost of such a measure would be around €0.7 billion, i.e. at 27% of the actual cost. And therefore, the aid would be cheaper by up to €1.9 billion.

Zombie firms in Slovakia: the role of corporate governance, foreign ownership and CEO gender

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Existing research provides evidence on negative effects on aggregate productivity of the so-called zombie firms, yet, a unified definition of what a zombie firm actually is and how it should manifest is still missing. In this paper we utilized more than 800 000 firm-year observations to shed some light on a zombie firm presence in Slovakia. We apply three different zombie identification procedures and provide an evidence that (i) there are significant differences in investments, economic efficiency, and effective tax rates among zombie firms and their non-zombie counterparts; (ii) foreign ownership and the number of directors are both factors lowering the probability of firm being a zombie in almost all industry groups; (iii) woman as a CEO and having the owner who serves as CEO lowers the probability of having negative equity. Other results vary across industries and zombie identification procedures. This implies that the term "zombie firm" shouldn't be

tossed around irresponsibly, as the selection procedure manifests in the obtained empirical results rather dramatically and has a potential to draw erroneous conclusions.

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