Latvijas Banka competition of Student Scientific Research Papers

Ieva Opmane
Senior Economist
Monetary Policy Department

LATVIJAS BANKA
EIROSISTĒMA

Competition

- This year, the competition will be held 23rd time in a row!

- Papers can be submitted in English or Latvian.

- Open for students from the Baltic states or those studying in the Baltic states.

- The quality & the quantity of work should be comparable to at least a bachelor's thesis.

- Papers should be submitted by the end of May (dates will follow shortly).

- The topic should be relevant to the Baltic or Euro area economies.

www.macroeconomics.lv

www.makroekonomika.lv

Why should you consider this competition?

Review, discussions, networking

Paper will be written anyway, why not to try?

Prizes up to 1500 euro
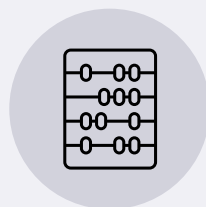
What is a good paper for this competition?

You should be interested in the topic!

The topic should be **innovative** or highly relevant for current research.

The topic should focus on **the Baltic states or the Euro area.**

The paper **should contribute something** to the existing literature and include **quantitative research.**

Proposed topics available on web page (not limited to those)

For example:
- assessment of the **natural rate of interest** in the euro area and proposals for developing monetary policy;
- role of **unconventional monetary policy** measures in the phase of monetary policy tightening;
- assessment of the **forward guidance** effectiveness and its role in developing monetary policy;
- **inflation determinants**, the role of the demand and supply shocks;
- **impact of** Russia's aggression and **war in Ukraine** on the economy of the Baltic States;
- **fiscal policy** in the European Union and proposals for improvement;
- assessment of **energy crisis** support measures in the European countries;
- assessment of the macroeconomic and macrofinancial impact of the risks associated with **climate change**;
- **export competitiveness** of the Baltic States;
- **financial stability** risks in the Baltic States and instruments used to limit those risks;
- potential impact of central bank **digital currencies** on the future economy in Latvia and globally;
- the structure of the **banking system** in the Baltic States and its impact on the development of the payment services and the related services.

Research

The paper sould include **quantitative research**
- Percentage calculations is not enough,
- correlation analysis is not enough,
- simple regression is not enough,
- We are looking for deep econometric analysis, including checking the stability of results across different model settings.

We don't care if the paper is 40 or 100 pages long (the results are what matter).

The literature review should be relevant (e.g., economic research papers, not basic economic principles or topic evolution since Ancient Rome).

What you write should be based on facts and research results, not assumptions or widely known information.

We expect the paper to be free of spelling mistakes (this won't be a reason for rejection, but it may indicate that the paper was not carefully written and reviewed).

Examples of data used in competition papers:

- Microdata (e.g. LFS)
- Trade databases
- ORBIS enterprise data
- Web scraped data
- Surveys (be careful with those...)

Tools:

- You can use any tool you're comfortable with.
- Better for research is programming tools (worth learning!) like R, Python, also STATA
- You can use EViews, not sure about SPSS, Excel, or other tools.

Use of ChatGPT and similar programs:
+ can be used to improve language, assist with coding etc. It would be good if you include note on how these tools were used.
- It's not nice if ChatGPT is used to create full contents (authors should be competent to do it by themselves)

Some additional tips

- No plagiarism (obviously...)

- You don't need to keep everything you've written. Write freely, but cut out weak parts. The paper doesn't need to be identical to what you submit in your university (it doesn't even need to have been defended yet)

- Avoid duplicating information in tables, graphs, and text.

- Move less important details to appendix (or cut them out altogether).

- Don't hesitate to have others review your work. If possible, discuss your topic and research with others, seek reviews, ask someone knowledgeable in the field for feedback, and get multiple reviews!

- There are student research conferences, good idea to prepare your work earlier, get a review and make the research better. (Conferences organized by LU&RTU, RSU, also some international conferences)

Some examples of awarded papers

all are published in
www.macroeconomics.lv
www.makroekonomika.lv

Igors Tatarinovs, Reinis Fals (SSE Riga)

Phillips Curve in the Eurozone: Forecasting Inflation and the Output Gap Using Explainable Neural Networks

Paper introduces the use of Hemisphere Neural Networks for forecasting the inflation and output gap in the eurozone withing the macroeconomic model of Philips Curve.
Authors show that all tested HNN models surpass the benchmark linear regression and univariate ARIMA models in predictive accuracy for inflation forecasting and help with the interpretation of results. The results for predicting output gap showed models' ability to track general economic trends.

+ new methodology (created in 2022, applied to the US, not yet to EA)
+ innovative
+ relevant topic
+ use of extensive programming and modeling but not an IT paper

1st place 2024

Luīze Mestere, Anastasija Sergeļa (SSE Riga)

Navigating Climate Risks: Assessing Cross-Border Spillovers of African Climate Shocks on European Union through International Trade.

Paper estimate the spillover effects of climate shocks in Africa on the European Union countries by examining changes in trade across different product categories.
Data from 1988, data about floods, droughts, storms... Use of dif-in-dif model, look at different countries and different product categories.

+ topic very up to date
+ use of two huge databases (climate shock database and COMEXT).
+ careful econometric modeling
+ gives policy insights about consequences of current and possible climate shocks

2nd place 2024

Ieva Vitaitytė (ISM University of Management and Economics)
Financial Literacy Impact on Investment Decisions in Lithuania

The paper investigates how households' financial literacy drives decisions to invest their savings and how it affects the choice of an investment instrument.

The study employs data from the Survey of Households conducted by the Central Bank of Lithuania and carries out different assessments of both the financial literacy of households and its impact on the decision to invest. It is concluded that financial literacy plays an important role in deciding to invest in stocks.

At the same time, it has been found that a significant proportion of Lithuanian households do not invest their savings and that financial literacy has no impact on investing in real estate assets in Lithuania.

+ good example of survey data use. Survey of financial literacy by Bank of Lithuania (cross-sectional data from 1000 households)
+ research of investment decisions (not too many papers about this topic)
+ Logit models with different specifications and testing model quality

2nd place, 2022

Ilze Verpakovska (University of Latvia)

Factors Affecting the Risk of Long-term Unemployment in the Latgale Region

Paper studies long-term unemployment focusing on the Latgale region, exploring factors behind it. Higher unemployment for male, nationality other than Latvian, lower education, aged 50-64.
It is also concluded that these factors affect the risk of long-term unemployment not only in Latgale, but also in other regions. The author finds that only the Riga and Pieriga regions have a statistically significantly lower risk of long-term unemployment than the Latgale region; yet the risk of overall unemployment in all other regions is significantly lower than in the Latgale region.

+ topic is not new, but always important in the situation of Latvia
+ use of Labour Force Survey microdata 2007-2021 (29+ thousand households each year)
+ well done basic econometric reasearch

13

Honorable mention, 2024

Ēriks Kasparenoks, Dana Supe (SSE Riga)
A Subtle Invitation to Bargain: Online Vacancy Data-based Inquiry into the Wage Setting Policies of Latvian Employers

Using a novel online job vacancy dataset, authors examine the extent of wage negotiations in the Latvian labor market from the employer's perspective. Authors establish a connection between the type of wage advertised and a firm's willingness to engage in wage bargaining.

Authors employ logit and tobit models and find that a company is more likely to negotiate an employee's wage when the job advertised needs higher qualification. Wage bargaining is also more prevalent, and firms are more open to wage negotiations in industries where employee productivity is heterogenous and workers are scarce.

This research adds to wage negotiation research as well as aids firms and employees in understanding wage bargaining dynamics.

+ nice example of webscrapping (since 2018 wages for vacancies in LV posted)
+ authors create dataset from different resources (cv.lv, visidarbi.lv, NVA etc.), clasify job titles and by using Orbis dataset clasify firms' industries (more than 8 thousand usable entries)

14

2nd place, 2021

Evita Prindule (Latvia University of Life Sciences and Technologies)

[Analysis of the Economic and Financial Performance of and an Assessment of the Risk Management Processes at Milk Processing Companies](#)

The paper focuses on an important part of Latvia's economy – the dairy sector. It analyses financial performance of companies in the dairy sector and assesses the risk management process. Conclusions are based on expert interviews and a consumer survey.

The author pays close attention to institutional and legal aspects of the dairy sector and analyses its economic performance, later taking deeper insight into economic and financial performance indicators in two milk processing companies in Latvia.

To enable the industry to develop, the author suggests favourable taxation mechanisms, regular financial analysis and emphasizes the need for development of e-commerce and new technological solutions.

+ an example of industry analysis; even though not all conclusions would be in line with the opinion of economists of Latvijas Banka, research was quite deep
+ industry data analysis and interviews

2nd place, 2022

Artis Veldre, Elvis Ancāns (SSE Riga)
Family versus Non-Family Enterprises – Evidence from Latvia

This paper analyses family firms in Latvia and compares their performance to non-family firms. The authors mainly focus on large Latvian firms. The results show that family firms constitute more than 30% of all the firms, and they are associated with significantly higher performance than non-family firms.

However, the hypothesis that the more family is involved in the management, the greater the profitability, was rejected. The authors also conducted interviews during a discussion about the impact of family-related events on business performance. In the authors' opinion, the main reason why family firms perform better than non-family firms is the differences in remuneration and incentives of the management.

+ one of the first student papers doing research about family firms (many to follow...)
+ use ORBIS database and do further calculations with it, almost 5 thousand companies over 9 year period;
+ econometric modelling
+ do additional 7 interviews with firms to better understand the results.

2nd place, 2022

Hope to meet you in Latvijas Banka!