



**System Dynamics Group
University of Bergen**



**National University
of Kyiv-Mohyla Academy,
Department of Finance,
Center of Financial and
Economic Research**



**The Ivan Franko
National University of
Lviv**

**4th Annual Research Conference
System Dynamics in Economic and Financial Models**

AGENDA

**Monday, December 10, 2021
Zoom Meeting**

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| 10.00 to 10.15 | Welcome Remarks |
| 10.15 to 12.30 | Session 1 <i>Dynamics of Socio-economic System: A System Dynamics Approach</i> |
| | Coffee Break |
| 12.45 to 15.15 | Session 2 <i>System Dynamics Modeling Framework for the Financial System of Ukraine</i> |
| | Coffee Break |
| 15.30 to 16.50 | Session 3 <i>System Dynamics Modeling of Labor Market and Shadow Economy Issues</i> |
| 16.50 to 17.00 | Closing Remarks |

4th Annual Research Conference
System Dynamics in Economic and Financial Models

WELCOME REMARKS

I. David Wheat, PhD, MPP, Professor Emeritus, University of Bergen, Norway

Session 1

Dynamics of Socio-economic System: A System Dynamics Approach

Verbovskyy Danylo, Master student, LNU

THE IMPORTANCE OF QUARANTINE IN UKRAINE DURING COVID-19 PANDEMIC

Ilkiv Volodymyr, Master students, NaUKMA

MODELING OF COVID CASES WITH SYSTEM DYNAMICS

Vasyl Gorbachuk, Professor, NaUKMA, Lyudmyla Batih, Denys Symonov, PhD students,
V.M.Glushkov Institute of Cybernetics of the NAS of Ukraine

NEW ENERGY AND ECONOMIC CHANGE

Juliet Abakumova, Associate professor, Belarusian state university

ECONOMIC GROWTH AND GLOBALISATION: A SYSTEM DYNAMICS APPROACH

Viktoriiia Surovets, Master student, NaUKMA

IMPACTS OF FOOD SYSTEM INITIATIVES ON FARMING BUSINESS RESILIENCE

Viktoriiia Nazarenko, Karyna Lehka, Master students, NaUKMA

SYSTEM DYNAMIC MODELING FOR FOOD SECURITY IN DEVELOPING COUNTRY

Maryna Paletska, Diana Hutsul, Master students, LNU

SYSTEM DYNAMICS MODEL FOR AGRICULTURE SECTOR IN DONETSK AND LUHANSK REGION

Yaroslav Pyskun, Master student, NaUKMA, Maryna Haiovych, 4th year student, NaUKMA

SYSTEM DYNAMICS MODELING OF THE AVERAGE LIFE EXPECTANCY

Session 2

System Dynamics Modeling Framework for the Financial System of Ukraine

Andrii Kaminskyi, Professor of Kyiv National University of Taras Shevchenko, Oleksii Petrovskyi,
PhD student, NaUKMA

SD APPROACH TO CONSUMER LENDING MODELLING: BASIC POINTS

Svitlana Hlushchenko, Associate professor, NaUKMA, Sergiy Ivakhnenkov, Professor, NaUKMA
APPLICATION OF SYSTEM DYNAMICS METHODS IN MODELING AND FORECASTING THE VOLUME OF BANK LENDING

Oleksandr Mertens, Professor, NaUKMA

MODELING OF THE FINANCIAL MARKET BEHAVIOUR

Anton Lytvyn, Senior Lecturer, NaUKMA

SYSTEM DYNAMICS APPROACH TO INSURANCE COMPANIES

Mykhailo Marusiak, Master student, LNU

SYSTEM DYNAMICS MODELING OF THE RELATIONSHIP BETWEEN MARKETING AND NET PROFIT

Mariia Babii, Anastasiia Demchenko, Master student, LNU

SYSTEM DYNAMIC MODEL OF WORKER BURNOUT AND EFFICIENCY

Anastasiia Zenchenko, 4th year student, NaUKMA, Isabel Feucht, Master student, Ulm University

THE EXPLANATORY SYSTEM DYNAMICS MODEL FOR ON-GOING RESEARCH OF FINANCIAL STABILITY OF LOCAL BUDGETS IN UKRAINE

Oleksandra Orlovska, Olena Mordas, Master students, NaUKMA

SYSTEM DYNAMICS APPROACH IN PROJECT MANAGEMENT

Yevheniia Novotarska, Vladyslav Maksymiuk, 4th year students, NaUKMA

HOW THE EXCISE TAX INFLUENCES THE SMOKING PREVALENCE IN UKRAINE

Session 3

System Dynamics Modeling of Labor Market and Shadow Economy Issues

Mariia Tomilina Master student, NaUKMA, Olena Primierova, Associate professor, NaUKMA

MODELING THE IMPACT OF LABOR PRODUCTIVITY AND PRODUCTIVITY OF FIXED ASSETS ON RETURN ON ASSETS AND EQUITY

Mariia Nasachenko, Nataliia Panchenko PhD students, NaUKMA

A DYNAMIC ANALYSIS OF THE INTERACTION BETWEEN SHADOW AND REAL SECTORS OF ECONOMY

Valeriia Tishakova, Mykola Borodii, 4th year students, NaUKMA

WHICH TOOLS ARE BETTER TO TACKLE WITH THE UNDECLARED WORK IN UKRAINE: DIRECT OR INDIRECT?

Tetiana Donkoglova, PhD student, NaUKMA

MODELING LABOR PRODUCTIVITY IN REAL ESTATE CONSTRUCTION PROJECTS

Maksym Popii, Master of International Business, Hult International Business School

LABOUR MARKET RESEARCH WITH SYSTEM DYNAMICS

CLOSING REMARKS

Iryna Lukianenko, PhD, Doctor of science, Professor, Head of Finance Department, NaUKMA

Marianna Oliskevych, PhD, Doctor of science, Professor of the Department of Mathematical Economics and Econometrics, LNU