

Michał Lewandowski

Department of Quantitative Economics
Warsaw School of Economics
ul. Al. Niepodległości 128
02-554 Warszawa, Poland Building C, room 6/3
Phone: (22) 564 9326 Email: michal.lewandowski@sgh.waw.pl
URL: <http://www.mlewandowski.waw.pl>

Born: April 29, 1980—Bydgoszcz, Poland
Nationality: Polish

Current position

Adjunct Professor, Department of Quantitative Economics, Warsaw School of Economics

Research area

Decision-making under risk, uncertainty and time delay; axiomatic preference foundations, combining descriptive and normative perspective

Behavioral game theory; design of mobile experiments, explaining departures from the rational model

Appointments held

2010–2022	Warsaw School of Economics, Decision Support and Analysis Division, Adjunct Professor
2020– 2021	Warsaw School of Economics, Department of Quantitative Economics, Statistics Poland, Department of Finance and Macroeconomic Studies, Consultant

Education

2004	MA in Economics, Warsaw School of Economics, Warsaw
2004	MA in Economics (double-diploma), Johannes Gutenberg University, Mainz
2010	PhD in Economics, European University Institute, Florence

Grants

2022–now	PRINCIPAL INVESTIGATOR the National Science Centre OPUS 21 grant: <i>Measuring uncertainty and testing reference point rules using indifference prices: axiomatic and experimental</i>
----------	----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

- approaches (Pomiar niepewności oraz testowanie reguł ustalania punktów odniesienia przy wykorzystaniu cen obojętności: podejście aksjomatyczne i eksperymentalne)*, 2021/41/B/HS4/03429, budget: PLN 1 023 946.
- 2020–2022 CO-INVESTIGATOR the National Science Centre OPUS 18 grant: *On behavioral discounting and Markov equilibria in stochastic decision problems (O dyskontowaniu behawioralnym i równowagach Markowa w stochastycznych problemach decyzyjnych)*, 2019/35/B/HS4/00346, budget: PLN 291 960.
- 2019–2021 CO-INVESTIGATOR the National Centre for Research and Development grant, EU Operational Program for Poland: Smart Growth 2014–2020: *Methods of simulation and analysis of logistic networks of postal operators (Metody symulacji i analizy sieci logistycznych operatorów pocztowych)*, budget: PLN 6m.
- 2018 PRINCIPAL INVESTIGATOR the Statistics for the Cohesion Policy grant, EU Operational Program Technical Assistance 2014–2020: *Identification of sources of regional diversification using methods of decomposition of economic growth, differences and inequality (Identyfikacja źródeł zróżnicowania regionalnego Polski przy wykorzystaniu metod dekompozycji wzrostu i różnic Produktu Krajowego Brutto (PKB) oraz Wartości Dodanej Brutto (WDB) per capita)*, budget: PLN 256 737.
- 2018–2022 CO-INVESTIGATOR the National Science Centre OPUS 16 grant: *Specific taste or cliques of jurors? Designing strategy-proof voting rules (Specyficzne gusta czy kliki jurorów? Zaprojektowanie systemów ocen i głosowań odpornych na manipulację)*, 2018/31/B/HS4/01005, budget: PLN 599 310.
- 2015–2022 CO-INVESTIGATOR the National Science Centre OPUS 10 grant: *Decision analysis methods in multicriteria decision problems and estimating the willingness-to-pay and willingness-to-accept using fuzzy system modeling (Metody analizy decyzji w problemach wielokryterialnych i szacowania skłonności do zapłaty/akceptacji przy wykorzystaniu modelowania rozmytego)*, 2015/19/B/HS4/01729, budget: PLN 195 460.
- 2015 PRINCIPAL INVESTIGATOR the Statistics for the Cohesion Policy grant, EU Operational Program Technical Assistance 2007–2013: *Identification of sources of regional diversification using methods of decomposition of economic growth, differences and inequality (Metoda dekompozycji PKB oraz WDB w zastosowaniu do analizy struktury różnic regionalnych)*, budget: PLN 140 140.

Honors and awards

- 2022 MEMBER OF THE INTERNATIONAL REVIEW PANEL evaluation of the National Science Centre PRELUDIUM 21 grants, Kraków. SCIENTIFIC EXPERT of the French National Research Agency, Paris.
- 2020 DIPLOMA European Doctoral Program in Quantitative Economics, Bonn Graduate School of Economics, Bonn.
- 2010

Publications & talks

JOURNAL ARTICLES

- 2023 How sure are you?—the properties of self-reported conviction in the elicitation of health preferences with discrete choice experiments, joint with M. Jakubczyk, *Theory and Decision*, pp. 1-18.
- 2022 On reference dependence and complementary symmetry, joint with Ł. Woźny, *Journal of Mathematical Psychology* 108, pp. 106–116.
- 2018 Complementary symmetry in Cumulative Prospect Theory with random reference, *Journal of Mathematical Psychology* 82, pp. 52–55.
- 2017 Prospect Theory versus Expected Utility Theory: Assumptions, predictions, intuition and modelling of risk attitudes, forthcoming in *Central European Journal of Economic Modelling and Econometrics* 9, pp. 275–321.
- 2017 Range-dependent utility, joint with K. Kontek, *Management Science* 64 (6), pp. 2812–2832.
- 2014 Buying and selling price for risky lotteries and Expected Utility theory with gambling wealth, *Journal of Risk and Uncertainty* 48(3): pp. 253-283.
- 2013 Risk Attitudes, Buying and Selling Price for a Lottery and Simple Strategies, *Central European Journal of Economic Modelling and Econometrics* 5(1): pp. 1-34.
- 2010 Buying and Selling Price for Risky Lotteries and Expected Utility Theory without Consequentialism, *Quantitative Methods in Economics* 11(1): pp. 223-253.

MONOGRAPHS, CHAPTERS AND OTHER PUBLICATIONS

- 2021 Teoria Gier. In M. Jakubczyk et al. (Ed.), *Modelowanie decyzji w arkuszu kalkulacyjnym*, Oficyna Wydawnicza SGH, pp. 71–126.
- 2021 Willingness-to-pay and willingness-to-accept for a lottery and reference point in prospect theory, In B. Kamiński et al. (Ed.), *Zagadnienia wspomaganie i analizy decyzji*, Oficyna Wydawnicza SGH, pp. 268–296.
- 2018 Eliciting Fuzzy Preferences Towards Health States with Discrete Choice Experiments, joint with M. Jakubczyk and B. Kamiński. In C. Berger-Vachon (Ed.), *Complex systems: solutions and challenges in economics, management and engineering*, Springer, pp. 131–147.
- 2010 Sprawozdanie z XIX Europejskich Warsztatów EWGET, *Decyzje* 14: pp. 135-141.
- 2010 Risk attitudes and measures of value for risky lotteries, *PhD dissertation*.

IN REVISIONS

- On journal rankings and researchers's abilities, joint with W. Charemza, Ł. Woźny, <https://ssrn.com/abstract=4549768>
- Range Utility Theory, joint with M. Baucells and K. Kontek,
- Discounted incremental utility, joint with M. Baucells and K. Kontek,
- Individual and collective rationality in carpooling, joint with P. Kalczyński.

WORKING PAPERS

- Predicting Behavior in Games: Loss Aversion vs. Rank Dependent Utility vs. Range Utility Theory, joint with M. Baucells, P. Leclerc, J. Merrick, <https://ssrn.com/abstract=>

4445520or<http://dx.doi.org/10.2139/ssrn.4445520>

WORK IN PROGRESS

Biseparable representations of Certainty Equivalents, joint with J. Chudziak,

Range and sign dependent utility, joint with M. Baucells and K. Kontek,

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3194874

Is Expected Utility an Ex-hypothesis? Some implications of Reference-Dependent Subjective Expected Utility model,

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3064682

Foster-Hart measure of riskiness and buying/selling price for a lottery,

INVITED TALKS AND RESEARCH SEMINARS

1. *Characterizing Certainty Equivalents for binary lotteries*, joint with Jacek Chudziak, **Seminarium z równań i nierówności funkcyjnych wielu zmiennych**, Uniwersytet Śląski, Katowice, May 2023.
2. *Functional equations techniques in biseparable representations of a certainty equivalent. (Zastosowanie równań funkcyjnych do uzyskania reprezentacji aksjomatycznych modeli biseparowalnych)*, **Seminarium Instytutu Matematyki**, Uniwersytet w Zielonej Górze, November 2022.
3. *Discounted incremental utility (Nowy model teorii decyzji w warunkach ryzyka i opóźnienia czasowego – podejście aksjomatyczne)*, **Seminarium z Równań Funkcyjnych**, Uniwersytet w Zielonej Górze, November 2022.
4. *Range Utility Theory*, **Relative Value Learning Meeting**, Paris School of Economics, June 2022.
5. *Discounted Incremental Utility*, **Decision analysis for Old-timers**, University of Chicago Booth School of Business, Chicago, December 2021.
6. *Discounted Incremental Utility*, **School of Economics seminar series**, University of East Anglia, Norwich, November 2021.
7. *Carpooling games*, **Gry, mechanizmy i sieci społeczne**, Seminarium Instytutu Informatyki, Uniwersytet Warszawski, December 2020.
8. *Time delay vs subjective and objective uncertainty*, **Seminarium z równań i nierówności funkcyjnych wielu zmiennych**, Uniwersytet Śląski, Katowice, November 2019.
9. *Framed utility for risk and time*, invited lecture at the **XXIX Conference of the Department of Economics of the University of Warsaw**, Chęciny, September 2018.
10. *Range and sign dependent utility for risk and time* **Management and Behavioural Research lunch series** Pompeu Fabra University, Barcelona, February 2018.

11. *The idea behind frame-dependence*, **Seminarium Katedry Metod Ilościowych i Zastosowań Informatyki**, Akademia Leona Koźmińskiego, Warszawa, January 2018.
12. *Range and sign dependent utility for risk and time*, **Seminarium naukowe im. Jerzego Sławy-Neymana**, Szkoła Główna Gospodarstwa Wiejskiego, Warszawa, November 2017.
13. *Range-dependent utility for decisions under risk and uncertainty*, **Seminarium z matematyki finansowej**, Instytut Matematyki, Uniwersytet Śląski, Katowice, January 2015.
14. *Buying and selling price for a lottery and expected utility with gambling wealth*, **Department of Economics Research seminar at the University of East Anglia**, Norwich, November 2009.

CHAIRING CONFERENCE SESSIONS

1. *Decision analysis topic session organization in the special session Matematyka w ekonomii i finansach*, **Jubilee Congress for the 100th anniversary of the Polish Mathematical Society**, Kraków, September 2019.
2. *Morning session chairing*, **The 10th Pan Pacific Game Theory conference**, Waseda University, Tokyo, September 2017.

ORGANIZED CONFERENCES

1. **VIII Hurwicz Workshop on Mechanism Design Theory**, Member of the Scientific and the Organizing Committee, Warsaw, November 2022.
2. **XXX European Workshop on Economic Theory**, Member of the Organizing Committee, Warsaw, July 2022.
3. **VII Hurwicz Workshop on Mechanism Design Theory**, Member of the Organizing Committee, Warsaw, December 2018.

CONFERENCE TALKS

1. *Characterizing Certainty Equivalents for binary lotteries*. **59th International Symposium on Functional Equations**, Hajdúszoboszló, June 2023.
2. *Biseparable representations of the certainty equivalent*. **New Socio-Economic thoughts workshop**, Warszawa, April 2023.
3. *Game of rows. A mobile application to test strategic behavior*. **XIV Modelowanie Preferencji a Ryzyko**, Ustroń, March 2023.
4. *Biseparable representations of the certainty equivalent*, **10th International Workshop on Multiple Criteria Decision Making**, Ustroń, March 2023.

5. *What do rewards for publications tell about researchers' ability*, **VIII Hurwicz Workshop on Mechanism Design Theory**, Warsaw, November 2022.
6. *Discounted incremental utility*, **The 21 Annual Society of the Advancement of Economic Theory conference**, Canberra, July 2022.
7. *Discounted incremental utility*, **XXX European Workshop on Economic Theory**, SGH Warsaw School of Economics, July 2022.
8. *Discounted incremental utility*, **Risk, Uncertainty, decision**, Paris School of Economics, July 2022.
9. *Discounted incremental utility*, **International Symposium on Functional Equations**, Innsbruck, June 2022.
10. *Preferences over Risky Payoff Streams: Normative and Descriptive Approaches*, **INFORM Annual meeting**, Anaheim, October 2021.
11. *Preferences over Risky Payoff Streams: Normative and Descriptive Approaches*, **Risk, Uncertainty, Decision**, University of Minnesota, July 2021.
12. *Time delay vs. the subjective and objective uncertainty*, **Individual Beings, Societies, States, and the World**, Warsaw, January 2020.
13. *Range utility theory for uncertain cash-flows*, *Jubilee Congress for the 100th anniversary of the Polish Mathematical Society*, Kraków, September 2019.
14. *Range utility theory for uncertain cash-flows*, **XII Modelowanie Preferencji a Ryzyko**, Ustroń, April 2019.
15. *Range utility theory for uncertain cash-flows*, **7th Hurwicz Workshop on Mechanism Design Theory**, Warszawa, December 2018.
16. *Neutralizing manipulation under Borda voting*, **Seminarium Instytutu Podstaw Informatyki Państwowej Akademii Nauk**, Warszawa, November 2018.
17. *Range and sign-dependent utility for risk and time*, **Foundations of Utility and Risk**, York, June 2018.
18. *Range and sign dependent utility for risk and time*, **Time, uncertainties, strategies IV**, Paris School of Economics, December 2017.
19. *Intensity-based Range-Dependent Utility*, **The 3rd European University Institute Alumni Conference in Economics**, Florence, October 2017.
20. *Intensity-based Range-Dependent Utility*, **The 10th Pan Pacific Game Theory conference**, Waseda University, Tokyo, September 2017.
21. *Is Expected Utility an Ex-parrot?*, **55th Edwards Bayesian Research Conference**, State University of California, Fullerton, February 2017.

22. *Is Expected Utility an ex-hypothesis?*, **VI Hurwicz Workshop on Mechanism Design Theory**, Warszawa, December 2016.
23. *Range-Dependent Utility with Constant Risk Aversion*, *Foundations of Utility and Risk*, Warwick, June 2016.
24. *Range of Preferences Depends on Parducci's Principles*, **54th Edwards Bayesian Research Conference**, State University of California, Fullerton, April 2016.
25. *Range-dependent utility for decisions under risk and ambiguity*, **10th Modeling Preferences and Risk Conference**, Ustroń, March 2015.
26. *Range-dependent utility for decisions under risk and uncertainty*, **53rd Edwards Bayesian Research Conference**, State University of California, Fullerton, March 2015.
27. *The range-dependent utility model as a general framework for decisions under risk, uncertainty and time*, **V Hurwicz Workshop on Mechanism Design Theory**, Warszawa, November 2014.
28. *Range-dependent utility*, **Foundations of Utility and Risk**, Rotterdam, July 2014.
29. *Ranging Bull Need Not Make Weight*, **51st Edwards Bayesian Research Conference**, State University of California, Fullerton, February 2013.
30. *Range-dependent utility vs. probability weighting*, **IV Hurwicz Workshop on Mechanism Design Theory**, Warszawa, November 2012.
31. *Gambles with prices and operational measure of riskiness*, **III Hurwicz Workshop on Mechanism Design Theory**, Warszawa, July 2011.
32. *Operational measure of riskiness and gambles with prices*, **Warsaw International Economic Meeting**, July 2010.
33. *Gambles with prices, operational measure of riskiness and buying and selling prices for risky lotteries*, **XIX European Workshop on General Equilibrium Theory**, Cracow University of Economics, Kraków, June 2010.
34. *Buying and selling price for a lottery and expected utility without consequentialism*, **I Hurwicz Workshop on Mechanism Design Theory**, Stefan Banach International Mathematical Centre, Warszawa, October 2009.
35. *Buying and selling price for a lottery and expected utility without consequentialism*, **European Doctoral Program in Quantitative Economics Jamboree Meeting**, London School of Economics, April 2009.
36. *Bidding and asking price for a lottery and an arbitrage-free account for preference reversal*, **LABSI international conference on strategic decision making in politics and economics**, University of Salerno, September 2008.

37. *Buying and selling price for a lottery and operational measure of riskiness*, **Games 2008: The Third World Congress of the Game Theory Society**, Northwestern University, Evanston, July 2008.
38. *Willingness-To-Pay/Willingness-To-Accept decision rule for choice among lotteries*, **European Doctoral Program in Quantitative Economics Jamboree Meeting**, Paris School of Economics, November 2007.

POSTER PRESENTATIONS

1. *Range Utility Theory for risk and time*, **VII Hurwicz Workshop on Mechanism Design Theory**, Warszawa, December 2018.
2. *Buying/selling price spread and Expected Utility*, **The fourth PhD presentation meeting**, University College London, 2009.

TALKS BY THE COAUTHORS

1. Jacek Chudziak, *On representations of the certainty equivalents for binary lotteries*, **The XXth International Conference on Functional Equations and Inequalities**, Będlewo September 2023.
2. Joanna Franaszek, *Simple algorithm for NE selection in voting games*, **18th European Meeting on Game Theory, SING**, Messina, June 2023.
3. Joanna Franaszek, *Reciprocity in PD-like games*, **22nd Annual SAET Conference**, Paris, July 2023.
4. Łukasz Woźny, *On journal rankings and researchers' abilities*. **Economic Seminar, University of Sussex**, Brighton, 2023.
5. Jacek Chudziak, *Biseparable representations of certainty equivalents*, **VIII Hurwicz Workshop on Mechanism Design Theory**, Warszawa, November 2022.
6. Jacek Chudziak, **On characterizing the certainty equivalent of a binary lottery**. *Seminarium z Równań i Nierówności Funkcyjnych Wielu Zmiennych*, Katowice, November 2022.
7. Michał Jakubczyk, *How sure are you? - can self-reported conviction in discrete choice experiments be used to elicit preferences for health states?*, **Foundations of Utility and Risk**, Ghent, July 2022.
8. Manel Baucells, *Discounted Incremental Utility for Risk and Time*. **Foundations of Utility and Risk**, Ghent, July 2022.
9. Aleksander Nosarzewski, *Deviations from Nash Equilibrium and Strategic Uncertainty*. **VIIIth International Workshop on Multiple Criteria Decision Making**, Ustroń, March 2021.

10. Bogumił Kamiński, *Nash equilibrium vs mini-max regret predictions: an empirical verification*, **Jubileuszowy Zjazd Matematyków Polskich na 100-lecie powstania Polskiego Towarzystwa Matematycznego**, Kraków, September 2019.
11. Manel Baucells, *Range Utility Theory for Risk and Time*. **the INSEAD seminar**, Singapore, 2018.
12. Manel Baucells, *Range Utility Theory for Risk and Time*. **7th Xiamen University International Workshop on Experimental Economics**, Xiamen, 2018
13. Manel Baucells, *Range and sign dependent utility for risk and time*. **The third Research in Behavioral Finance Conference**, Vrije Universiteit, Amsterdam, 2018.
14. Manel Baucells, *Range and sign dependent utility for risk and time*. **Foundations of Utility and Risk**, York, 2018.
15. Manel Baucells, *Range and sign dependent utility for risk and time*, **The Workshop in Behavioral Economics**, Frankfurt School of Finance & Management, 2018.
16. Manel Baucells, *Range and sign dependent utility for risk and time*, **China Europe International Business School seminar**, Shanghai, 2018.
17. Manel Baucells, *Range and sign dependent utility for risk and time*, **Management and Behavioural Research lunch series at Pompeu Fabra University**, Barcelona, 2018.
18. Manel Baucells, *Range and sign dependent utility for risk and time*, **The INFORMS Advances in Decision Analysis**, Austin, 2017.
19. Manel Baucells, *Range and sign dependent utility for risk and time*, **The INFORMS Annual Meeting**, Houston, 2017.
20. Krzysztof Kontek, *Behavioral portfolio optimization using the range-dependent utility model for risk and time*, **The III Wrocław Conference in Finance**, Wrocław, 2017.
21. Krzysztof Kontek, *Range dependent utility for risk and time*, **IAREP 2017 – Leveraging behavioral insights**, Rishon LeZion, Izrael, 2017.
22. Bogumił Kamiński, *Multiple-criteria Evaluation of Preferences Towards Health States Using Fuzzy Approach*, **7th International Workshop on Multiple criteria decision making**, Ustroń, 2017.

PROFESSIONAL ACTIVITY

2011–2019 Author of the chapter on the structure of economic growth, differences and inequality in Poland as compared to EU using methods of decomposition. In: *Macroeconomic Situation in Poland in the Context of the World Economic Processes*. Yearly report of Statistics Poland, edited by: Mirosław Blazej.

2015, 2018

Head of two projects on identification of sources of regional diversification using methods of decomposition of economic growth, differences and inequality. Part of Operational Program on Technical Assistance managed by the Ministry of Investment and Economic Development of the Republic of Poland.

OTHER ORGANIZATIONAL WORK

2018-now coorganizer of the Warsaw Economic Seminars,
2016-2018 organizer of the working group *Decisions* at Warsaw School of Economics.

RADIO AND PRESS

2019 Expert guest in the interview on the Nobel Prize in Economics from 2005, Otokoclub
2016 Expert guest in the radio audition *From another planet: game theory*, Radio dla Ciebie.
2015 Author of the article Are pacifists right?, published in the *Egzorcysta* monthly magazine.

Teaching

PhD level: Background Course in Mathematics (EUI*), Game Theory (SGH).

Master level: Advanced Microeconomics I and II (QEM), Theory of decisions I and II (QEM), Decision Theory, Game Theory (SGH), Operations management (ALK).

Bachelor level: Method of Decision Analysis, Introduction to Game Theory, Deterministic Models of Operations Research, Optimization Methods, Econometrics (SGH).

Summer school: Lectures on range effects and minimax regret strategies, *Games and decision summer lab*, Warsaw, July 2019, financed by the National Academic Exchange Agency.

Supervised 25 master and 130 bachelor theses (SGH)

Professional courses: Statistical pitfalls, Data mining using the CRISP process, Decomposition methods of GDP *per capita* (GUS).

*EUI - European University Institute, SGH - Warsaw School of Economics, QEM - International Masters program co-funded by Erasmus+ coordinated by Université Paris 1 Panthéon-Sorbonne, ALK - Kozminski University in Warsaw, GUS - Statistics Poland.

Service to the profession

Refereeing for: *Management Science* (2), *Operations research* (1), *Psychological Review* (1), *Journal of Mathematical Psychology* (1), *Mathematics and Financial Economics* (1), *Games and economic behavior* (1), *Decision analysis* (1), *Theory and Decision* (1), *Economics Letters* (1), *Games* (1), *The Geneva Risk and Insurance Review* (1), *Journal of Behavioral and Experimental Economics* (1), *The BE Journal of Theoretical Economics* (2), *Frontiers in Physics* (1), *Peace Economics, Peace Science and Public Economics* (1), *The Central European Journal of Economic Modeling and Econometrics* (1), *Operations research and decisions* (1), *Gospodarka Narodowa* (1), *Journal of Economics and Management* (1), *Ekonomia* (1), *E-mentor* (1); I also

served as a Scientific Expert evaluating research proposals for the French National Research Agency and member of the International Panel of Experts evaluating PRELUDIUM 21 research grants of the Polish National Science Centre.

Last updated: December 11, 2024