



Matěj Opatrný

Date of birth: 30/01/1993 | **Nationality:** Czech | **Gender:** Male | **Email address:** matej.opatrny@gmail.com | **Address:** José Martího 407/2, 162 00, Prague 6, Czechia (Work)

WORK EXPERIENCE

RESEARCHER – CHARLES UNIVERSITY ENVIRONMENT CENTRE – 01/01/2021 – Current – PRAGUE, CZECHIA
Address: José Martího 407/2, 162 00, Prague, Czechia

ECONOMIC ANALYST – EXPOBANK – 01/06/2018 – 31/12/2019 – PRAGUE, CZECHIA

EDUCATION AND TRAINING

01/10/2017 – 30/10/2021 Prague, Czechia
PHD IN ECONOMICS Charles University Institute of Economics Studies

Website <https://ies.fsv.cuni.cz/en>

01/03/2024 – 30/05/2024 Berkeley, United States
RESEARCH VISIT UC Berkeley

Website <https://www.berkeley.edu/>

28/12/2019 – 13/07/2020 Auckland, New Zealand
RESEARCH VISIT The University of Auckland

Website <https://www.auckland.ac.nz/en.html>

04/07/2018 – 03/10/2018 Santiago de Chile, Chile
RESEARCH VISIT Pontificia Universidad Catolica de Chile

Website <https://www.uc.cl/>

LANGUAGE SKILLS

Mother tongue(s): **CZECH**
Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C2	C1	C1	C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

SKILLS

R | Stata | Power Apps, Power Automate, Power Flow, Power BI | MS Office(MS Word,MS Powerpoint,MS Excel,MS)

PUBLICATIONS

2026
[New estimates of the elasticity of marginal utility of consumption for Europe](#)

We estimate the elasticity of marginal utility of consumption (mju) for Europe and 32 individual European countries using household-level income tax data. Specifically, we rely on the absolute equal-sacrifice approach to elicit the revealed preferences of income taxpayers on their political preference for income redistribution. Our central estimate of mju equals 1.43. With few exceptions, 's for European countries exceed unity, ranging between 1.2 and 1.94. We discuss the implications of our estimates for inequality measurement, benefit transfer, and the social discount rate.

Ščasný, M., Opatrný, M. New estimates of the elasticity of marginal utility of consumption for Europe. Empir Econ 70, 91 (2026). <https://doi.org/10.1007/s00181-026-02936-z>

2025

Publication Bias and Model Uncertainty in Measuring the Effect of Class Size on Achievement

Class size reduction mandates are routinely justified by studies reporting positive effects on student achievement. Yet other studies report no effects, and the literature as a whole awaits correction for potential publication bias. Moreover, if identification drives results systematically, the relevance of individual studies will vary. We build a sample of 2,819 estimates collected from 66 studies and for each estimate classify 42 factors that reflect estimation context. We employ nonlinear techniques for publication bias correction and model averaging techniques to address model uncertainty. The results are consistent with little publication bias. The implied class size effect is negligible for all identification approaches except Tennessee's Student/Teacher Achievement Ratio project and for all contexts except classes of fewer than 15 students.

Opatrny, M., Havranek, T., Irsova, Z., & Scasny, M. (2025). Publication bias and model uncertainty in measuring the effect of class size on achievement.

Authors: M Opatrny, T Havranek, Z Irsova, M Scasny | Journal Name: Journal of Labor Economics

2025

Elasticity of marginal utility of consumption: the equal-sacrifice approach applied for the Czech Republic

We provide the first estimate of the elasticity of marginal utility of consumption, mju , for a post-transition economy in the Central & Eastern European region – the Czech Republic – based on household-level data. Using the absolute equal-sacrifice income tax approach, we obtain a central estimate of mju at 1.47, which varies between 1.32 to 1.66 within the study period covering 2005–2022. Moreover, the estimate of the elasticity of marginal utility of consumption differs between various income groups, indicating that this approach is suitable only for those who pay income tax. Including the non-taxpayers segment means *ceteris paribus* negative mju , and hence its smaller value for the entire population. Importantly, the mju estimate increases when social benefits are included in gross income, and it decreases when social and health insurance contributions are included in the definition of taxes. Since parameter μ is a crucial component of the social discount rate, our result provides useful input for policies that affect inter-temporal allocations.

Opatrný, M., Ščasný, M. Elasticity of marginal utility of consumption: the equal-sacrifice approach applied for the Czech Republic. J Econ Inequal 24, 261–281 (2026). <https://doi.org/10.1007/s10888-025-09671-y>

Authors: Opatrný, M., Ščasný, M. | Journal Name: J Econ Inequal | Volume, Issue and Pages: 24, 261–281 | Publisher: Springer

2021

The impact of the Brexit vote on UK financial markets: a synthetic control method approach

We estimate how the UK financial markets would have evolved if the Remain camp had won the referendum. To construct the counterfactual, we use the synthetic control method. Our results suggest that there would not have been any significant change in the development of the FTSE 100 Index in the medium to long term if there had not been a referendum. On the other hand, we find a significantly negative effect of 1.2 percentage points on the 10-year bond yield. Given the geopolitical circumstances in mid 2016, financial agents investing in the pound could have sought safer investment options represented by longer-term government bonds, which consequently could result in lower bond yields.

OPATRŇY, Matěj. Empirica. 2021, 48(2), 559-587. ISSN 0340-8744.

2020

The Impact of EU Accession on Farm Production in the Czech Republic: A Synthetic Control Method Approach.

Czech farmers experienced an enormous exogenous shock when they joined the common agricultural market (CAM) and the Common Agricultural Policy (CAP) in 2004. Using the World Bank's dataset, we apply the synthetic control method to establish a counterfactual case of the Czech Republic food production index in the absence of the CAM and CAP. The results show that the Czech Republic would have had a higher food index if it had not entered the CAM and CAP. Moreover, we show that the CAP and CAM had different impacts on farms in the Czech Republic and Bulgaria, which have the most comparable agriculture according to the results of the synthetic control method

OPATRŇY, Matěj. Finance a úvěr. 2020, 70(3), 281-307. ISSN 0015-1920.

2023

Assessment of the impact of agricultural support on crop diversity

This study examines the impact of agricultural support on crop diversity measured by a diversity index. Our results indicate that agricultural subsidies have a limited effect on agricultural biodiversity. By using unique farm-level data, we show that subsidies support the income of farmers rather than the agricultural biodiversity. The results are robust regarding the size, practice management and altitude of the agricultural holdings' operations and various measures of agricultural biodiversity. However, when interpreting the results, the limitations of biodiversity indices should be considered.

Kroupova et al., 2023, Agricultural Economics, 2023, 69(3), 89-100. ISSN 0139-570X.

2017

Quantifying the Effects of the CNB's Exchange Rate Commitment: A Synthetic Control Method Approach

In this paper I evaluate the quantitative effects of the Czech National Bank's commitment to keep the Koruna from appreciating that were put in place in 2013. I focus on the policy's impact on output, unemployment, and inflation. I use the synthetic control method, which allows me to compute the counter-factual development of the Czech economy in the absence of the commitment. I find that the commitment helped decrease unemployment substantially. The effect on overall output is also strongly positive, almost 2 percentage points for growth in 2015, but only marginally statistically significant, which might be connected to disturbances created by changes in excise taxes. The effect of the commitment on inflation is positive but not statistically significant at standard levels.

OPATRŇY, Matěj. Finance a úvěr. 2017, 67(6), 539-577. ISSN 0015-1920.

2026

Benefit-Cost Analysis of Precision Agriculture for Nitrogen Pollution Reduction: Evidence from the Zelivka Catchment

This paper presents a social benefit-cost analysis (BCA) of Precision Agriculture (PA) and Enhanced Efficiency Fertilizers (EEF) for reducing nitrate pollution in the Zelivka catchment, the drinking-water source for 1.5 million people in Prague and surrounding regions. The analysis combines field-level data (50,309 ha, 729 farms), meta-analytical biophysical parameters, a dynamic heterogeneous-agent adoption model, and cross-validation against an independent SWAT+ hydrological simulation.

Under review in JBCA

Authors: Matej Opatrný, Milan Scasny, Csilla Farkas, Mikael Skou Andersen, David Zilberman | **Journal Name:** JBCA

2025

Bridging the Gap: A Novel M2/LIHC Hybrid Indicator Unveils Energy Poverty Dynamics - Case Study of the Czech Republic

This paper introduces a novel composite energy poverty indicator, the M2LIHC, which combines elements of the twice-median expenditure share (2M) and Low Income High Cost (LIHC) measures. Using a unique dataset merging the Czech Household Budget Survey and EU-SILC data from 2017-2022, we demonstrate how this hybrid approach provides new insights into energy poverty dynamics. The M2LIHC indicator addresses key limitations of existing metrics, avoiding the LIHC measure's counterintuitive response to income changes in the lowest decile and mitigating the 2M indicator's potential overestimation of energy poverty among higher-income households with high energy costs. Our comparative analysis reveals significant differences in energy poverty rates and household characteristics identified by each indicator. The M2LIHC measure proves more robust to income fluctuations than LIHC while maintaining sensitivity to both income and energy cost components. We find energy poverty in the Czech Republic has increased across all indicators from 2017 to 2022, with the M2LIHC indicator suggesting a rise from 8.9% to 13.5%. To further validate our approach, we employ the DASMODO (Distributional And Social Impact Model) to simulate various energy and climate policy scenarios. These simulations demonstrate the complex effects of compensation policies on energy poverty measures, with M2LIHC providing a more nuanced view of policy impacts. By providing a more comprehensive and theoretically consistent measure of energy poverty, coupled with policy simulation capabilities, the M2LIHC indicator offers policymakers an improved tool for targeting support and assessing the effectiveness of energy poverty alleviation strategies in the context of energy transitions and climate policies.

Opatrný M., Scasny M. (2025): "Bridging the Gap: A Novel M2/LIHC Hybrid Indicator Unveils Energy Poverty Dynamics – Case Study of the Czech Republic " IES Working Papers 6/2025. IES FSV. Charles University.

Authors: Opatrný M., Scasny M. | **Journal Name:** IES WP | **Volume, Issue and Pages:** 6/2025

2024

Conventional wisdom, meta-analysis, and research revision in economics

Over the past several decades, meta-analysis has emerged as a widely accepted tool to understand economics research. Meta-analyses often challenge the established conventional wisdom of their respective fields. We systematically review a wide range of influential meta-analyses in economics and compare them to "conventional wisdom." After correcting for observable biases, the empirical economic effects are typically much closer to zero and sometimes switch signs. Typically, the relative reduction in effect sizes is 45%–60%.

Gechert, S., Mey, B., Opatrný, M., Havranek, T., Stanley, ..., & Rachinger, H. J. (2025). Conventional wisdom, meta-analysis, and research revision in economics. *Journal of Economic Surveys*, 39, 980–999. <https://doi.org/10.1111/joes.12630>

Authors: Gechert, S., Mey, B., Opatrný, M., Havranek, T., Stanley, T. D., Bom, P. R. D., Doucouliagos, H., Heimberger, P., Irsova, Z., & Rachinger, H. J. | **Journal Name:** *Journal of Economic Surveys* | **Volume, Issue and Pages:** 39, 980–999

2026

Reporting Guidelines for Meta-Analysis in Economics—Updated for AI

Meta-analysis is how science takes stock of its vast research output. The advent of increasingly capable artificial intelligence (AI) promises an unprecedented ability to identify and synthesize relevant research and its findings. In this document, the meta-analysis of economics research network (MAER-Net) updates existing Reporting Guidelines to be consistent with community-driven best practices for the responsible use and disclosure of AI-assistance in meta-analysis research. This update is meant to further improve the transparency, replicability, and quality of meta-analyses by building upon the 2020 and 2013 Reporting Guidelines published by this Journal. Cook et al. (2026) describe the guiding principles behind the update. Future meta-analyses, whether or not they use AI, are expected to follow these updated guidelines or to be prepared to give reasons if they deviate from them.

Cook, N., F. Bartoš, P. R. D. Bom, et al. 2026. "Reporting Guidelines for Meta-Analysis in Economics—Updated for AI." *Journal of Economic Surveys*. <https://doi.org/10.1111/joes.70116>

Authors: Nikolai Cook, František Bartoš, Pedro R. D. Bom, Sebastian Gechert, Klára Kantová, Jerome Geyer-Klingenberg, Tomáš Havránek, Zuzana Irsova, Martina Luskova, Matěj Opatrný, Franz Prante, Heiko J. Rachinger, T. D. Stanley | **Journal Name:** *Journal of Economic Surveys*

2026

Volumetric choice experiments and welfare measures in a subsidy-driven context

Volumetric Choice Experiments (VCE) offer a novel approach to studying individual behavior, traditionally explored through Discrete Choice Experiments. This study assesses the efficacy of VCE in understanding farmers' preferences regarding new results-based and practice-based agri-environmental contracts, using a comprehensive international stated preference survey. Recognizing that farmers often act as households maximizing utility rather than purely profit-driven producers, we provide justification for applying a utility-based framework in this context. The subsidy-driven nature of agri-environmental contracts poses a challenge for the use of multiple discrete-continuous choice models suited for VCE data. Conventionally, these models utilize an income-based budget equation, which would not be binding given the willingness-to-accept format of the experiment. To operationalize our model, we adopt a land-based budget equation, facilitating the development of a novel compensating variation measure for welfare analysis. Our findings reveal insightful contrasts between VCE-derived data and traditional DCE results, highlighting the complexities encountered and the comparability of outcomes. By delving into the distinct attributes of VCE and justifying the utility-based approach for farmers, this research not only bridges a critical gap in the literature but also enhances our understanding of farmer behavior, with significant implications for the design and implementation of future agri-environmental policies.

Budziński, Wiktor & Czajkowski, Mikołaj et al. 2026. "Volumetric choice experiments and welfare measures in a subsidy-driven context," *Resource and Energy Economics*, Elsevier, vol. 86(C).

Authors: Wiktor Budziński, Mikołaj Czajkowski, Solen Le Clec'h, Olimpia Markiewicz, Bettina Matzdorf, Matěj Opatrný, Jens Rommel, Julian Sagebiel, Christoph Schulze, Milan Ščasný, Lenny van Bussel, Katarzyna Zagórska, Wojciech Zawadzki | **Journal Name:** *Resource and Energy Economics* | **Volume, Issue and Pages:** Volume 86

PROJECTS

01/01/2021 – CURRENT

SEEPiA

I am the leader of a working package focused on the "Analysis of Tool Settings in Relation to Adaptation and Biodiversity Protection," where I oversee six institutions to deliver results for the Ministry of Environment and the Ministry of Agriculture. This role involves coordinating research efforts and ensuring that the findings contribute to the sustainable management and conservation of biodiversity, aligning with the strategic environmental goals of both ministries.

Link <https://seepia.cz/en/>

01/01/2023 – 31/12/2026

MARCHES

The MARCHES project is developing and refining a methodology to assess health costs of environmental stressors, particularly on the air we breathe and the water we drink, using findings in six European regions of the following countries: Czech Republic, Denmark, Estonia, Kosovo, Spain and Sweden. Around 200 million people in the EU rely on surface water for drinking, and many rural residents use wells. These two sources of drinking water can be contaminated by nitrate used in fertilizers, which can lead to serious health risks, including cancer, when consumed over many years. On the other hand, air pollution causes about 350,000 premature deaths annually in the EU, contributing to chronic health problems and reducing quality of life for many people. In both cases, it's important to calculate the economic costs to society, including both deaths and long-term health issues, such as life years lived with disabilities.

Link <https://projects.au.dk/marches>

01/01/2019 – 31/12/2023

GAČR EXPRO FE3M

Cílem výzkumu je posunout hranice výzkumu energetické účinnosti, modelování chování spotřebitelů a analýzy dopadů regulací. Zkoumáme příčiny mezery energetické účinnosti se zaměřením na výběr a substituci kapitálových statků, které domácnosti využívají při uspokojování jejich energetických služeb, a zkoumáme, do jaké míry jsou spotřebitelé ochotni změnit jejich poptávku po energiích s cílem zvýšit flexibilitu energetického systému. Analyzujeme jak odhalené, tak projevené preference spotřebitelů, včetně zkoumání validity těchto metod. Standardní top-down a bottom-up modely jsou obohaceny, aby lépe reprezentovaly chování domácností. Modelování se zaměřuje na zavádění a využívání energeticky účinných technologií a dopadů výroby a spotřeby energie na životní prostředí a zdraví a následně na blahobyt. Vyvíjíme několik hybridních modelů založených na optimalizaci energetického systému, modelech obecné rovnováhy (CGE), multiregionálních environmentálně rozšířených input-output modelech a analýze drah dopadu, vše integrované do komplexního modelovacího nástroje.

Link <https://czp.cuni.cz/cz/projekty/fe3m-gacr-expro-2019-2023>