# Bence Kiss-Dobronyi

bence.kiss-dobronyi@uni-corvinus.hu •

Arlington, VA • USA

linkedin.com/in/bencekd • github.com/bencekd • medium.com/@bencekd

#### Education

#### Corvinus University of Budapest

Budapest, Hungary

PhD in Business Economics

2021 – present

Topic: Macroeconomic shocks and competitiveness, supervisors Erzsebet Czako & David Losonci

Massachusetts Institute of Technology / edX / JPAL

Online 2020 – 2021

MicroMasters in Data, Economics, and Development Policy

Online non-degree program, consisting of five MIT courses

program leaders Esther Duflo & Abhijit Banerjee

Corvinus University of Budapest

BUDAPEST, HUNGARY

MSc in Leadership & Management

Performance management and controlling major Thesis: *The effect of EU funded development grants on SMEs*, supervisor David Tarody

The ejject of Zerjamen secret men game en einze, eup et izet Zanta ian

Rajk College for Advanced Studies

BUDAPEST, HUNGARY

**Social Sciences & Economics** (Non-degree, advanced courses in various topics)

2011-2016

2014 - 2016

Selected courses:

Values in Society and Economy I-II (Attila Chikan)

Econometrics I-II (Balazs Murakozy)

Networks and Economic Behaviour - one-day course (Matthew O. Jackson)

*The Second Machine Age - short course* (Erik Brynjolfsson)

*Disruptive Innovation - short course* (Clayton Christensen)

*Valuation in one-day - short course* (Aswath Damodaran)

University of Tübingen

Tübingen, Germany

2015

**Economics** (Master's level, exchange semester)

Selected courses:

Research Internship in Economic History (Joerg Baten)

Multinational Enterprises (Onur A. Koska)

Corvinus University of Budapest

Budapest, Hungary

2010 - 2013

BA in Commerce & Marketing

Thesis: *Democratizing Information - do we take the opportunity?* 

Mobile application markets and consumer choice, supervisor Eva Markos-Kujbus

## **Professional Experience**

World Bank (IBRD)

Washington, D.C., USA

**ET Consultant (Economist)** 

Jan '24 – present

Macroeconomic modelling and model development (MRIO focus) with a focus on climate, energy policy and labour outcomes.

Cambridge Econometrics

Brussels, Belgium & Budapest, Hungary & Cambridge, UK

Economist, Senior Economist, Managing Economist

*Sep '18 – Dec '23* 

Macroeconomic modelling, model development (E3ME, input-output, SAM) and economic research. Projects in the thematic areas of environment, climate and energy policy. Clients: UN, ILO, European Commission, European Parliament, various governments.

Hiflylabs

Budapest, Hungary

Consultant, Project Manager

Jun 17 – Aug 18

Data analysis, database & system architecture and consulting projects. Clients: governmental institutions, financial institutions, energy sector. Managing project teams in data-science, engineering visualisation projects.

Accenture

**Analyst** 

BUDAPEST, HUNGARY & BRATISLAVA, SLOVAK REPUBLIC

DIVIC LID III ...

Jul '16 – May '17

TARKI Social Research Institute

BUDAPEST, HUNGARY

**Data Visualisation Specialist (contract)** 

Aug '15 - Aug '16

### **Publications**

Hartvig, A., Kiss-Dobronyi, B., Kotek, P., Takacsne Toth, B., Gutzianas, I., Zareczky, A.Z. (2024): The economic and energy security implications of the Russian energy weapon, *Energy*, 294 (May 2024), DOI: 10.1016/j.energy.2024.130972.

**Kiss-Dobronyi, B., Czako, E., Losonci, D. (2024):** Management practices and changes in turnover of domestic firms during the Covid-19 economic shock [in Hungarian], *Hungarian Economic Review*, LXXI (March 2024), DOI: 10.18414/KSZ.2024.3.229.

**Kiss-Dobronyi, B., Chitiga-Mabugu, M., Lewney, R., Mbona, N. (2023):** Interactions between recovery and energy policy in South Africa, *Energy Strategy Reviews*, 50 (November 2023), DOI: 10.1016/j.esr.2023.101187.

Dafnomilis, I., Chen, H.-H., den Elzen, M., Fragkos, P., Chewpreecha, U., van Soest, H., Fragkiadakis, K., Karkatsoulis, P., Paroussos, L., de Boer, H.-S., Daioglou, V., Edelenbosch, O., Kiss-Dobronyi, B., van Vuuren, D.P. (2022): Targeted Green Recovery Measures in a Post-COVID-19 World Enable the Energy Transition, *Frontiers in Climate*, 4, DOI: 10.3389/fclim.2022.840933.

**Kiss-Dobronyi, B., Fazekas, B. (2022):** Modelling the Decarbonisation of Energy Intensive Industries in the Eu: the Potential Effects of a Carbon Border Mechanism, *ETUI Research Papers*, Report 3.

Chikan, A., Czako, E., Kiss-Dobronyi, B., Losonci, D. (2022): Firm competitiveness: A general model and a manufacturing application, *International Journal of Production Economics*, 243 (January 2022), DOI: 10.1016/j.ijpe.2021.108316.

Markkanen, S., Viñuales, J., Pollitt, H., Lee-Makiyama, H., Kiss-Dobronyi, B., Vaishnav, A., Le Merle, K. and Cullen, L.G. (2021): On the Borderline: The EU CBAM and its place in the world of trade, CISL working papers, Cambridge UK.

**Pollitt, H., Lewney, R., Kiss-Dobronyi, B., Lin, X. (2021):** Modelling the economic effects of COVID-19 and possible green recovery plans: a post-Keynesian approach, *Climate Policy*, Forthcoming Special Issue: COVID-19 recovery, DOI: 10.1080/14693062.2021.1965525.

**Kiss-Dobronyi, B., Fazekas, D., Pollitt, H. (2021):** Macroeconomic assessment of possible Green Recovery scenarios in Visegrad countries, *Society and Economy*, 43(3), DOI: 10.1556/204.2021.00014.

**Chikan, A., Czako, E., Losonci, D. & Kiss-Dobronyi, B. (eds.)** (2019): On the edge of the 4<sup>th</sup> industrial revolution. Briefing on the results of the 2019 questionnaire (in Hungarian). Versenyképesség Kutató Központ–VTO Alapítvány: Budapest [report].

**Buksa, M., Hoffmann, J., Kiss-Dobronyi, B. & Thaler, B. (eds.)** (2015): The Disrupting Power of Novelty - Summaries from the works of Clayton M. Christensen (in Hungarian). Rajk College: Budapest [book]

#### Conferences and invited talks

**Kiss-Dobronyi, B.** Low-Carbon Structural Economic and Employment Transformations - the MINDSET model at the World Bank - Technical deep-dive, *IAEE 45th International Conference*, Boğaziçi Üniversitesi, 2024 June

**Kiss-Dobronyi, B., Hartvig, A., Gutzianas, I., Arsenio, F.** South African decarbonisation – integrating IAM and open-source SAM modelling, *Sixteenth IAMC Annual Meeting* 2023, Euro-Mediterranean Center on Climate Change, 2023 Nov

**Kiss-Dobronyi, B.** The role of MNEs in decarbonizing the cement industry – home and abroad, 7th Global Strategy and Emerging Markets Conference & 8th Copenhagen OFDI Conference, Copenhagen Business School, 2023 Oct

**Simo, M., Kiss-Dobronyi, B., Hartvig, A.** British Institute of Energy Economics Oxford 2023 Research Conference, *British Institute of Energy Economics Oxford* 2023 Research Conference, BIEE, 2023 Sep

**Chen, Z., Suk, S., Kiss-Dobronyi, B.** A study of decarbonization in China involving impact analysis of zero coal power plants on the economy and environment using E3ME, 12th Congress of Asian Association of Environmental and Resource Economics, Waseda University, 2023 Aug

**Suk, S., Kiss-Dobronyi, B., Chen, Z., Toru, M.** Impact of carbon market linkage between China, Japan and Korea on decarbonization: E3ME applied study, 12th Congress of Asian Association of Environmental and Resource Economics, Waseda University, 2023 Aug

Kiss-Dobronyi, B., Hartvig, A., Kotek, P., Takacsne Toth, B., Gutzianas, I., Zareczky, A. A multi-model assessment of the economic and energy impacts of the war in Ukraine, *Commodity and Energy Markets Association Annual Conference*, Budapest University of Technology and Economics, 2023 Jun

**Kiss-Dobronyi, B., Lewney, R., Chitiga-Mabugu, M., Mbona, N.** Interactions between recovery and energy policy in South Africa, *Third Young Scholars Conference on Structural Change and Industrial Policy*, YSI, 2023 Jun

Kiss-Dobronyi, B. (lead organizer) First E3ME-FTT Summer School, Cambridge Econometrics, 2023 Jun

**Kiss-Dobronyi, B.** Macroeconomic modelling of the distributional and revenue impacts of the Fit-for-55 policy package, *SEEPIA Summer School on Macroeconomic modelling of environmental policy*, Charles University Prague, 2023 May

**Kiss-Dobronyi, B.** Post-Keynesian macroeconomic modelling of the potential effects of the carbon border adjustment mechanism, 2023 Winter School on Climate Policies, Innovation, and International Competitiveness, EEARE, 2023 Feb

**Kiss-Dobronyi, B.** Advancing a green and fair economic transformation in a crisis-driven World: The role of macro-economic modelling, *UN PAGE - UN DCO seminars*, Online, 2022 Dec

**Kiss-Dobronyi, B., Hartvig, A., Heilmann, I.** Economics of sufficient consumption pathways for 1.5C and 2C warming employing post-Keynesian demand-led modelling, *IAMC Annual Meeting*, University of Maryland, 2022 Dec

**Hartvig, A., Kiss-Dobronyi, B., Vercoulen P., Zareczky, A.** Regional rivalry: SSP3 modelling of the war in Ukraine, *IAMC Annual Meeting*, University of Maryland, 2022 Dec

**Kiss-Dobronyi, B.** Stocktaking of economic, social, and environmental impacts of sustainable recovery, including impacts on NDC implementation, *Socialization of Presidency Studies of Climate Sustainability Working Group*, G20 Presidency Indonesia, 2022 Sept

**Chikan, A. & Kiss-Dobronyi, B.** An Inventory Paradigm Revisited in the COVID era, *International Symposium on Inventories*, International Society for Inventory Research, 2022 Aug

**Polugodina, M., Fazekas, D. & Kiss-Dobronyi, B.** The case of Germany with an outlook on the possible effects of a Carbon Border Adjustment Mechanism, *Decarbonizing energy intensive industries conference*, European Trade Union Institute, 2022 June

**Kiss-Dobronyi, B.** Economic impacts of FF55 for the Czech Republic: E3ME model, *Spring School on impact assessment*, Charles University Environment Centre, 2022 June

**Chikan, A., Czako, E. & Kiss-Dobronyi, B.** Connection between supply chain resilience characteristics and firms' performance in the pandemic, *IPSERA Annual Conference*, *IPSERA*, 2022 April

Chikan, A., Czako, E., Losonci, D. & Kiss-Dobronyi, B. Measuring firm competitiveness, *Research webinar*, Hungarian Economists Association, 2022 Jan

**Kiss-Dobronyi, B. & Szekeres, M.** Working from home: occupations and performance, results from Hungary, *Pandemic Shock and its Consequences for Business and the Economy*, WSB University in Poznan, 2021 Dec

Markkanen, S., Viñuales, J., Pollitt, H., Lee-Makiyama, H., Kiss-Dobronyi, B., Vaishnav, A. et al. On the Borderline: The EU CBAM and its place in the world of trade, *Research webinar*, University of Cambridge Institute for Sustainability Leadership, 2021 Oct

Kiss-Dobronyi, B. The role of sufficiency in the sustainable economy, Future Trade conference, 2021 Sept

**Kiss-Dobronyi, B.** E3ME-FTT, an integrated energy-climate model, with technological progress, *XXXIV. Hungarian Operations Research Conference*, Hungarian Operations Research Society, 2021 Aug

**Van Hummelen, S., Kiss-Dobronyi, B., Lewney, R., Barbieri, L.** The long-term socioeconomic impacts of green recovery, *Climate Exp0*, COP26 Universities Network, 2021 May

**Kiss-Dobronyi, B.:** Using the tools we have to estimate the economic impacts of COVID-19, *GSI-CE research colloquium*, University of Exeter, 2021 March

**Pollitt H., Kiss-Dobronyi, B.:** Using the tools we have to estimate the economic impacts of COVID-19, *Colloquium on Computational Social Science/Computational Data Sciences*, George Mason University, 2021 February

Kiss-Dobronyi, B., Pollitt, H., Lewney, R., Kramer, B., Massie, E. & Tuijp, P.: Assessment of impacts of COVID-19 and crisis recovery packages, *Thirteenth IAMC Annual Meeting* 2020, Integrated Assessment Consortium, 2020 December

Chikan, A., Czako, E., Kiss-Dobronyi, B. & Losonci, D.: Firm Competitiveness: a General Model and a Manufacturing Application in the Age of Digitalization, *International Working Seminar on Production Economics*, Universität Innsbruck, 2020 February

**Kiss-Dobronyi, B.:** Differences in silver prices across temporal and spatial dimensions: Silver pricing and determinants of local prices in the 19th-20th century, *XXXIII. National Conference of Scientific Students' Association* (*OTDK*) – *'Economic History' section*, Széchenyi István University, 2017 Apr

**Horvath G., Kiss-Dobronyi, B. & Nagy R.:** The Effect of Regulatory Change on the Market of Compulsory Motor Vehicle Insurance (in Hungarian), *XXXIII. National Conference of Scientific Students' Association (OTDK) – 'Micro- and macroeconomics' section*, Széchenyi István University, 2017 Apr

**Gabos A. & Kiss-Dobronyi, B.:** The beta version of the IPOLIS data visualisation tool, *Expert Workshop 'Visualisation and outreach to stakeholders'*, University of Luxembourg, 2016 March

**Kiss-Dobronyi, B. & Somosi, D.A.:** Are Chinese Telecommunication Companies Competitive in Developed Countries? The Case of ZTE Corporation (in Hungarian), XXXII. National Conference of Scientific Students' Association (OTDK) – 'International Economics and Business' section, Awarded 2<sup>nd</sup> prize, Budapest Business School, 2015 Apr

**Kiss-Dobronyi, B. & Szanto, P.:** Competitiveness, Opportunities and Estimated Social Costs of Mobile Payment (in Hungarian), *XXXII. National Conference of Scientific Students' Association* (*OTDK*) – *'Business Informatics' section*, Budapest Business School, 2015 Apr

**Kiss-Dobronyi, B. & Ritter, K.:** The Effect of Foreign Partnership and Foreign Trade Activity on Economic Activity and Social Norms (in Hungarian), *XXXII. National Conference of Scientific Students' Association (OTDK)* – *'Economic History' section*, Budapest Business School, 2015 Apr

**Kiss-Dobronyi, B. & Torda, A.:** Motivating Bicycle Commuting in Corporate Environment (in Hungarian), XXXI. National Conference of Scientific Students' Association (OTDK) – 'Sustainability & Sustainable Growth' section, **Awarded 3<sup>rd</sup> prize**, University of Pannonia, 2013 Apr

## **Teaching Experience** Thesis evaluation, Thesis supervision 2020-2024 1 x BA supervision, 2 x MSc evaluation, 2 x BA evaluation Corvinus University of Budapest; Eötvös Loránd University (ELTE) Course Instructor, International business economics (with Havran, Zs.) 2022 Master's level course, Corvinus University of Budapest, Budapest Course Instructor, Introduction to the economics of climate change 2022 Research course, Rajk College, Budapest Course Instructor, Introduction to business economics (with Haasz, V.) 2021 Bachelor level course, Corvinus University of Budapest, Budapest Course Instructor, Empirical competitiveness research (with Chikan, A.) Master's level research course, with a strong emphasis on methodology & applications (R, data imputation, dimension reduction and structural equation modelling methods), Heller Farkas College, Budapest Course Instructor, Data-driven competitiveness research (with Chikan, A.) One semester research course, with a strong emphasis on methodology & applications (Python, pandas, dimension reduction and regression methods), Rajk College, Budapest **Achievements & Scholarships** 2023 Best International Publication Award, Industrial and Corporate Economics - Hungarian Academy of 2021-2023 Recipient of 'Cooperative Doctoral Programme' Grant, Topic: "The impact of macroeconomic shocks on the economy" [C1753844] - National Research, Development and Innovation Office of Hungary **2019-2020** Work exhibited in Data Stories Exhibition 2020 and 2019 - Central European University, Hungary 2019-2020 Work exhibited in Data Stories Exhibition 2020 and 2019 - Central European University, Hungary 2019 Selected participant of Youth Leader's Forum - Antall József Knowledge Centre, Hungary **2018** I.st prize "From data to story" hackathon - Center for Independent Journalism 2016 Heller Farkas Award for Academic Excellence - Rajk College for Advanced Studies 2015 TOP 10, 21st CEEMAN International Case Writing Competition - CEEMAN & Emerald 2014 Innovative Leaders of Tomorrow Scholarship - Huawei **2014** 'New Wave' Scholarship - International Training Center for Bankers, Budapest **Independent Coursework** EAERE - ETH Winter School on Climate Policies, Innovation, and International Competitiveness 2023 EAERE & ETH Zurich Spring School on the Evolution of Social Complexity 2022 Complexity Science Hub Vienna Susan Athey: Machine Learning Methods in Economics 2019 one-day course, Rajk College for Advanced Studies Natasha Balac, Paul Rodriguez, Andrea Zonca: Hadoop Platform and Application Framework 2017 online course, Coursera, University of California San Diego Matthew O. Jackson: Social and Economic Networks 2015 online course, Coursera, Stanford University Matthew O. Jackson, K. Leyton-Brown, Y. Shoham: Game Theory 2015 online course, Coursera, Stanford University, The University of British Columbia Anthony C. Robinson: Maps and Geospatial Revolution 2015 online course, Coursera, The Pennsylvania State University Jeff Leek: R Programming 2015 online course, Coursera, Johns Hopkins University

## Skills

## **Technical expertise:**

Advanced R (tidyverse, ggplot2, igraph), Python (pandas, numpy, scipy, matplotlib, seaborn, networkx), JavaScript, MS Office Suite

Intermediate STATA, HTML, Gephi, QGIS, Tableau, PowerBI, Adobe Suite, Git, Vue.js, D3.js, NetLogo, Fortran

BASIC EViews, LATEX, PHP, SQL, VBA, MongoDB, Pajek, SAS, Ox

**Languages:** English (full professional proficiency), Hungarian (native), German (beginner).