David Van Dijcke

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Research interests: econometrics, industrial organization, political economy.

Advisors: Prof. Florian Gunsilius, Prof. Kaspar Wuthrich.

EMPLOYMENT

Harris School of Public Policy, University of Chicago — Oct 2024 – Nov 2024
Teaching Fellow — Riyadh, SA

- Designed and taught 3-week Applied Econometrics course for a Harris Public Policy non-credential program, jointly organized with the Saudi government.

Ipsos Public Affairs, LLC — Mar 2022 – Present
Consulting Analyst — Washington, DC, US

- Assisting Risk Analytics Division (North America) on mobility analytics and remote sensing for various rapid-response projects, including:
  - *World Bank Group, Gaza (2023–4)*: assessment of damage to infrastructure in Gaza using SAR data following Israel-Hamas war. Final UN/World Bank report received global news coverage.
  - *World Bank Group, Nepal and Afghanistan (2023)*: rapid damage and needs assessment (RDNA) using synthetic-aperture radar (SAR) data from satellites following series of earthquakes.
  - *World Bank Group, Syria (2023)*: RDNA in Syria using mobile device data following Kahramanmaras earthquake using remote sensing methods. Final report received global news coverage.
  - *FIFA, Qatar (2022)*: development of an interactive app that reported real-time crowd movements during the 2022 World Cup using mobility, traffic, and social media data.
  - *Ipsos Automotive Center of Excellence (2022)*: development of an interactive app to assess mobility flows to and from Electric Vehicle chargers in the US.
  - *Ukraine, RDNA (2022)*: RDNA of Ukraine during the 2022 Russian invasion using surveys and remote sensing. Joint with the World Bank, European Commission, and Government of Ukraine. Final report received global news coverage.
  - *World Bank Group, Syria (2022)*: assessment of health infrastructure and migrant movement during the Tigray conflict using mobile device data.
- Methods used include: big data analytics in Python, PySpark, and Spark using distributed cloud computing on Amazon Web Services; geospatial analysis in GeoPandas and ArcGIS; data visualization and app deployment using R Shiny, Jupyter Notebooks, ArcGis.

University of Michigan — Jan 2023 – Apr 2023
Graduate Student Research Assistant — Ann Arbor, US

- Research assistant to Prof. Florian Gunsilius. Tasks included writing STATA, R, and Python packages for a published paper, and conducting co-authored research at the intersection of econometrics and computer vision.

University of Michigan — Aug 2021 – Present
Graduate Student Instructor — Ann Arbor, US

- **Courses taught.** *Graduate*: Applied Microeconometrics (ECON 675); Introduction to Econometric Analysis I (ECON671) (2x). *Undergraduate*: Intermediate Introduction to Statistics and Econometrics I (ECON 451).

Bank of England — May 2020 – Present
Academic Visitor/PhD Intern — London, UK

- Research and policy advice using big data to study the UK labor market and COVID-19 economy at Advanced Analytics Division.
- PhD summer internships in 2020, 2021, and 2023.
- Results presented before Monetary Policy Committee and published in two Bank of England Staff Working Papers.

University of Oxford (Lady Margaret Hall) Oct 2019 – June 2020
Tutor Oxford, UK

- Tutored students from the MPhil in Economics and the BA in Politics, Philosophy and Economics.

Deutsche Bundesbank Jul-Aug 2019
Research Assistant Frankfurt, DE

- Co-authored a cross-country study of the cyclicality of labor effort, forthcoming Bundesbank Discussion Paper.

KU Leuven Feb-Sep 2019
Research Assistant Leuven, BE

EDUCATION

University of Michigan May 2022 – Present
PhD, Economics Ann Arbor, US

- March 2024: Visiting Research Student Collaborator at Princeton University. Sponsor: Prof. Ulrich K. Müller.

University of Michigan Aug 2020 – May 2022
Master of Arts, Economics Ann Arbor, US

University of Oxford Oct 2019–Aug 2020
Probationer Research Student, Economics Oxford, UK

- Equivalent to 2nd year of MPhil in Economics. No grades due to COVID-19.

KU Leuven Sep 2016-Jul 2019
BA, Philosophy; MSc Economic Policy; MSc Economics Leuven, BE

- **MSc, Economics** (Major: Research in Economics) .
  - *Magna cum laude* (83%).
  - Dissertation awarded best student paper at the Faculty of Economics (2018-19) and top grade (18/20).
- **MSc, Economic Policy** .
  - *Summa cum laude* (85.77%).
  - Dissertation published in Belgian Banking and Finance journal and awarded top grade (18/20).
- **BA, Philosophy** .
  - *Magna cum laude* (81.57%).

The Royal Academy of Fine Arts / Ghent University Sep 2013-Jul 2016
BA, Theatre Ghent, BE

- *Cum laude.*

Heilig-Hart Instituut Heverlee / Sint-Albertus College Sep 2007-Jul 2013
Latin-Mathematics (Secondary education) Heverlee / Haasrode, BE

HONORS AND AWARDS

Rackham Predoctoral Fellowship, Rackham Graduate School, University of Michigan (2024, 12 months of tuition + stipend); WU Best Paper Award of the City of Vienna (2022); Honorary Fellow of the Belgian American Educational Foundation (2020-21); The Pinxten Award for the best student paper in the Master of Economics or the Master of Advanced Studies in Economics of the Department of Economics (2018-19, KU Leuven)

RESEARCH

Publications

1. Van Dijcke, D., Wright, A. L., & Polyak, M. (2023). Public response to government alerts saves lives during Russian invasion of Ukraine. *Proceedings of the National Academy of Sciences*
2. Milosh, M., Painter, M., Sonin, K., Van Dijcke, D., & Wright, A. L. (2021). Unmasking partisanship: Polarization undermines public response to collective risk. *Journal of Public Economics*
3. Brzezinski, A., Kecht, V., Van Dijcke, D., & Wright, A. L. (2021). Science skepticism reduced compliance with COVID-19 shelter-in-place policies in the United States. *Nature Human Behaviour*, *5*(11), 1519–1527
4. Brzezinski, A., Deiana, G., Kecht, V., & Van Dijcke, D. (2020). The COVID-19 pandemic: Government vs. community action across the United States. *Covid Economics: Vetted and Real-Time Papers*, *7*, 115–156
5. Van Dijcke, D. (2018). The impact of ECB unconventional monetary policy on income inequality in the Netherlands. *Bank en Financiewezen*, *3*

Working Papers

1. Van Dijcke, D., Gunsilius, F., & Wright, A. L. (2024). Return to office and the tenure distribution [Revision Requested at The Review of Economics and Statistics]. *University of Chicago, Becker Friedman Institute for Economics Working Paper*, (2024-56)
2. Gunsilius, F., & Van Dijcke, D. (2024). Free discontinuity regression [Under review]
3. Van Dijcke, D. (2023). On the non-identification of revenue production functions [Under review]. *Bank of England Staff Working Papers*, *1015*
4. Van Dijcke, D., Buckmann, M., Turrell, A., & Key, T. (2023). Vacancy posting, firm balance sheets and government interventions during the COVID-19 pandemic [To be submitted]. *Bank of England Staff Working Papers (Forthcoming)*
5. Sonin, K., Van Dijcke, D., & Wright, A. L. (2023). Isolation and insurrection: How partisanship and political geography fueled January 6, 2021 [Under review]. *University of Chicago, Becker Friedman Institute for Economics Working Paper*, (2021-13)
6. Van Dijcke, D., & Wright, A. L. (2020). Using mobile device traces to improve near-real time data collection during the george floyd protests [Research note]. *Available at SSRN 3621731*
7. Lewis, V., & Van Dijcke, D. (2019). Work effort and the cycle: Evidence from survey data [Under review]. *Deutsche Bundesbank Discussion Papers (Forthcoming)*

OTHER PROFESSIONAL ACTIVITIES

Referee

Journal of European Economic Association, Harvard Kennedy School Misinformation Review.

PRESENTATIONS

2024 Remote Work Conference, Stanford University; New Connections in the Study of Political Economy, Panama; ESIF Economics and AI+ML Meeting, Cornell University; ASSA 2024, San Antonio.
2023 Econometric Society European Winter Meeting 2023, University of Manchester; Econometric Society North America Summer Meeting 2023, UCLA; New Methods Seminar, Bank of England; ASSA 2023, New Orleans; Dewey Data Research Seminars; Ipsos Center for Analytics Excellence.

2022 EEA-ESAM Congress, Bocconi University; Econometric Society Australasia Meeting; ESCoE Conference on Economic Measurement, University of Strathclyde; Bank of England.
2021 NBER Summer Institute 2021, National Security Session; Bank of England; Indeed Policy Partners Workshop.
2020 2020 Banca d'Italia and Federal Reserve Board Joint Conference on Nontraditional Data & Statistical Learning; SafeGraph Data Consortium; University of Oxford Macro Lunch. **2019** Minsky at 100: Revisiting Financial Stability - Università Cattolica del Sacro Cuore Milano; Deutsche Bundesbank.

QUALIFICATIONS

Computer Skills *Advanced*: R, Python, MATLAB, Stata, LaTeX, Excel, Spark (PySpark), AWS; *Intermediate*: Linux, Git, R Shiny; *Basic*: Julia, C++, Bash, Google Cloud Platform, Google BigQuery, SQL, Markdown; *Other*: machine learning, numerical methods, web scraping, big data, geospatial analysis (GIS).
Certifications MIT 6.00.2x Introduction to Computational Thinking and Data Science (edX); MIT 6.00.1x Introduction to Computer Science and Programming Using Python (edX); MIT 6.86x Machine Learning with Python (edX).

SOFTWARE

1. `R DiSCos` package: Distributional Synthetic Controls estimation.
   - Available at https://www.davidvandijcke.com/DiSCos/
2. `Stata disco` package: Distributional Synthetic Controls estimation.
   - Available at https://github.com/Davidvandijcke/DiSCos_stata