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| EDUCATION: | Ph.D. in Economics, <i>KU Leuven</i> | 2021–present |
| | Visiting Ph.D. Researcher, <i>Tilburg University, Dpt. of Econometrics & OR</i> | 02.2024–04.2024 |
| | M.Sc. in Advanced Studies of Economics (<i>magna cum laude</i>), <i>KU Leuven</i> | 2020–2021 |
| | M.Sc. in Economics (<i>magna cum laude</i>), <i>KU Leuven</i> | 2019–2020 |
| | Diploma in Impact Evaluation, <i>J-PAL & Pontificia Universidad Católica de Chile</i> | 2016 |
| | M.Sc. in Economics and Public Policies, <i>Universidad Adolfo Ibáñez</i> | 2014–2015 |
| | B.S. in Business Administration Sciences, <i>Universidad Adolfo Ibáñez</i> | 2010–2013 |

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| FIELDS OF INTEREST: | Labor and Demographic Economics, Family Economics, Innovation and Technological Change |
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PUBLISHED ARTICLES:

[1] Does personality affect the allocation of resources within households?
Review of Economics of the Household, Accepted, March 2025
[\[download\]](#)

[2] Artificial intelligence and firm-level productivity
with Dirk Czarnitzki
Journal of Economic Behavior and Organization, 211, July 2023, 188-205
[\[download\]](#)

[3] Artificial intelligence and industrial innovation: evidence from firm-level data
with Dirk Czarnitzki and Christian Rammer
Research Policy, 51(7), September 2022, 104555
[\[download\]](#)

COMPLETED WORKING PAPERS:

[1] Evidence on the adoption of artificial intelligence: the role of skills shortage in German firms
with Paolo Carioli and Dirk Czarnitzki
Under revision
[\[download\]](#)

Artificial Intelligence (AI) is considered to be the next general-purpose technology, with the potential of performing tasks commonly requiring human capabilities. While it is commonly feared that AI replaces labor and disrupts jobs, we instead investigate the potential of AI for overcoming increasingly alarming skills shortages in firms. We exploit unique German survey data from the Mannheim Innovation Panel on both the adoption of AI and the extent to which firms experience scarcity of skills. We measure skills shortage by the number of job vacancies that could not be filled as planned by firms, distinguishing among different types of skills. To account for the potential endogeneity of skills shortage, we also implement instrumental variable estimators. Overall, we find a positive and significant effect of skills shortage on AI adoption, the breadth of AI methods, and the breadth of areas of application of AI. In addition, we find evidence that scarcity of labor with academic education relates to firms exploring and adopting AI.

- [2] Personality traits, the marriage market, and household behavior
with Mariia Kovaleva
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We develop an empirical framework to analyze the dynamic effect of personality traits in marriage market patterns and intrahousehold decisions. We exploit detailed information at the individual level from the HILDA survey about consumption, labor supply, time use, and personality traits (as measured by the Big Five). First, we document that personality types are related to marital and divorce patterns, time allocated to both market labor and non-market labor activities, and the evolution of earnings. Next, to rationalize these empirical facts, we build a life-cycle model that integrates endogenous household formation and collective household choices under limited commitment. Our framework allows personality to affect both wages and individual preferences. In the latter, personality traits enter indirectly through the intrahousehold production of a public good and the utility of marriage (match quality). We use the estimates of our model to conduct policy counterfactuals associated with sorting in the marriage market and intrahousehold behavior.

WORK IN PROGRESS:

- [1] Parental personality and child skills formation
- [2] What explains the gains from a stable marriage? A revealed preference analysis
with Laurens Cherchye
- [3] The arguable evolution of Chilean income inequality
with Leonardo Cáceres
- [4] Artificial Intelligence and the demand for labor: evidence from German firm-level
with Dirk Czarnitzki and Bettina Peters
- [5] Technological change and intrahousehold resources allocation
- [6] Female human capital investment and household dynamics
with Marcos Balmaceda
- [7] Evidence on firm adoption of artificial intelligence
with Dirk Czarnitzki and Christian Rammer
In preparation for the Edward Elgar Handbook on the Economics and Theory of the Firm

TEACHING EXPERIENCE:

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| Economic Evaluation of Economic Policy, <i>KU Leuven</i> T.A. for Prof. Frederic Vermeulen, graduate-level | <i>Spring 2023</i> |
| Master's Thesis Advisor, <i>KU Leuven</i> For Prof. Frederic Vermeulen & Prof. Laurens Cherchye, graduate-level | <i>2022–present</i> |
| Econometrics, <i>Universidad Adolfo Ibáñez</i> T.A. for Prof. Julio Guzmán, undergraduate level | <i>Spring & Fall 2014</i> |

PROFESSIONAL EXPERIENCE:

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| Ministry of Agriculture of Chile <i>Research Economist, Bureau of Studies and Agricultural Policies</i> | <i>2017–2019</i> |
| Pontificia Universidad Católica de Chile <i>Research Economist, UC Public Policy Research Center</i> | <i>2015–2017</i> |
| Ministry of Work and Social Security of Chile <i>Research Economist (internship), Superintendency of Pensions</i> | <i>01.2015–03.2015</i> |

**RESEARCH
ASSISTANCE:**

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| Prof. Dirk Czarnitzki, <i>KU Leuven</i> | 2020–2021 |
| Prof. Laurens Cherchye & Prof. Frederic Vermeulen, <i>KU Leuven</i> | 2020 |
| Prof. Claudio Agostini & Prof. Ignacio Briones, <i>Universidad Adolfo Ibáñez</i> | 2017 |

GRANTS:

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| Full doctoral scholarship, <i>KU Leuven</i> | 2021–2025 |
| European Economic Association's (EEA) travel grant | 2023 |

PRESENTATIONS:

2021: Public-Labour-Health Seminar (Leuven - seminar)

2022: ECORES Summer School (Leuven); Household Economics Gathering (Brussels); 9th ZEW/MaCCI Conference (Mannheim)

2023: Trans-Atlantic Doctoral Conference (TADC, London); European Society of Population Economics Conference (ESPE, Belgrade); European Economic Association Conference (EEA-ESEM, Barcelona); European Association of Labour Economists Conference (EALE, Prague); 18th Belgian Day of Labour Economists (BDLE, Brussels)

2024: Structural Econometrics Group Seminar (Tilburg - seminar); TSE Workshop on the Economics of Education (Toulouse); New Advances in Family Economics Workshop (Paris - poster); Inaugural Conference of the French Association of Population Economists (AFÉPOP, Paris); Scottish Economic Society Conference (SAS, Glasgow); 9th LEER Conference on Education Economics (LEER, Leuven); Applied-Micro Leuven Workshop (Leuven); Household Economics Gathering (Brussels)

2025: Research Group of Microeconomics Seminar (Ghent - seminar), Luxembourg Workshop on the Origins of Socioeconomic Inequality (Luxembourg)

**EDITORIAL
SERVICE:**

Referee for *Journal of Economic Behavior & Organization*, *Research Policy* (x4), *Economic Modelling* (x2), *Economics of Innovation and New Technology*, *Science and Public Policy*

LANGUAGES:

Spanish (native), English (proficient), French (B1)

REFERENCES:**Prof. Laurens Cherchye**

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