#### Jeremias Klaeui

University of Lausanne – Department of Economics – jklaeui.github.io jeremias.klaeui@unil.ch – +41 76 378 22 15

#### **Doctoral studies**

KOF Swiss Economic Institute, ETH Zurich

Zurich, CH

Visiting researcher, Labour market research division, Host: M. Siegenthaler Aug 2023 - current

London School of Economics and Political Science

London, UK

Visiting researcher, Centre for Economic Performance, Host: A. Manning Sep 2022 - April 2023

HEC, University of Lausanne

Lausanne, CH

PhD in Economics

Sep 2019 - Spring 2024

- Completed the Swiss Program for Beginning Doctoral Students in Economics at the Study Center Gerzensee. Final grade: 5.75/6.0
- Teaching assistant in Econometrics on MSc level

## Technical skills & languages

### Quantitative methods

- Extensively used in research: Regression models: linear, (high dimensional) fixed effects, logistic, Poisson, penalised regression (e.g LASSO). Multinomial logit models, nested multinomial logit models. Quasi-experimental methods: Difference-in-Differences, Regression discontinuity designs, Instrument variables, Synthetic control method.
- Further used in research: Doubly robust machine learning for causal inference, Identification of conditional average treatment effects using machine learning, random forests. Hierarchical clustering, k-means clustering. Hazard models
- Concepts I teach to Master level students: Linear regression. Causality: selection bias, conditional independence, endogeneity, reverse causality. Fixed effects, random effects. Quasi-experimental methods: Difference-in-Differences, Regression discontinuity designs, Instrument variables.

#### Coding

- Used on a daily basis: R (data.table, fixest, ggplot2, kable, parallel), Git, ATEX
- Also used for research: R (glmnet, sf, ranger, caret, tm, word2vec, fuzzyjoin, dplyr and many more), SQL
- Used on a daily basis in the past: STATA (SNB and first year PhD for economic research); Java (at SNB); PHP, HTML, CSS, JavaScript, SQL (for frontend and backend web development); Python (for my high school thesis)

### Experience in project and people management

- Managing my own company and employees
- Coordinating and instructing research assistants during my PhD
- Professional exchange with Swiss administration for data deliveries and writing the quotation for a government-procured economic study

#### Languages

- German (native), English (fluent), Spanish (proficient), French (proficient), and Italian (basic knowledge)

#### Academic projects

Labor Demand and Supply Across Occupational Boundaries with Daniel Kopp, Rafael Lalive, Michael Siegenthaler

in progress

- Which occupations are considered by jobseekers? Do recruiters consider jobseekers who have not yet worked in the occupation of the vacancy?
- Is recruiters' and jobseekers' consideration limited by occupational boundaries or does it overlap those boundaries? Do recruiters and jobseekers adapt their consideration scope to limit their exposure to scarcity in workers or jobs?
- We use a unique combination of online vacancy data and click data from recruiters and jobseekers on job-room.ch matched with administrative data from the Swiss unemployment register.
- I have constructed an index of similarity between occupations based on job requirements from the near-university of vacancy postings
- I have constructed a vacancy-level and a individual jobseeker month-level measure of market tightness. The measures are highly predictive of overall market tightness and allow for a causal identification of tightness effects by exploiting within-person variation in tightness while controlling for unobserved heterogeneity between recruiters and job-seekers

Job search and firm-level labour market power

with Ihsaan Bassier, Alan Manning

in progress

- We use data on the click behaviour of Swiss unemployed on a job platform to investigate how
  job search affects the competitiveness of the labour market.
- We investigate the number and type of employers being considered by job-seekers using clicks on vacancies to define consideration sets.
- The results are interpreted in a framework encapsulating popular existing models in which employer market power is based on either frictions in labor markets or imperfect substitutability among jobs
- We show how this model and the data can be used to compute measures of the extent of employer market power and relate them to popularly used measures of concentration ratios.

Consideration sets in job search

solo-authored in progress

- The first step in finding a job is to filter the vast number of vacancies.
- I investigate people's choices when forming consideration sets in the job search process.
- The project focuses on key factors such as location, hours worked, and occupation and estimates an empirical model to shed light on these factors' relative importance in forming consideration sets.
- I explore heterogeneity in job consideration, examining differences in how broadly people consider job options and whether these differences are linked to search outcomes.

#### Policy projects

Effects of different types of unemployment benefit sanctions

with Patrick Arni, Boris Kaiser (BSS), Rafael Lalive, Markus Wolf

in progress

- Commissioned by the Swiss State Secretariat for Economic Affairs
- I will contribute by using admin data and job platform click data to measure the effect of sanctions on search effort

Swiss Job Tracker

with Matthias Bannert, Daniel Kopp, Michael Siegenthaler, Severin Thoeni, Joe Winkelmann launched Dec 2022

- A real-time index of open vacancy postings in Switzerland aggregating scraped data from 70

job portals and 50K company webpages.

- I implemented an algorithm that deals with scraper issues and unstable job portals in realtime to obtain a clean index
- Dashboard. Github page with open-source R-code. Media coverage example

Die Schweizer Selbständigerwerbenden im Covid19-Lockdown.

with Marius Brülhart, Rafael Lalive, Michael Siegenthaler

Two waves, Apr & Oct 2020

- Data sources: Survey among self-employed
- Media coverage in NZZaS. Link

Demographics and household savings over the life-cycle with Miriam Koomen

2018

- Data sources: Swiss Household Budget Survey (HABE)
- Presented at internal seminar, Swiss National Bank, November 2018.

#### Education

University of Basel

University College London

MSc Economic Policy – Final grade: Distinction

Basel, CH

Sep 2016 - Sep 2017

London, UK

BA Business (Minor) and Economics (Major) – Final grade: 5.7/6.0 Aug 2013 - Jan 2016

## Relevant work experience

Swiss National Bank Zurich, CH

Research Assistant, International Policy Analysis unit

Jun 2018 - Jul 2019

Econometric and economic analysis for research and policy documents. Data editing, analysis
and database management in Stata, R, Excel and Java (Groovy). Topics include: household
saving and investment behaviour, global imbalances, the IMF External Sector Report, the
Swiss external balance.

jkweb ag Basel, CH

Co-founder and manager

2011 - 2016

 Co-founder and manager of a web design & web applications company with currently 44 full and part-time employees. Strategic decisions, project management, client consulting and web programming in PHP, JS, SQL, HTML.

SRF Swiss Radio&TV, Basellandschaftliche Zeitung Internships in journalism

Basel, CH

September 2012 - January 2013

### Conferences and courses

IZA Workshop Matching Workers and Jobs Online

Sep 2023

IZA Summer School in Labor Economics (Course + Presentation of my work) Jun 2023; Berlin A. Şahin (U Texas), P. Kline (Berkeley), U. Schönberg (UCL), S.Jäger(MIT / IZA)

LSE CEP Labour Work in Progress Seminar

Mar 2023; London, UK

Job search Workshop

Jun 2022; Lucerne, CH

Fribourg Winter School in Machine Learning and Text Analysis

Mar 2022; Fribourg, CH

M.Huber (Fribourg), H. Liebert (Harvard / Zurich)

# ${\bf Extracurricular}$

- Team captain of the winning team from Lausanne of the 2022 Econometric Game (previous winners include Cambridge, Harvard and Oxford University). Topic: Report on the determinants of the recent surge in inflation including policy recommendations.
- Board member of Pro Centro Educativo Yampu, an association organising and funding a private school in rural Guatemala
- Voluntary work in Leon, Nicaragua: English teaching in public schools, tutoring in Spanish,
   English, and mathematics
   Jan May 2013