

# YAROSLAV YAKYMOVYCH

## CURRICULUM VITAE

Department of Economics  
Uppsala University, Box 513  
751 20 Uppsala  
Sweden

[yaroslav.yakymovych@nek.uu.se](mailto:yaroslav.yakymovych@nek.uu.se)  
<https://sites.google.com/view/yaroslavyakymovych>  
Tel: +46(0)704270564

### Education

---

- 2017 – Current      **PhD candidate**, Department of Economics, Uppsala University  
*Main advisor*: Stefan Eriksson, Associate Professor, Department of Economics, Uppsala University  
*Secondary advisors*: Adrian Adermon, PhD, Researcher at IFAU (Institute for Evaluation of Labour Market and Education Policy); Georg Graetz, Assistant Professor, Department of Economics, Uppsala University  
Affiliated with *Uppsala Center for Labor Studies (UCLS)*  
(Cancelled due to pandemic) *Visiting Student Researcher*, Stanford University, Spring 2020. Invited by Susan Athey, The Economics of Technology Professor, Stanford University Graduate School of Business
- 2015 – 2017      **Master Programme in Economics**, Uppsala University, Thesis: The Impact of Networks on Labour Market Outcomes
- 2012 – 2015      **Bachelor Programme in Business and Economics**, Uppsala University

### Fields of Interest

---

Labour economics, Machine learning, Applied econometrics, Technological change, Health economics

### Teaching Experience

---

- 2018 – 2020      **Analytical Methods (Master's level)**, Teaching Assistant, Department of Economics, Uppsala University
- 2018 – 2019      **Economics A: Principles of Micro- and Macroeconomics (undergraduate)**, seminar supervisor, Department of Economics, Uppsala University
- 2016 – 2017      **Economics B (undergraduate)**, Mentor/Additional TA, Department of Economics, Uppsala University

### Other Experience

---

- 2016 – 2017      **Research assistant** to Associate Professor Stefan Eriksson, Department of Economics, Uppsala University
- 2016      **Research assistant** to Professor Oskar Nordström Skans, Department of Economics, Uppsala University
- 2016      **Exam corrector** at the Department of Economics, Uppsala University
- 2013      **Summer internship** at Regional Statistics Office, Lviv, Ukraine

## Stipends and Awards

---

2018	Scholarship for studies abroad from the Jan Wallander and Tom Hedelius Foundation, 400 000 SEK (40 000 USD)
2015	Winner of the Swedish Economics Championship for undergraduate students, award of 45 000 SEK (4 500 USD)

## Professional Service

---

2018	Reviewer, Labour Economics
2017 – 2020	Treasurer of the PhD Association at the Department of Economics, Uppsala University
2018 – 2019	Board member of Uppsala Economics Association
2015 – 2016	Board member of Pareto Uppsala Economic Organisation

## Presentations and Conferences

---

2021	IFAU Seminar, virtual
2021	SUDSWEC 2021, Stockholm
2018	UCLS Annual Meeting, Krusenberg

## Skills

---

Languages: Ukrainian (native), English (fluent), Swedish (fluent), Russian (fluent), Polish (basic)

Programming: Stata (advanced), R (advanced), LaTeX (advanced)

## Job Market Paper

---

### **Who (Mis)uses the Sickness Insurance System? Evidence from a Randomised Experiment**

Sickness insurance systems guarantee employees the right to take leave from work when they are sick, but are open to excessive use as monitoring of recipients is difficult and income replacement rates are often high. To focus efforts to prevent over-use, it is important to know what characterises individuals whose sick leave uptake responds strongly to monitoring. This paper studies heterogeneous effects on the duration of workers' sick leave spells when medical certificate requirements were relaxed in a large-scale randomised experiment based on recipients' date of birth. I employ a novel machine learning method, the causal forest, which allows me to compute individualised predictions of treatment effects and take into account a large number of individual characteristics and their potentially complex relationships with each other and with sick leave duration. Individuals whose sickness absence duration increases the most when monitoring is reduced are characterised by a history of extensive sick leave uptake in earlier periods, low socioeconomic status, and male gender. The results suggest that a targeted policy can achieve the same reduction in monitoring costs as took place during the experiment at a 39 percent smaller loss in terms of increased sickness absence.

## Other Work

---

### **Resilience to Adverse Labor Market Shocks** (with Susan Athey, Lisa Simon, Oskar Nordström Skans and Johan Vikström)

We apply generalized random forest estimation to extremely rich Swedish register data in order to identify worker characteristics and aggregate conditions that predict income losses among workers who lose their jobs due to plant closures. The most affected quarter of observations are estimated to lose 37 percent of annual earnings on year after the job loss, compared to losses of only 16 percent for the least affected. Furthermore, the groups that suffer the most in the short-run also

suffer the largest long-run effects. Old workers and those with low formal education suffer the most – high school drop outs are seven times as likely to be in the hardest hit quartile of observations as college educated workers. But most of the heterogeneity arises from aggregate (industry, location) conditions. Workers suffer larger losses if industry employment trends are declining or if the industries are less dynamic. Effects are also substantially larger if locations are less dense and the local unemployment rate is higher. Displacements lead to twice as large effects if both location and industry conditions are below the median as when these conditions are above the median, while holding worker characteristics fixed. Workers who are displaced under bad conditions are more likely to move to employment, in particular to locations where aggregate conditions are more favorable. Policy-makers who want to identify workers with the largest displacement losses, are more likely to succeed if they target workers based on industry and location conditions than if they rely on indicators of human capital.

### **The Consequences of Job Loss for Routine Workers**

Routine-biased technological change has led to the worsening of labour market prospects for workers in exposed occupations as their work has increasingly been done by machines. Routine workers who have lost their jobs in mass displacement events are likely to have been a particularly affected group, due to potential difficulties in finding new employment that matches their skills and experience. In this study, the annual earnings, employment, monthly wages and days of unemployment of displaced routine workers are compared to those of displaced non-routine workers using Swedish matched employer-employee data. The results show substantial routine-occupation penalties among displaced workers, which persist in the medium to long term. A possible channel for this effect is the loss of occupation- and industry-specific human capital, as routine workers are unable to find jobs similar to those they had before becoming displaced. I do not find evidence that switching to a non-routine occupation reduces routine workers' losses, but there are rather indications that switchers do worse in the short-to-medium run. The findings suggest that the effects of labour-replacing technological change on the most exposed individuals can be severe and difficult to ameliorate.

### **Understanding occupational wage growth** (with Adrian Adermon, Simon Ek and Georg Graetz)

Using a new identification strategy, we jointly estimate the growth in occupational wage premia as well as time-varying occupation-specific life cycle profiles for Swedish workers 1996–2013. We document a substantial increase in between-occupation wage inequality due to differential growth in premia as well as due to shifts in life-cycle profiles. However, this increase is not apparent in raw wage data, because of strong sorting responses. The association of wage premium growth and employment growth is positive, suggesting that premium growth is predominantly driven by demand side factors. At the same time, there appears to be a strong life-cycle component to shifts in the occupational wage structure, often favoring young workers. Our results are robust to allowing for occupation-level changes in returns to cognitive and psycho-social skills.