# NURFATIMA JANDAROVA

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# OFFICE CONTACT INFORMATION

 ${\rm CoE}$  in Tax Systems Research (FIT), Tampere University 33014, Finland

## RESEARCH INTERESTS

Applied Microeconomics, Labour Economics, Genomics, Economics of Education

## REFERENCES

Andrea Ichino	Aldo Rustichini	Giulio Zanella
European University Institute	University of Minnesota	University of Bologna
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## **EDUCATION**

2016-2021	PhD in Economics, European University Institute Supervised by Prof. Andrea Ichino and Prof. Giacomo Calzolari Thesis title: Essays in Applied Microeconomics
2016-2017	MRes in Economics, European University Institute
2017	Genome-wide Data Analysis, Summer school at Tinbergen Institute
2014-2015	MSc in Economics, University College London
2009-2013	BA in Economics, KIMEP University

## RESEARCH EXPERIENCE AND OTHER EMPLOYMENT

2023 - 2026	<b>Postdoctoral Researcher</b> , Finnish Centre of Excellence in Tax Systems Research, Tampere University
2024 - 2026	${\bf Visiting\ Postdoctoral\ Researcher},\ {\bf FIMM-Institute\ for\ Molecular\ Medicine\ Finland}$
2021 - 2023	Postdoctoral Associate, Department of Economics, University of Minnesota
2017 - 2021	Research Assistant to Prof. Andrea Ichino, European University Institute
2018 - 2021	Research Fellow, Department of Economics, University of Minnesota
2017 - 2019	Editorial Assistant to Prof. Andrea Ichino, European University Institute
2015 - 2016	Chief Analyst, JSC Halyk Finance
2012 - 2014	Analyst, JSC Halyk Finance

### TEACHING EXPERIENCE

Autumn 2025	KAT.TAL.322 Advanced Course in Labour Economics, Tampere University Instructor
Spring 2024	KAT.TAL.322 Advanced Course in Labour Economics, Tampere University Instructor
Fall 2020	Panel Data for Banking Sector Analysts, Florence School of Banking and Finance Teaching assistant to Prof. Jeffrey Wooldridge
Fall 2019	The Problem of Causality, European University Institute Teaching assistant to Prof. Andrea Ichino
Fall 2018	Econometrics I, European University Institute Teaching assistant to Prof. Andrea Ichino
Fall 2017	Econometrics I, European University Institute Teaching assistant to Prof. Andrea Ichino

## PROFESSIONAL ACTIVITIES

### Seminars and Conferences

2022	EALE
2023	ASSA, MEA, ESSGNC, EALE, SIE
2024	MEA, Jyväskylä, FIT, TUNI
2025	KT päivät, INTEDU (forthcoming)

### Refereeing

**Economic Policy** 

## HONOURS, SCHOLARSHIPS, AND FELLOWSHIPS

2019 - 2020	PhD Completion Grant, European University Institute
2016 - 2020	PhD Grant, Italian Ministry of Foreign Affairs
2015	Distinction, Master's program at the UCL

### **SKILLS**

Research software: Stata, R, Python, Matlab, PLINK, vcftools

Computer skills: LaTeX, Git, Shell scripting
Language skills: English, Russian, Kazakh

### **PUBLICATIONS**

2025 "Does Intelligence Shield Children from the Effects of Parental Unemployment?"; in Economics of Education Review 104

#### WORKING PAPERS

#### 2024 "Individual Characteristics and Earnings" with Aldo Rustichini

We study how observed individual characteristics afect earnings of individuals. The characteristics we study are individual personality traits (including cognitive ability) and family background. We make use of data providing information on the individual characteristics rather than estimating them as latent variables.

Their contribution may be indirect (facilitating the acquisition of education) or direct (perhaps afecting productivity). We estimate the fraction of these two contributions through regression analysis and structural model, and find that the contribution of both pathways is significant.

These characteristics may be in part determined endogenously. To estimate the proportion due to original individual characteristics we use measures provided by Polygenic Scores for education years and fuid intelligence. The marginal efects of these scores is significant and high. The indirect contribution (operating though acquisition of college) is around one third of the total efect.

#### 2024 "Political Participation and Party Preferences" with Aldo Rustichini

Political behavior of citizens includes political participation and preferences. We show with UK data that political behavior is afected by individual characteristics that are also determining educational attainment, including cognitive abilities and intelligence.

Our analysis reconciles the rational choice assumption with the acquisition of costly political information, which would otherwise give only negligible benefts. We disentangle the causal pathways by identifying efects operating directly and those operating indirectly, in particular through education and income. We address the issue of endogeneity of cognitive skills using polygenic scores, and show that an important component of the causal factors is genetic.

### 2023 "Selection and Roy Model" with Aldo Rustichini

We model the evolution of the distribution of genotypes in European populations over the past 14 thousand years. In our model, the evolution is driven by selection operating after a shift in the productivity of agriculture, induced by a well-documented climate change, in a standard Roy model in which individuals self-select into one of two sectors (agriculture or hunter-gathering).

We then test the model in two data sets, one of ancient and one of modern DNA datasets, matching the observed distributions of genetic variables of interest (allele frequencies and lineages). The model extends a standard Wright-Fisher model. We estimate the model and find support for our main hypothesis, namely that a major shift in the distribution of allele frequencies (in a direction favouring higher cognitive skills) occurred after the climate warming at the end of the Younger Dryas (11,600 years BPE) made agriculture more productive than hunter-gathering.

The general implication we draw is that historical transformations (in our case climate change and technological change) can affect the distribution of genotype and thus institutions, rather than the other way round.

#### WORK IN PROGRESS

2025 "Genetics and Employee Sorting" with Stefano Lombardi, Jarkko Harju, Aldo Rustichini, Kristina Zguro and Andrea Ganna

2025 "Large Language Models and Algorithmic Collusion" with Hanno Kase and Iason Kotsoulis

#### RESTING PAPERS

- "Multiple Imputation of University Degree Attainment" with Johanna L. Reuter
- "Fertility Choice and Intelligence in Developed Countries" with Michele Boldrin and Aldo Rustichini