

NIKITA PAVLOV

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SUMMARY

I am a fourth-year Ph.D. student in Economics at Penn State University with strong research interests in structural labor economics and theoretical econometrics. My main programming language is Julia, but I'm also familiar with R, Python, MATLAB, and SQL through projects and coursework. Prior to my Ph.D. enrollment, I gained rich and diverse experience as an instructor at my home university and as a project manager.

EDUCATION

Ph.D. in Economics The Pennsylvania State University, USA. GPA: 3.8/4.0	2021 - Present
M.S. in Economics Higher School of Economics University, Russia.	2017 - 2019
B.A. in Management Higher School of Economics University, Russia.	2013 - 2017

RESEARCH INTERESTS

- Labor Economics
 - Household decision making, child human capital formation.
- Theoretical Econometrics
 - Design of optimal statistical treatment assignment rules, empirical process theory.

EMPLOYMENT

Graduate Research Assistant , <i>Department of Economics</i> , Penn State, US	2022 - 2024
<ul style="list-style-type: none">• Professor Ewout Verriest, Summer 2024<ul style="list-style-type: none">– Cleaned and filtered the Panel Study of Income Dynamics (PSID) dataset (5k×40k);– Designed a structural model linking parenting styles to children's adult outcomes, with individual characteristics as moderators.• Professor Patrik Guggenberger, Summer 2022 & 2023<ul style="list-style-type: none">– Co-authored the paper "<i>Minimax regret treatment rules with finite samples when a quantile is the object of interest</i>".	
Assistant , <i>Department of Theoretical Economics</i> , Higher School of Economics, Russia	2018 - 2021
<ul style="list-style-type: none">– Taught Economics courses at both undergraduate and graduate levels;– Received the "<i>Best Teacher of the Higher School of Economics University 2021</i>" award.	
Project Manager , Central Universal Department Store (TsUM), Russia	2016 - 2017
<ul style="list-style-type: none">– Coordinated efforts between analytics and other departments;– Developed project management guidelines for the HR department, based on PMBOK best practices.	

Please visit my website at nmp5624.github.io for the most recent versions of my working papers.

"Child Cognitive and Mental Development under Parental Threat of Corporal Punishment"

Prospective Job Market Paper

Abstract: In this paper, I construct and estimate a dynamic model of child development where both the child and parents choose inputs that affect the child's human capital formation. In each period, parents act as Stackelberg leader and, in addition to time and monetary investments in the child's development, also decide whether to announce a corporal punishment disciplinary scheme, which takes effect if the child misbehaves. Given parental choices, the child acts as a Stackelberg follower and allocates her time between self-investment, regular leisure, and delinquent leisure (misbehavior). Both the usage of the corporal punishment scheme itself and the execution of corporal punishment are allowed to influence the evolution of the cognitive and mental stability dimensions of child's human capital. Using the estimated model parameters, I conduct counterfactual analyses to study how children's human capital evolution would respond to a ban on corporal punishment, a ban on the threat of corporal punishment, and the introduction of conditional government subsidies for households with high levels of children's mental stability and/or cognitive skills.

"From Rules to Hugs: The Impact of Parental Strictness and Warmth on Juvenile's Time Allocation"

3rd Year Paper

Abstract: In this paper, I study the effects of parental strictness and warmth on juveniles' time allocation and human capital formation. I build a structural model where a juvenile solves a time allocation problem by choosing how much time to spend on studying, delinquent leisure, and regular leisure. Her returns from studying and delinquent leisure depend on corresponding dimensions of human capital, namely educational capital and delinquent capital. I assume that parental strictness and warmth are capital inputs and use instrumental variables (IV) to estimate their impact on the corresponding measures of human capital. My estimates suggest that warmth has a strong positive impact on educational capital, whereas strictness has a strong negative impact on delinquent capital. Simulations reveal that although warmth does not discourage delinquent leisure as much as strictness does, it greatly incentivizes studying both through a direct effect on educational capital and through emerging time substitution patterns. At the same time, the strong decrease in delinquent leisure induced by strictness is compensated mostly by an increase in regular leisure rather than studying. The implications of these results for human capital formation are discussed.

"Minimax regret treatment rules with finite samples when a quantile is the object of interest"

with Patrik Guggenberger and Nihal Mehta. At consideration in Econometric Theory.

Abstract: Consider the setup in which a policymaker is informed about the population by a finite sample and based on that sample has to decide whether or not to apply a certain treatment to the population. We work out finite sample minimax regret treatment rules under various sampling schemes when outcomes are restricted onto the unit interval. In contrast to Stoye (2009) where the focus is on maximization of expected utility the focus here is instead on a particular quantile of the outcome distribution. We find that in the case where the sample consists of a fixed number of untreated and a fixed number of treated units, any treatment rule is minimax regret optimal. The same is true in the case of random treatment assignment in the sample with any assignment probability and in the case of testing an innovation when the known quantile of the untreated population equals $1/2$. However if the known quantile exceeds $1/2$ then never treating is the unique optimal rule and if it is smaller than $1/2$ always treating is optimal. We also consider the case where a covariate is included.

"Asymptotically optimal statistical treatment rules when a quantile is the object of interest"

Abstract: Researchers are often presented with sufficient information to construct a class of consistent treatment assignment rules, all of which drive the loss function to zero in the limit. The seminal paper by Hirano and Porter (2009) develops large sample results to compare rules within such a class and derives treatment rules that are asymptotically optimal in the sense of minimizing mean sample loss. This paper follows Hirano and Porter's limiting experiment approach, but instead of the mean sample loss, it focuses on an arbitrary quantile of the sample loss distribution. As a result, it provides asymptotically optimal Bayes and minimax sample quantile rules for some common classes of loss functions, both in parametric and semiparametric settings.

TEACHING

As Instructor (Higher School of Economics University):

- 2020/2021:
Advanced Macroeconomics (Master’s programme; Faculty of Economic Sciences), Fall 2020;
Macroeconomics 2 (Bachelor’s programme; Faculty of World Economy and International Affairs), Fall 2020;
Economics (Bachelor’s programme; Faculty of Communications, Media, and Design), Spring 2021;
Economics (Bachelor’s programme; Faculty of Humanities), Spring 2021.
- 2019/2020:
Advanced Macroeconomics (Master’s programme; Faculty of Economic Sciences), Fall 2019;
Macroeconomics (Bachelor’s programme; Graduate School of Business), Spring 2020;
Macroeconomics 1 (Bachelor’s programme; Faculty of Economic Sciences), Spring 2020.
- 2018/2019:
Research Seminar “Economic Thinking” (Bachelor’s programme; Faculty of Economic Sciences), Fall 2018;
Macroeconomics (Minor; Faculty of Economic Sciences), Spring 2019.

As Graduate Teaching Assistant (Penn State University):

- Environmental Economics (ECON 428, undergraduate), Fall 2024;
- Economics of Public Expenditures (ECON 425, undergraduate), Spring 2024;
- Monetary Theory and Policy (ECON 451, undergraduate), Fall 2022 & 2023;
- Corporate Economics (ECON 444, undergraduate), Spring 2023.

OTHER INFORMATION

Visa Status:	F-1;
Citizenship:	Russian Federation;
Languages:	English (fluent), Russian (native);
Computer Skills:	Julia, R, Python, MATLAB, SQL, L ^A T _E X, MS Office.