

YIFEI LUO

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EDUCATION

Toulouse School of Economics, Toulouse, France
Master in Applied Economics
M1 thesis: Immigrants selection and consequences

2023 to 2025 (expected)

Case Western Reserve University, Cleveland, USA
MS in Mathematics Qualification exam in Analysis and MS exam in Matrix Analysis, and Topology.
BS in Mathematics with minor in history
BA in Economics with honor

2019 to 2023

RESEARCH INTERESTS

I do economic research in behavioral, labor, GenAI, economic history, and innovation. I use economic data and model to study bounded rationality, religion, source of techno-optimism, and behaviorally induced policy preference.

WORKING PAPER

[Persistent Shadows of the 1932–34 Ukrainian Famine: Trade Disruption, Inequality, and Identity Formation](#)

Summary: This paper estimates the long-run effects of the 1932–34 Ukrainian famine on regional trade and inequality. I instrument famine intensity with exogenous weather variation, using LASSO to select for a pre-specified set of relatively strong predictors, and report just-identified and—where feasible—overidentified specifications. Regions with higher famine mortality exhibit persistently weaker export capability and higher within-region inequality (conservatively proxied by registered vehicle values). On the import side, famine exposure reduces Russia-linked trade while reallocating imports toward the EU, the United States, and China. A mechanism consistent with theory and evidence links intergenerationally transmitted famine memory to stronger Ukrainian identity, which lowers the willingness to maintain Russia-centric ties and is associated with higher inequality; export shortfalls arise because famine locked local economies into lower value-added sectors and depressed political participation, weakening the institutional capacity needed for export upgrading. Cohort patterns and the interaction between schooling programs and family transmission document heterogeneous persistence across generations. Results are robust to classical IV diagnostics, placebo tests, migration corrections, and falsification exercises using spatially matched random outcomes.

[Effects of Armed Conflict on Agricultural Productivity—Evidence from Syrian Civil War](#)

Summary: We investigate the shock suffered by the primary sector in Syria, following the outbreak of the civil war in March 2011. We incorporate remote sensing dataset with machine learning (ML) to surmount the data unavailability in weak government such as Syria to evaluate the agricultural shock when the armed conflict is still under process. We split our analysis locally and at larger area. Using Staggered Difference-in-Differences (SDID) at patch level (local), we find temporary negative war effects on agricultural activities for zones directly affected by the combats, valid only in the short run (5 years). We also note anticipation effects in the form of preventive migration flows. We then adopt a *patch-donuts* strategy to quantify the spillovers in the territories indirectly affected. The externalities are persistently negative, thereby we recommend policymakers to aid both the locality receiving directly the conflict but also the adjacency. We are unable to quantify the maximal spillover effect of conflict due to our insufficient construction. Lastly, at sub-district level we run Two-Way Fixed Effects and IV (using distance to closest city as instrument) to gauge the impact embedding local equilibrium effects. There is suggestive evidence of the conflict-related damages to agriculture, especially when the Syrian State is involved in threatening military operations.

[Elite Ideology and the Dynamics of Cultural Dominance](#)

Summary: I develop a dynamic model to study the interaction between intergenerational cultural value transmission and the elite's choice of regime ideology. The model allows regimes to be stationary, time-varying, and ultimately endogenously chosen by elites. I first show that, under any regime choice, the initial distribution of cultural values will almost surely lead to the extinction of one value. I then analyze a two-period regime sequence, demonstrating that the duration of the initial regime is critical in preventing ideological backlash when institutions change. I characterize the minimum duration required for early-period policymakers to ensure that their preferred cultural value dominates in the long run, regardless of future regime shifts. Finally, I endogenize regime choice by modeling elite preferences, showing how the initial cultural allocation determines whether long-term policy stabilizes or cycles, causing fluctuations in the dominant cultural value.

RESEARCH IN PROGRESS

Cognitive richness, learning models and evolutionarily stable Berk–Nash equilibrium

Summary: Real world decision making often times entail bounded rationality due to feasibility restriction of mental model. I adapt classical Berk-Nash equilibrium in decision making and augment it with cognitive richness (volume of mental model) and learning of alternative models. The setting allows me to characterize evolutionarily stable distribution of the product measure of reference frame and cognitive richness under different objective environment. Being mentally rich bear incremental cost over the task volume thereby negatively affect the fitness. Finally, I apply the equilibrium definition over various types of applications.

Behavioral selection of immigrants

Summary: I developed theory explaining the set of behavioral characteristics that determines one's migration decision from the sending country to the destination country in addition to wage and migration costs. I adapted a method that employs survey data to mark a ranking of individuals within the country and that specific dimension. I use WVS, ESS, Afrobarometer, and EVS to empirically verify the migration decision and quantify how much does the behavioral costs/benefits distorts one's decision relative to pure monetary returns.

Clustering directed graphs

The wandering continental philosophy and thriving analytic philosophy

SCHOLARSHIP AND AWARD

Jean-Jacques Laffont Scholarship, TSE
Economics achievement award, CWRU

2023 to 2025
2023

COMPUTER SKILLS

- Various vibe coding platform such as Codex, Cursor, iflow, Qoder.
- OpenAI API, Gemini API, etc.
- LaTeX, Stata, R, Python (computation, web scraping, plotting, integration with QGIS, phonetic matching, semantic matching, various ML model), ArcGis, QGIS, Mathematica, docker.

LANGUAGE

Native in Mandarin, proficient in English, and elementary knowledge in French and Spanish. Russian and Ukrainian symbol and reading.