# **JEREMY MAJEROVITZ**

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#### **Academic Positions**

2024 Postdoctoral Research Associate, University of Notre Dame

2022–2024 Associate Economist (Postdoc), St. Louis Federal Reserve

2022–2024 Visiting Scholar (Postdoc), Washington University in St. Louis

#### **Education**

2022 Massachusetts Institute of Technology

Ph.D. in Economics

2015 STANFORD UNIVERSITY

B.A. with Honors in Economics, Secondary Major in Math

#### **Fields**

Primary: Development and Macroeconomics

Secondary: Applied Econometrics

# **Teaching Experience**

2021, 2022 14.76 - Firms, Markets, Trade, and Growth (Undergraduate and Master's Level)

2019, 2022 14.772 - Development Economics: Macroeconomic Issues (PhD Level)

2018 14.771 - Development Economics: Microeconomic Issues (PhD Level)

2018 14.75 - Political Economy and Development (Undergraduate Level)

#### Fellowships, Honors, Grants, and Awards

2022 Weidenbaum Center Small Grant

2019 Bank of Mexico Summer Research Program

2019–2020 Jerry A. Hausman Graduate Dissertation Fellowship

2017 George and Obie Shultz Fund

2016–2020 NSF Graduate Research Fellowship

2015 Sterling Award for Scholastic Achievement

2015 Firestone Medal for Excellence in Undergraduate Research

#### **Professional Activities**

### Presentations

2025: ASU Annual Macroeconomics Conference (Scheduled)

2024: Boston University, Oxford CSAE Annual Conference, PACDEV, MWIEDC, Midwest Macro, North American Summer Econometric Society Meeting, PSE-CEPR Development Economics Symposium, SED Annual Meeting

2023: SED Annual Meeting, Barcelona Summer Forum, KU Leuven Summer Event, IGC/Yale Firms Trade and Development Conference, NEUDC

2019: Bank of Mexico Conference on Financial Stability

#### Other Activities

Referee for Journal of Development Economics

Organizer of MIT Development Tea (2018–2022)

Co-Founder of EconREFs (Group devoted to graduate student mental health and well-being; 2018–2021)

Co-Organizer of MIT Application Assistance and Mentoring Program (Program for prospective PhD applicants from underrepresented backgrounds; 2020–2021)

#### **Publications**

"Childhood Environment and Gender Gaps in Adulthood" (with Raj Chetty, Nathan Hendren, Frina Lin, and Ben Scuderi). 2016. *American Economic Review Papers and Proceedings* 106(5): 282-88.

#### **Working Papers**

#### "Measuring Misallocation with Experiments" (with David Hughes)

**Abstract:** Misallocation of inputs across firms has been proposed as a reason for low levels of development in some countries. However, existing work has largely relied on strong assumptions about production functions in order to estimate the cost of misallocation. We show that, for arbitrary production functions, the cost of misallocation can be expressed as a function of the variance of marginal products. Using an RCT that gave grants to microenterprises, we estimate heterogeneous returns to capital by baseline characteristics, and provide a lower bound on the total variance of returns to capital. This lower bound is a nonlinear function of the parameters from a linear IV model, and we show that standard methods (e.g. the delta method or projection) fail in this setting. We provide novel econometric tools that provide uniformly valid confidence intervals for nonlinear functions of parameters. We find evidence for sizable losses from misallocation of inputs across the firms we study, although the magnitude depends critically on which inputs we allow to be reallocated. We estimate that optimally reallocating capital would increase output by 22%, while optimally reallocating all inputs would increase output by 301%.

"A Q-Theory of Banks" (with Juliane Begenau, Saki Bigio, and Matías Vieyra). Conditionally Accepted at Review of Economic Studies

Abstract: We introduce a dynamic bank theory featuring delayed loss recognition and a regulatory capital constraint, aiming to match the bank leverage dynamics captured by Tobin's Q. We start from four facts: (1) book and market equity values diverge, especially during crises; (2) Tobin's Q predicts future bank profitability; (3) neither book nor market leverage constraints are strictly binding for most banks; and (4) bank leverage and Tobin's Q are mean reverting but highly persistent. We demonstrate that delayed loss accounting rules interact with bank capital requirements, introducing a tradeoff between loan growth and financial fragility. Our welfare analysis implies that accounting rules and capital regulation should optimally be set jointly. This paper emphasizes the need to reconcile regulatory dependence on book values with the market's emphasis on fundamental values to enhance understanding of banking dynamics and improve regulatory design.

#### "Misallocation and the Selection Channel"

Abstract: An important determinant of aggregate productivity is the selection channel: the process by which less efficient firms are driven out of the market by more efficient firms. Conventional wisdom suggests that markets in developing countries are more sclerotic, allowing inefficient firms to survive that would have exited in a developed country. I provide a tractable model to examine the importance of the selection channel, and show how to calibrate it to panel data on firms. I use this model to show that the effect of the selection channel on aggregate productivity is approximately equal to the average difference in log productivity between stayers and exiters, which can be measured easily in firm panel data. Results for Indonesia, Spain, Chile, and Colombia suggest that Indonesia could raise its aggregate productivity by roughly 30% if its firm exit process became as selective as Spain's. However, cross-country estimates suggest that the selection channel is not an important explanation for cross-country differences in output per capita.

# "Financial Frictions with Risk, Irreversible Capital, and Default" (with Francisco Buera, Yongseok Shin, and Kuldeep Singh)

**Abstract:** Risk is an important factor that affects investment decisions, especially for undiversified entrepreneurs in less developed economies. Yet standard macro models of financial frictions do not incorporate risk: short-term returns are known in advance, and investment is fully reversible. Thus, even if entrepreneurs are risk averse and credit constrained, they will invest all of their assets in the firm, until the marginal product of capital equals the interest rate. As a result, standard models often find that productive entrepreneurs quickly save their way out of credit constraints, limiting the effect of financial frictions on output and aggregate productivity. We incorporate risk into a model of financial frictions, by making investment partially irreversible. Productive entrepreneurs accumulate capital substantially more slowly than in the first-best, leading to a reduction in aggregate productivity. Credit can play a role in undoing these frictions if firms have an option to default. Default creates a state-contingent contract, in which the entrepreneur repays if productivity stays high and defaults if productivity falls; this encourages investment and improves welfare through risk-sharing with the bank.

# "How Much Should We Trust Regional-Exposure Designs?" (with Karthik Sastry)

**Abstract:** Many prominent studies in macroeconomics, labor, and trade use panel data on regions to identify the local effects of aggregate shocks. These studies construct regional-exposure instruments as an observed aggregate shock times an observed regional exposure to that shock. We argue that the most

economically plausible source of identification in these settings is uncorrelatedness of observed and unobserved aggregate shocks. Even when the regression estimator is consistent, we show that inference is complicated by cross-regional residual correlations induced by unobserved aggregate shocks. We suggest two-way clustering, two-way heteroskedasticity- and autocorrelation-consistent standard errors, and randomization inference as options to solve this inference problem. We also develop a feasible optimal instrument to improve efficiency. In an application to the estimation of regional fiscal multipliers, we show that the standard practice of clustering by region generates confidence intervals that are too small. When we construct confidence intervals with robust methods, we can no longer reject multipliers close to zero at the 95% level. The feasible optimal instrument more than doubles statistical power; however, we still cannot reject low multipliers. Our results underscore that the precision promised by regional data may disappear with correct inference.

# "Consolidation on Aisle Five: Effects of Mergers in Consumer Packaged Goods" (with Anthony Yu)

Abstract: We study the effects of the average merger in the consumer packaged goods industry, a sector making up over 10% of US GDP. Using an event-study design and linked retail scanner data from hundreds of consummated mergers, we find that mergers raise prices at the target by 0.9%. Under nested CES demand, we provide sufficient statistics to recover average consumer welfare effects as a function of effects on price, store and product availability, and firm exit. Accounting for availability and exit is quantitatively important. The decline in consumer welfare is equivalent to a 1.9-3.7% price increase at the target firm.

"Risky Business and the Process of Development" (with Paco Buera, Yongseok Shin, and Kuldeep Singh)

Abstract: Risk is an important factor that affects investment decisions, especially for undiversified entrepreneurs in less developed economies. Yet standard macro models of financial frictions do not incorporate risk: short-term returns are known in advance, and investment is fully reversible. Thus, even if entrepreneurs are risk averse and credit constrained, they will invest all of their assets in the firm, until the marginal product of capital equals the interest rate. As a result, standard models often find that productive entrepreneurs quickly save their way out of credit constraints, limiting the effect of financial frictions on output and aggregate productivity. We incorporate risk into a model of financial frictions, by making investment partially irreversible. Productive entrepreneurs accumulate capital substantially more slowly than in the first-best, leading to a reduction in aggregate productivity. Credit can play a role in undoing these frictions if firms have an option to default. Default creates a state-contingent contract, in which the entrepreneur repays if productivity stays high and defaults if productivity falls; this encourages investment and improves welfare through risk-sharing with the bank.

#### **Work in Progress**

"The Cost of Capital and Misallocation in the United States" (with Miguel Faria-e-Castro and Julian Kozlowski)

"Estimating Trends in Intergenerational Mobility by Race Using Multiple Data Sources"