Jean-Felix Brouillette

jfbrou@stanford.edu | www.jfbrouillette.com | github.com/jfbrou

Stanford University 579 Jane Stanford Way Stanford, CA, 94305-6072 (650) 289-8443

Education

2024 (expected) Ph.D. in Economics, Stanford University

2018 M.Sc. in Economics, HEC Montréal
2016 B.B.A. in Economics, HEC Montréal

Dissertation Committee

Prof. Peter J. Klenow

Economics Department, Stanford University klenow@Stanford.edu (650) 725-8169

Prof. Christopher Tonetti

Graduate School of Business, Stanford University tonetti@stanford.edu (650) 725-7985

Prof. Charles I. Jones

Graduate School of Business, Stanford University chad.jones@stanford.edu (650) 725-9265

Research and Teaching Fields

Primary field: **Macroeconomics**

Secondary field: Industrial organization

Working Papers

"Markups, Firm Scale, and Distorted Economic Growth." (Job market paper) With Mohamad Adhami and Emma Rockall.

We study the dynamic consequences of markups for long-run economic growth in a general equilibrium

theory of firm-driven endogenous technological change. In this environment, differentiated firms engage in monopolistic competition, charge heterogeneous markups and make forward-looking investments in R&D to improve their process efficiency. Markups restrict the scale at which these firms operate and therefore reduce their incentives to invest in R&D. With dispersion in markups, both the aggregate and cross-firm allocations of such investments are inefficient. Using firm-level administrative data from France to discipline our model, we find that size-dependent subsidies inducing firms to operate at the efficient scale increase the long-run growth rate of productivity by 1.2 percentage points. Nearly 75% of this faster productivity growth can be achieved by simply reallocating R&D resources across firms, revealing that it is the dispersion in markups, rather than their average level, that is more distortionary to economic growth.

"Women Inventors and Economic Growth."

In 1976, 4% of inventors in the U.S. were women, and by 2020, that fraction had only moved up to 12%. Under the natural assumption that there are no intrinsic differences in inventive potential across genders, the scarcity of women in innovation reveals that the U.S. is missing out on some of its brightest minds. This raises two questions: (1) What are the barriers faced by those "lost" Jennifer Doudnas? and (2) How costly is the resulting misallocation of inventive talent for aggregate productivity and welfare? To tackle those questions, I develop a theory of semi-endogenous growth in which individuals with heterogeneous talent choose between a career in research or production. However, three gendered barriers can deter or prevent women from pursuing their comparative advantage. They may face different forms of discrimination in the labor market, be confronted with higher obstacles to human capital formation or lack the opportunities and role models to become innovators. Interpreting micro-level data on the universe of U.S. inventors through the lens of this framework, I find that the underrepresentation of women in innovation is virtually all due to a lack of exposure to innovation. Women and men inventors are just too similarly productive and educated for distortions operating through selection or human capital to play a prominent role. Taking advantage of the structure of this theory, I find that lifting all barriers to female innovation would increase U.S. income per person by 8.6% in the long-run. Accounting for transition dynamics reveals that this policy would be equivalent to permanently raising everyone's consumption by 2.7%.

"Race and Economic Well-Being in the United States." With Charles I. Jones and Peter J. Klenow. NBER Working Paper 29539, December 2021.

We construct a measure of consumption-equivalent welfare for Black and White Americans. Our statistic incorporates life expectancy, consumption, leisure, and inequality. Based on this incomplete list of factors, welfare for Black Americans was 43% of that for White Americans in 1984 and rose to 59% by 2019. Going back further in time (albeit with more limited data), the gap was even larger, with Black welfare equal to just 29% of White welfare in 1940. On the one hand, there has been remarkable progress for Black Americans: the level of their consumption-equivalent welfare increased by a factor of 26 between 1940 and 2019, when aggregate consumption per person rose a more modest 5-fold. On the other hand, despite this remarkable progress, the welfare gap in 2019 remains disconcertingly large. The gap appears even larger when we make rough attempts to incorporate omitted factors such as morbidity, incarceration, and unemployment.

Teaching Experience

2022 **Teaching Assistant**, Stanford University

Econ 52 (undergrad. macroeconomics) for Prof. Peter J. Klenow

Outstanding Teaching Assistant Award

2016–2018 **Teaching Assistant**, HEC Montréal

Math 80816 (grad. econometrics) for Prof. Daniel Parent

Econ 20852 (undergrad. macroeconomics) for Prof. Nicolas Vincent

Econ 20806 (undergrad. econometrics) for Prof. Benoit Dostie

Relevant Positions

2019–present Research Assistant, Stanford University

for Prof. Peter J. Klenow and Prof. Charles I. Jones

2017–2018 **Research Assistant**, Northwestern University

for Prof. Nicola Persico

Fellowships and Honors

2023	B.F. Haley and E.S. Shaw Fellowship for Economics at SIEPR, Stanford University
2023	George P. Shultz Dissertation Support Fund, Stanford University
2023	Dissertation Fellowship, Federal Reserve Board of San Francisco
2022	Outstanding TA Award, Econ 52, Stanford University
2022	Young Scholar, Lindau Nobel Laureate Meetings
2022	Innovation Research Boot Camp, NBER
2018	Graduate Fellowship, Stanford University
2018–2022	Doctoral Fellowship, SSHRC and FRQSC
2016–2018	Master's Scholarship, SSHRC and FRQSC
2012–2013	National Sprint Canoeing Champion (U20), Canoe Kayak Canada

Professional Activities

Referee for: Econometrica, American Economic Review: Insights, Journal of Political Economy Macroeconomics