

## Soumitra Shukla

**Address:** Department of Economics  
Yale University  
New Haven, CT 06520-8268

**Telephone:** +1-203-809-8245

**E-mail:** [soumitra.shukla@yale.edu](mailto:soumitra.shukla@yale.edu)

**Web page:** [soumitrashukla.github.io](https://soumitrashukla.github.io)

**Citizenship:** India, F-1 Visa

**Fields of Concentration:**  
Labor Economics  
Applied Microeconomics

**Desired Teaching:**  
Labor Economics  
Applied Econometrics  
Big Data Analytics  
Public Policy

**Comprehensive Examinations Completed:**  
2017 (Oral): Labor Economics (*with distinction*) and Industrial Organization  
2016 (Written): Microeconomics and Macroeconomics

**Dissertation Title:** *Rookie Market: Unpacking the Black Box of Firm-Worker Matching*

**Committee:**  
Prof. Joseph Altonji  
Prof. Costas Meghir  
Prof. John Eric Humphries

**Expected Completion Date:** May 2021

**Degrees:**  
Ph.D., Economics, Yale University, 2021 (expected)  
M.Phil., Economics, Yale University, 2017  
M.A., Economics, Yale University, 2016  
B.S. Economics and Mathematics, *with High Distinction*, University of Minnesota

**Fellowships, Honors and Awards:**  
University Dissertation Fellowship, Yale University, 2020-2021

University Fellowship, Yale University, 2015-2020  
Carl Arvid Anderson Prize Fellowship, Yale University, 2019–2020  
Cowles Foundation Fellowship, Yale University, 2015–2019  
Raymond Powell Prize (for teaching), Yale University, 2018–2019  
Lester Page Hoole Fellow, Yale University, 2017-2018  
Ella Thorp Scholarship, University of Minnesota, 2014-2015  
Linda and Ted Johnson Research Fellowship, University of Minnesota, 2014-2015  
Phi Beta Kappa (top 2% of class), University of Minnesota, 2014  
Talle Family Scholarship, University of Minnesota, 2013-2014  
Stockman Scholarship, University of Minnesota, 2012-13

**Research Grants:**

Cowles Foundation Structural Microeconomics Program Research Grant, 2017-present

**Teaching Experience:**

Spring 2018-2020, T.A. to Prof. John Eric Humphries, Econometrics (Undergraduate)  
Fall 2018, T.A. to Prof. Michael Booser, Econometrics (Graduate)  
Fall 2017, T.A. to Prof. Yusuke Narita, Econometrics (Undergraduate)

**Research and Work Experience:**

Research Assistant, to Prof. Yusuke Narita, Yale University, Summer 2017  
Research Assistant, to Prof. Joseph Altonji, Yale University, Summer 2016  
Research Assistant, to Dr. Rakesh Mohan, Yale University, Fall 2016-Spring 2017

**Working Papers:**

“Between College and That First Job: Designing and Evaluating Policies for Hiring Diversity”, *Job Market Paper*

**Work In Progress:**

“Do Nice People Finish Last? Socio-Emotional Skills, Academic Performance, Job Search, and Placements at a Top U.S. Business School” with John Eric Humphries.

“Informality and Investment in Developing Countries” with Rafael Dix-Carneiro, Costas Meghir and Jean-Marc Robin.

**Pre-PhD Publications:**

“Petviashvili’s Method for the Dirichlet Problem” (2016) [with D. Olson, G. Simpson and D. Spirn], *Journal of Scientific Computing*, Volume 66(1), 296-320.

**Languages:**

Hindi (native), English (fluent).

**Programming Skills:**

R, Julia, Python, C++, SQL, Unix, Distributed Computing

## References

Prof. Joseph G. Altonji  
Yale University  
Department of Economics  
New Haven, CT 06520  
PO Box 208281  
Phone: +1 (203) 687 6077  
[joseph.altonji@yale.edu](mailto:joseph.altonji@yale.edu)

Prof. Costas Meghir  
Yale University  
Department of Economics  
New Haven, CT 06520  
PO Box 208281  
Phone: (+1) 646 532 9154  
[c.meghir@yale.edu](mailto:c.meghir@yale.edu)

Prof. John Eric Humphries  
Yale University  
Department of Economics  
New Haven, CT 06520  
PO Box 208281  
Phone: +1 (773) 633 8483  
[johneric.humphries@yale.edu](mailto:johneric.humphries@yale.edu)

## Dissertation Abstract

### **Between College and That First Job: Designing and Evaluating Policies for Hiring Diversity, [Job Market Paper]**

In India's urban labor markets, disadvantaged castes earn 15% less than comparable advantaged castes, with the largest disparities concentrated in the private sector. Such disparities remain pronounced despite widespread and effective affirmative action policies in college admissions. Moreover, there is no empirical evidence evaluating compensatory hiring practices for disadvantaged castes.

This paper studies policies to reduce caste disparities in hiring. To do so, I employ novel data on every stage of the job placement process of an elite technical college in India, half of which is comprised of students from disadvantaged castes. The administrative data includes rich student-level information on all stages of job search, including job applications, pre-interview screening tests, job interviews, job offers, and job choices. The data also includes detailed information on pre-college test scores, previous labor market experience, within-college performance, job characteristics and demographics.

I offer the first quantitative decomposition of the earnings drop off across castes at each stage of the job placement process. I show that the compositions of job applications and job choices do not explain the earnings gap. Furthermore, I show that almost all of the earnings drop off occurs between job interviews and job offers. These findings suggest that policies which provide information about jobs, modify preferences, or improve performance at university are unlikely to close the earnings gap.

Guided by the sequential decomposition of the earnings gap, I build a model of the job placement process. The model, which incorporates both the supply of and demand for jobs, is estimated using the method of simulated likelihood. My estimates show that caste disparities in hiring are not driven by differential caste-affinity over job characteristics but by hiring decisions of firms. On average, firms need to be compensated 5% of average salary to be as likely to make job offers to disadvantaged castes as to observably similar advantaged castes.

Finally, I evaluate policies to promote hiring diversity. First, I consider a subsidy in which firms are compensated by the amount that makes them indifferent between hiring an observably identical advantaged or disadvantaged caste. Second, I consider a "pre-college intervention" policy which

equalizes the distribution of pre-college test scores across castes. To compare cost-effectiveness, I use the model estimates and calculate the change in test scores required to induce the same employment gains for the disadvantaged caste as the gains from the direct subsidy. The change in test scores is large because the model estimates imply that test scores play only a small role in hiring. Even under extremely conservative assumptions, a back of the envelope calculation based on cost estimates of improving student test scores in India shows that direct subsidies can be twice as cost-effective as the “pre-college intervention” policy.

**Do Nice People Finish Last? Socio-Emotional Skills, Academic Performance, Job Search, and Placements at a Top U.S. Business School,** with John Eric Humphries

This paper studies how socio-emotional skills affect academic outcomes and eventual job placements among MBA students at a top U.S. business school. We employ novel data comprising detailed personality measures allowing for rich patterns of sorting based on multidimensional traits. These personality measures, such as compassion, gregariousness, assertiveness etc., are assessed through forced-choice methods which provide robust safeguards against “gaming”. Next, we perform a descriptive analysis of the role of socio-emotional skills in explaining academic performance and sorting patterns in job applications, interview selection and job choices. Finally, we estimate a sequential model of the key stages of the MBA program, including academic performance, course specialization, job search and job placements. Through this model, we focus on quantifying the salience of socio-emotional skills in the business school experience. The model is of general interest and can serve as a prototype for business schools and other institutions interested in understanding the role of socio-emotional abilities in explaining academic performance and labor market outcomes.

**Informality and Investment in Developing Countries,** with Rafael Dix-Carneiro, Costas Meghir and Jean-Marc Robin

What labor market policies improve wages, allocations and welfare in the presence of a large informal sector? We answer this question in Brazil --- a country in which nearly half of the workforce is employed in the informal sector. To do so, we develop an equilibrium wage-posting model with workers who search randomly on and off the job. Firms are heterogeneous in total-factor productivity and choose their sector of location (formal or informal), wages and capital investments. The rental rate of capital may differ across sectors. Firms are monopolistic competitors in the goods market and monopsonistic competitors in the labor market, as they set both prices and wages. Market power arises from preference for diversity in the goods market and from search frictions in the labor market. Moreover, preferences are non-homothetic, so market demand depends on the entire distribution of income. We estimate the model using data on formal firms (Relação Anual de Informações Sociais -- RAIS), informal firms (Economia Informal Urbana -- ECINF), and formal and informal workers (Pesquisa Mensal de Emprego -- PME). In counterfactual simulations, we quantify the equilibrium effects on wages, allocations, and welfare of (a) increasing the cost of informality, (b) equalizing the rental rate of capital across sectors, and (c) increasing aggregate productivity, so that the economy is richer and demands lesser informal sector goods.