Jacob Howard

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Education

Ph.D. Economics, University of Colorado at Boulder, Expected May 2020

Dissertation: Essays on Endogenous Production-Network Formation and the Consequences of Globalization, in progress.
Primary Advisor: Wolfgang Keller, Committee: Jeronimo Carballo, Keith Maskus, Sergey Nigai

M.A. Economics, University of Colorado at Boulder, 2016.

M.A. Economics, University of Memphis, 2014.

B.A. Economics, International Studies and Economics, University of Memphis, 2012.

Fields of Research

International Trade, Network Economics, Wages and Wage Inequality, Environmental Economics

Teaching

University of Colorado, Boulder 2016-Present

Courses Taught: Principles of Microeconomics, Intermediate Microeconomics

Employment

University of Colorado, Boulder 2014-Present

Instructor and Teaching Assistant

Research Assistant: McGuire Center for International Studies

NBER, 2016-2018

Research Assistant, NSF Grant: Trading, Institutions, Product Innovation, and Entrepreneurship

Job Market Paper

Endogenous Production Networks and the Labor Market Consequences of Globalization

This paper studies the quantitative implications of labor-market frictions in a setting where firms obtain intermediate-inputs through an endogenously formed global-production-network. I describe a model that demonstrates the role of sector-level labor-market frictions in determining the structure of firm-level production-networks. I show that decreases in relative labor-market frictions across sectors can cause sector-level estimates of production-network in-degree to double in magnitude. The model also shows how the second moment of the firm-to-firm matching function determines how wage-inequality will respond to a trade shock. I also use the model to simulate the effect of a protectionist tariff by the Home country. The model shows that a protectionist tariff can lead to increases in long-run unemployment within all sectors of the economy in Home. At the same time, the model also shows how a protectionist tariff can lead to an increase in long-run real wages for both sectors of the economy. This result is driven by the reallocation of Foreign labor across sectors in response to the tariff, which provides firms in Home access to cheap suppliers through the production-network.

Open Research Projects

The Impact of Offshoring and Outsourcing Firm Behaviors on Labor Market Outcomes

Census Project hosted at the Rocky Mountain Research Data Center

This project proposes to answer the following questions. What role do supply chains play in shaping wage inequality? How do these supply chains vary by firm productivity levels, and is there a systematic differential response of these supply chains to an international trade shock? If wages are determined by supply chains, this implies that there will be nominal wage consequences for workers in all sectors of the importing economy. How much do changes, due to trade shocks, in firm-level supply-chains spillover into non-import competing sectors? Within all sectors are there heterogeneous responses to trade shocks that vary by firm size and what are the implications of this heterogeneity?

Working Papers

Regional Environmental Quality and International Trade: The Role of Production Networks

Joint work with Doyoung Park, University of Arkansas Fayetteville

This paper studies the interaction between trade liberalization and firm production networks in shaping spatial differences in environmental quality within countries. We first analyze the effect of inter-firm trade in intermediate goods on the level of total regional emissions and average emission intensities. Second, we study the effect of trade liberalization on the spatial distribution of firms within countries in a setting with firm-to-firm production networks. We find that regions with relative proximity to foreign markets attract more firms as international trade barriers diminish. This leads to higher total emissions in such regions due to agglomeration forces, whereas spatial selection together with production networks leads to a decline in average emission intensities.

Awards

University of Colorado at Boulder:

Morris E. Garnsey Fellowship in Economics, August 2018

Sieglinde Talbott Haller Economics Scholarship, September 2017

Leslie Whittington Memorial Fellowship for Excellence in Economics, May 2016

Yordon Prize in Microeconomics, May 2016

Conference and Seminar Presentations

"Labor-Market Frictions and Endogenous Production-Network Formation", University of Memphis Economics Department (2019)

"Predicting Destination Firm Size in the Commodity Flows Survey", Rocky Mountain Research Data Center Meeting (2018)

"Supply Chains, Wages and International Trade", Southern Economic Association Annual Meeting (November 2017)

Software Skills

Julia, Matlab, Python, R, STATA

Use of Summit supercomputer at University of Colorado at Boulder

References

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