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Fields of Concentration:

Industrial Organization International Trade Applied Microeconomics

Desired Teaching:

Applied Econometrics Environmental Economics International Economics Development Economics

Comprehensive Examinations Completed:

2015 (Oral): Industrial Organization, International Trade 2014 (Written): Microeconomics, Macroeconomics

Dissertation Title: Essays on Economics of Firms and Productivity in International Markets

Committee:

Professor Pinelopi K. Goldberg (chair) Professor Judith A. Chevalier Professor Fiona M. Scott Morton

Expected Completion Date: May 2018

Degrees:

Ph.D., Economics, Yale University, 2018 (expected)M.Phil., Economics, Yale University, 2016M.A., Economics, Yale University, 2015

M.A, Law and Diplomacy, Tufts University, 2013M.B.A., Sharif University of Technology, 2009B.Sc., Industrial Engineering, Sharif University of Technology, 2007

Fellowships, Honors and Awards:

Yale University Dissertation Fellowship, 2017
Frazier Jelke Fellowship, 2015-2016
Yale University Doctoral Fellowship, 2013-present
PARSA Community Foundation Scholarship, Tufts University, 2011-2013
Robert Stewart Outstanding Student Award, Tufts University, 2012
Best Research Award, World Resources Institute, 2012
NIOC Scholarship, Sharif University of Technology, 2002-2007

Teaching Experience:

Yale University International Trade Policy, Giovanni Maggi, Spring 2017 Economics of Digitization, Glen Weyl, Fall 2016 Firms, Markets and Competition, Philip Haile, Spring 2016 Intermediate Microeconomics, Larry Samuelson, Fall 2015,

Tufts University Global Oil Markets, Spring 2013, Bruce Everett

Research and Work Experience:

Summer Associate, Cornerstone Research, Washington, D.C., 2017 Research Assistant to Prof. Costas Arkolakis, Yale University, 2014-2015 Research Assistant to Prof. Fiona Scott Morton, Yale University, 2015 Consultant, World Bank, Washington, D.C., 2013 Researcher, World Resources Institute, Washington, D.C., 2013 Researcher, Global Development and Environment Institute, Tufts University, 2011-2013 Research Assistant to Prof. William Moomaw, Tufts University, 2011 Business founder and CEO, Akam Energy, 2007-2009

Working Papers:

"When the Dust Settles: Productivity and Economic Losses Following Dust Storms" with Kowsar Yousefi, (November 2017), *Job Market Paper*

Works in Progress:

"Dust and Mortality Rate: Evidence from the Middle East", (Sept. 2017) "Manufacturers acting as Intermediaries" with Parisa Kamali, (May 2017)

Pre-Doctoral Research:

"Access to Justice for Women in the Middle East and North Africa" with Nadereh Chamlou, (Sept. 2012), *World Economic Forum Series*

"Making the Green Climate Fund's Allocations Add Up to its Ambition" with Cliff Polycarp, Alex Doukas and Neil Bird, (August 2012), *World Resources Institute Series*

Seminar and Conference Presentations:

2014-2017: Yale Industrial Organization and International Trade Prospectus Workshops

Languages:

Farsi (native), English (fluent), Spanish (beginner)

References:

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Dissertation Abstract

Chapter 1: (Job Market Paper) When the Dust Settles: Productivity and Economic Losses Following Dust Storms (with Kowser Yousefi)

Despite increasing concerns about the effects of climate change on economic growth and prosperity, we have little, persuasive, causal empirical evidence to inform us about the severity of this damage. This paper proposes a new context, in terms of both geographic region and type of pollution, to measure the economic costs associated with climate change. We provide large-scale evidence of the economic impacts of dust storms in Iran by estimating the effect of random year-to-year variation in dust exposure on manufacturing firm productivity. Dust storms deposit in regions that are far away from their points of origin, providing a unique framework in which emissions have no interaction with local economies.

Using data collected from a decade of dust storms at on-the-ground weather stations, and firm data provided by Iran's Census of Industrial Plants, we find that firms with higher exposure to dust emission exhibit negative productivity responses: one additional day of dust storm in a year results in a decline in productivity of about 0.081%, an amount equivalent to \$149 million across all firms or 0.04% of GDP of Iran. The negative impact of these storms intensifies as the outdoor area and labor size of a plant increase; the primary mitigating factors are wind speed and access to reliable transportation networks (railroad). Our estimates are robust to multiple specification checks and are precise. The analysis of the mechanisms suggests that productivity declines

mainly due to adverse impacts of dust storms on the health of the workers and to disruptions in access to input and output markets. Our paper highlights the significant spillover of environmental emissions across countries with drivers that can be traced back to climate change and political unrest in the region which has hindered multiple anti-desertification projects.

Chapter 2: Dust and Mortality Rate: Evidence from the Middle East

This paper provides evidence on impact of dust storms on mortality rates in Iran. I exploit random year-to-year variation in dust exposure across counties in Iran over a 10-year period to identify the impact. Using all-cause mortality data from all counties, I highlight the vulnerability of people with few resources and fragile health to dust storms. My findings suggest that mortality rates increase significantly in response to dust storms. I estimate that an additional day of dust storm in a year increases mortality rate by 0.15% nationwide. Furthermore, I investigate differential impacts across different age groups. I find that infants and the elderly (people above 60 years of age) are the groups most sensitive to dust exposure. The mortality data contains cause of death information as well. I document that across different causes of death, respiratory, cardiovascular and cancer related issues are the main causes associated with death in response to dust storms.

Chapter 3: Manufacturers Acting as Intermediaries (with Parisa Kamali)

An increasing majority of manufacturing firms export products that they do not produce. In other words, firms act as intermediary for their suppliers to help their products reach new markets. Using a novel panel survey of manufacturing firms located in Spain we find that on average 19% of sales of manufacturing firms are from sourced products not produced by them. Our data suggest that larger (by firm size and sales) and more productive firms have higher proportions of sales from sourced products. We also find that firms that source, reach more distant markets for both export and import. We propose a general equilibrium model capable of generating predictions consistent with these empirical findings. The novelty of our model is in allowing the firms to be both producers and intermediaries at the same time. Our results highlight that an exporter's ability to reach foreign markets may depend not just on tariffs applied to the firm's product, but on the tariffs applied to products of manufacturers that supply their inputs from the firm.