# ALEJANDRA LÓPEZ ESPINO

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#### **EDUCATION**

### The Pennsylvania State University

August 2015- present

Ph.D. Economics.

Primary fields: international trade, production networks.

Secondary fields: applied econometrics and computational economics.

### Instituto Tecnológico Autónomo de México (ITAM)

January 2015

Completed 66/78 credits toward an M.A. degree in Economic Theory.

### Instituto Tecnológico Autónomo de México (ITAM)

December 2013

B.A. Economics — economic theory track.

#### WORKING PAPERS

# Production Networks and Rules of Origin: moving from NAFTA to USMCA Job Market Paper

2023

· Rules of origin (RoOs) are a common feature of Free Trade Agreements. These rules establish the conditions that firms in member countries must satisfy to benefit from a tariff reduction when exporting to partner countries. This paper focuses on the automotive sector, wherein Regional Content Requirements (RCRs) increased on average 34 p.p. relative to NAFTA's flat requirement of 50 %. I propose a model of endogenous production networks and use a novel dataset on Mexican firm-to-firm trade to show that, to study the impact of RoOs, one must account for upstream compliance; failure to do so results in a misestimation of the policy effects. Second, the indirect effect of RoOs accounts for a large share of the aggregate policy effect. Third, on average, welfare decreases in member countries.

# Upstream Effects of USMCA's Labor Provisions: Implications for Mexican Automobile Workers Joint work with Armella Mancellari

• The USMCA requires that 40 percent of automobile value content uses labor that is paid at least \$16 per hour, five times Mexico's current average hourly wage in the sector. Through the lens of a network model, we examine three major potential margins of adjustment for upstream automobile suppliers in Mexico. First, some firms may move towards greater subcontracting to reduce the costs of directly employed labor. Second, we may observe firms substituting towards capital and away from low-skill labor. And finally, firms may choose to source inputs from outside the USMCA trade zone altogether. We study the local welfare effects on workers in Mexico's automobile industry caused by these changes.

### **EXPERIENCE**

#### **Economics Department**

Summer 2018,2022

Instructor

The Pennsylvania State University

· Introduction to Econometrics, Statistical Foundations for Econometrics.

### **Economics Department**

Fall 2015- Spring 2022 The Pennsylvania State University

Teaching Assistant

- · Undergrad-level courses on macroeconomics, microeconomics, and labor economics.
- · Masters-level course on applied microeconometrics and dissertation essay writing.

### **Economics Department**

June- December 2017
The Pennsylvania State University

Research Assistant

Dirección General, ProMéxico

May-July 2015 Secretaría de Economía Consultant

Centro de Investigación Económica

Research Assistant

August 2013- January 2015

Instituto Tecnológico Autónomo de México (ITAM)

Unidad de Política de Ingresos Tributarios January-August 2013

Research Assistant Secretaría de Hacienda y Crédito Público

Unidad de Planeación Económica de la Hacienda Pública September- December 2012

Research Assistant Secretaría de Hacienda y Crédito Público

Centro de Investigación Económica January- August 2012

Research Assistant Instituto Tecnológico Autónomo de México (ITAM)

**GRANTS** 

The Pennsylvania State University Fall 2015- Spring 2022

Teaching Assistantship

Summer 2021 Federal Reserve Bank of Chicago

Dissertation Fellowship

Mexican Central Bank Fall 2020

Dissertation Internship

**PRESENTATIONS** 

The Pennsylvania State University November, 2022

Trade and Development Student Brownbag

**Kiel Institute** December, 2021

Trade Seminar

Hitotsubashi University November, 2021

Trade Seminar

Federal Reserve Bank of Chicago August, 2021

Dissertation Fellowship Seminar

Mexican Central Bank October, 2020

Programa de Investigación de Verano

The Pennsylvania State University April, 2019

IO Student Brownbag

**TECHNICAL SKILLS** 

Spanish (native), English (Fluent), French (CEFR level C1). Languages

**Programming** R, Python, Bash, SQL, Cypher, Mathematica, Matlab, Stata.

graph-tool, neo4j, NetworkX, iGraph, Cytoscape. Graph analysis

**HPC** tools Unix/Linux package compilation (C/C++), virtual environments, job scheduling

(MOAB, SLURM), large scale processing (Spark, Arrow), parallel processing (R,

python, Matlab).

Other ArcGIS, Git, Hugo, LaTex, Vim, Zotero.