## 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.

Committee co-chairs: Jonathan Eaton and James Tybout.

## 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 prevalent component of Free Trade Agreements (FTAs), serving as prerequisites that firms in member countries must fulfill to qualify for tariff reductions on their intra-regional exports. I focus on the automotive sector, where Regional Content Requirements (RCRs) increased on average by 16 p.p. relative to NAFTA's average of 53 %. Leveraging a new dataset on Mexican firm-to-firm trade, I developed an origin calculator to show three main findings. Firstly, the Mexican value chain exhibits strong interconnectedness, with 30 % of firms serving 10 or more assemblers and contributing to a third of the transaction volume. Secondly, car part producers stand out as the most affected group within the value chain, experiencing a threefold decrease in compliance rates compared to car assemblers. Thirdly, the steep increase in RCRs is ameliorated by the roll-up provision, particularly in the realm of super-core parts and components—a provision that has recently been the subject of dispute among the FTA partners. Lastly, had the USMCA's dispute settlement panel ruled in favor of the US interpretation, the compliance rate would have halved, in contrast to the estimated 18 % decrease when the super-core roll-up is allowed.

# 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** 

Research Assistant The Pennsylvania State University

June-December 2017

May-July 2015

Dirección General, ProMéxico

Secretaría de Economía Consultant

Centro de Investigación Económica August 2013- January 2015

Instituto Tecnológico Autónomo de México (ITAM) Research Assistant

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

Federal Reserve Bank of Chicago Summer 2021

Dissertation Fellowship

Mexican Central Bank Fall 2020

Dissertation Internship

**PRESENTATIONS** 

November, 2022 The Pennsylvania State University

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** 

Languages Spanish (Native), English (Fluent), French (Fluent).

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

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

**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.

## **PERSONAL**

Citizenship Mexico (US Permanent Resident)

**Pronouns** she/her/hers

## REFERENCES

Professor Jonathan Eatonjxe22@psu.eduProfessor James Tyboutjxt32@psu.edu

Professor Fernando Parro fxp5102@psu.edu

Professor Marc Henry marc.henry@psu.edu