

ALEJANDRA LÓPEZ ESPINO

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<https://alopezespino.github.io>

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

2023

Job Market Paper

- Rules of Origin (RoOs) are a prevalent component of Free Trade Agreements (FTAs), serving as prerequisites that firms in member countries must fulfill to avail tariff reductions during exports. I focus on the automotive sector, where Regional content Requirements (RCRs) increased on average by 16 p.p. relative to the North American Free Trade Agreement (NAFTA)'s average of 53 %. Leveraging a new dataset on Mexican firm-to-firm trade, I develop 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

2023

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

Teaching Assistant

The Pennsylvania State University

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

Economics Department*Research Assistant*June- December 2017
*The Pennsylvania State University***Dirección General, ProMéxico***Consultant*May- July 2015
*Secretaría de Economía***Centro de Investigación Económica***Research Assistant*August 2013- January 2015
*Instituto Tecnológico Autónomo de México (ITAM)***Unidad de Política de Ingresos Tributarios***Research Assistant*January-August 2013
*Secretaría de Hacienda y Crédito Público***Unidad de Planeación Económica de la Hacienda Pública***Research Assistant*September- December 2012
*Secretaría de Hacienda y Crédito Público***Centro de Investigación Económica***Research Assistant*January- August 2012
*Instituto Tecnológico Autónomo de México (ITAM)***GRANTS**

The Pennsylvania State University*Teaching Assistantship*

Fall 2015- Spring 2022

Federal Reserve Bank of Chicago*Dissertation Fellowship*

Summer 2021

Mexican Central Bank*Dissertation Internship*

Fall 2020

PRESENTATIONS

The Pennsylvania State University*Trade and Development Student Brownbag*

November, 2022

Kiel Institute*Trade Seminar*

December, 2021

Hitotsubashi University*Trade Seminar*

November, 2021

Federal Reserve Bank of Chicago*Dissertation Fellowship Seminar*

August, 2021

Mexican Central Bank*Programa de Investigación de Verano*

October, 2020

The Pennsylvania State University*IO Student Brownbag*

April, 2019

TECHNICAL SKILLS

Languages

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

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.