Cristian Espinosa Diaz

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Education

2018 - Present	**PhD(c) in Economics**	
	University College London (UCL)	
2011 - 2012	**M.A. in Economics**	
	University of Chile	
2009 - 2010	**Professional Degree in Economics**	
	University of Chile	
2006 - 2009	**B.A. in Economics**	
	University of Chile	

Research Interests:

International Economics (Trade and Macroeconomics), Empirical Macroeconomics

References

Morten O. Ravn
Department of Economics
University College London
Email: m.ravn@ucl.ac.uk

Kalina Manova
Department of Economics
University College London
Email: k.manova@ucl.ac.uk

Franck Portier
Department of Economics
University College London
Email: f.portier@ucl.ac.uk

José-Víctor Ríos-Rull
Department of Economics
University of Pennsylvania
Email: vr0j@upenn.edu

Employment

2013 - 2017	**Central Bank of Chile**	
	Financial Policy Division, Financial Stability Subdivision	
	Economic and Financial Analyst	

Job Market Paper

From Protection to Retaliation: The Trade War Effect

Abstract: This paper explores the welfare costs of trade impediments imposed during Trump's presidency. These crucially depends on the accurate identification of trade elasticities—the import demand elasticity and the inverse export supply elasticity. I propose a novel instrument to identify these: retaliatory tariffs imposed on sectors different from those targeted by the trade partner. Under WTO rules, countries must match the tariff rate imposed by the trade partner but can choose which products to target. By focusing on price-elastic goods, countries maximize punishment by driving away demand from foreign competitors. Using 2018 Canadian retaliation against the U.S., I estimate an inverse export supply elasticity of zero and an import demand elasticity of 5.2, significantly higher than the 2.5, commonly reported in the literature. This suggests that trade policies tend to target extremes of the elasticity distribution: revenue-raising tariffs on inelastic goods and retaliatory tariffs on elastic goods. By constructing an interval for the average demand elasticity between 2.5 and 5.2, I estimate the U.S. welfare costs to range between \$11 and \$22 billion, potentially doubling prior estimates.

Working Papers

The Macroeconomic Effect of Modern Protectionism

Abstract: This paper estimates the dynamic effects of import tariffs on key macroeconomic aggregates in a small open economy. Due to the countercyclical profile of tariffs, the simultaneity between tariffs and GDP induces attenuation bias in the calculation of impulse response functions. To address this issue, we develop a novel instrument based on retaliatory tariffs, constructed from a database of temporary trade barriers. Retaliatory tariff rates are constrained by the World Trade Organization (WTO) to match those imposed by trade partners. The identifying assumption is that tariffs imposed by trade partners are orthogonal to the own economic activity shocks. Retaliation responds to a foreign partner's defection rather than to domestic economic conditions, allowing the identification of an exogenous import tariff shock using an SVAR-IV model. Our key findings are: (i) import tariffs are highly contractionary, with most effects occurring in the first year after the shock; (ii) the estimated effects exceed those obtained using standard timing restriction models; and (iii) the results are robust across various alternative specifications.

The Carbon Tax as an Automatic Stabilizer in a Commodity-Producing Small Open Economy, with Pablo Gutierrez

Revise and Resubmit at *Economic Analysis and Policy*

Abstract: In this paper, we evaluate the role of carbon taxes as automatic stabilizers in small open economies that specialize in the export of a single commodity, particularly those highly dependent on energy inputs for production. Specifically, we examine the carbon tax's ability to reduce the volatility of the real exchange rate and energy prices. This analysis is conducted through the lens of a DSGE model that incorporates an externality affecting GDP, originating from the burning of fossil fuels for energy generation. We assume this externality drives climate change, and the government, aiming to internalize these damages, imposes a Pigouvian tax on the energy sector. Our model is calibrated for the Chilean economy, which is highly specialized in copper production. The results show that the tax: (i) reduces energy volatility by 14% and energy price volatility by 10%, and (ii) lowers the variance of the real exchange rate by 1.8%. These stabilizing effects are robust to different shock specifications and the choice of model used to represent household consumption and the environment.

Published Papers

2017	Espinosa, C., Fernandez, J, and Vasquez, F. Firm's Stress Testing: An Application to the Chilean Non-Financial Corporate Sector (in Spanish) *Journal Economía Chilena (The Chilean Economy)*
2015	Espinosa, C., and Fornero, J. Welfare Analysis of an Optimal Carbon Tax in Chile, in C. García (Ed.) (in Spanish) *Economía y Energía: La experiencia Chilena (Book chapter)*
	Espinosa, C., and Fernandez, J., Historical Comparison of Results in the Chilean Corporate Sector (in Spanish) *Journal Economía Chilena (The Chilean Economy)*
2014	Espinosa, C., and Fornero, J. Welfare Analysis of an Optimal Carbon Tax in Chile *Journal of Economic Analysis Review*

Professional Memberships

2021 - Present	European Network for Training in Economic Research (ENTER) UCL ENTER Representative
	Economics: The Open-Access, Open-Assessment Journal Journal Reviewer (referee)
2019 - Present	Student member of the Royal Economic Society (RES)

Seminars, Workshops and Conference Presentations

2024	ENTER Seminar, University of Mannheim (*forthcoming*) MMF annual conference, Manchester Workshop on dynamic macroeconomics, Vigo ENTER Seminar, Stockholm School of Economics RES Easter School, Bristol University
2023	AASLE Conference, Taiwan Nordic Summer Symposium in Macroeconomics, Sweden ENTER Jamboree, Mannheim University Macroeconomic workshop, Surrey University
2022	ENTER Jamboree, Universitat Autonoma Barcelona (UAB)

Short Courses and Summer Schools

2024	Research Easter School for the Royal Economic Society, University of Bristol International Economics and Trade Profs. Meredith Crowley and Isabelle Mejean
2022	Economics Summer School, University of East Anglia Bayesian Structural Vector Autoregressions Profs. Martin Bruns and Robin Braun
2019	Research Easter School for the Royal Economic Society, University of Essex New Monetarist Economics: Theory, Evidence and Policy Implications Prof. Randall Wright
2015	Microeconometrics Summer School, Barcelona GSE Dynamic and Non-Linear Panel Data Models Profs. Sergi Jiménez-Martín and J.M. Labeaga

Honors and Awards

2021	PhD in Economics Scholarship, by Department in Economics at UCL
2019	MRes in Economics passed with distinction
2017	MRes/Mphil/PhD in Economics Scholarship at UCL, by Chilean Government
2011	MSc in Economics Scholarship, by University of Chile
2010	BSc in Economics and Professional Degree ranked among top 10%

Teaching Assistant Experience

2019 - Present	**University College London (UCL)**
	MSc Time Series Econometrics, Profs. Raffaella Giacomini and Saleem Bahaj
	BSc Econometrics for Macroeconomics and Finance, Prof. Dennis Kristensen
	BSc Money and Banking, Prof. Silvia Dal Bianco
2010 - 2013	**University of Chile**
	MA Econometrics I, Prof. Valentina Paredes
	BA Econometrics I, Prof. Andres Sagner
2011 - 2012	**Diego Portales University**
	MA Econometric Theory, Prof. Rodrigo Montero
	BA Macroeconomics II, Profs. Ricardo Mayer and Rodrigo Montero
2010	**Institute of Banking Studies Guillermo Subercaseaux**
	BA Financial Econometrics, Prof. Andres Sagner

Skills

Programming:	STATA, MATLAB, Dynare, Python
	LaTeX, Microsoft Office and Visual Basic
Languages:	Spanish (Native), English (Fluent)

Personal Information

| **Residence:** | London, United Kingdom |
| **Citizenship:** | Chilean |