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ACADEMIC POSITIONS	<b>The Economic and Social Research Institute (ESRI)</b> Postdoctoral Research Fellow, Competitiveness, Trade and FDI	Dublin, Ireland 11/2022–
	<b>Trinity College Dublin</b> Teaching Fellow, Department of Economics	Dublin, Ireland 09/2022–12/2022
EDUCATION	<b>Trinity College Dublin</b> Ph.D. in Economics Supervisor: Martina Kirchberger Dissertation: <i>Three Essays on Regional and Labor Economics</i>	Dublin, Ireland 2018-2023
	<b>Universidad Nacional de Colombia</b> M.Sc. in Economics	Bogota, Colombia 2015-2017
	<b>Universidad Nacional de Colombia</b> B.A. in Economics	Bogota, Colombia 2010-2014
SELECTED WORK IN PROGRESS	<b>The Effects of Investment in Training on Productivity in the European Union</b> (with Iulia Siedschlag)  Review and re-submit, <i>Review of Income and Wealth</i> <i>Abstract:</i> This paper investigates the impact of on-the-job training on labour productivity, focusing on both the direct effects of training capital accumulation and its complementarity with other intangible capital assets. While previous research has highlighted the positive role of workplace training in enhancing productivity, we extend this literature by exploring how investments in training interact with other intangible assets such as software and data bases, innovation property, brand, and organisational capital. Using data from the EUKLEMS & INTANProd databases covering 17 industries across 27 EU countries, the UK, and the US between 1995 and 2021, we employ a difference-in-differences estimation approach within a production function framework augmented to include intangible capital. Our findings reveal that training significantly boosts labour productivity, with the effect being stronger in industries with higher training investment intensity. We also demonstrate that the complementarity between training and other intangible capital is most pronounced in business services and is mainly explained by the interaction between training and other firm-specific intangible assets such as branding and organisational capital.	

SELECTED  
WORK  
IN PROGRESS

**The Impact of AI Exposure on Labor Market Outcomes and Worker Well-Being: Insights from Longitudinal Data in Australia** (with Dora Tuda) [↗](#)

*Abstract:* This paper examines the impact of artificial intelligence (AI) exposure on labour market outcomes and well-being in Australia. Using longitudinal microdata from the Household, Income and Labour Dynamics in Australia (HILDA) survey, we examine the impact of AI exposure on employment and job satisfaction outcomes from 2002 to 2022. We find that AI exposure led to a reduction in usual and desired work hours and an increase in hourly wages. AI exposed individuals also experienced lower satisfaction with job security but increased perceived autonomy. These adverse well-being effects are most pronounced among casual workers, whereas AI exposure appears to increase employment and wages for women and work hours for older workers. Our findings are robust to alternative AI exposure definitions, sample restrictions, and controls for pandemic-related labour shocks.

**Artificial Intelligence and Firm-Level Productivity: Early Evidence from a Small Open Economy** (with Iulia Siedschlag) [↗](#)

*Abstract:* Artificial Intelligence (AI) is a modern general-purpose technology (GPT) with the potential to enhance the productivity of firms in every sector of the economy. Notwithstanding the growing interest in AI as a new source of productivity growth, evidence on firm-level productivity gains from using AI is scarce. This paper contributes to filling this evidence gap using firm-level data from Ireland over 2013-2024. By leveraging a Local Projection Difference-in-Differences framework and Propensity Score Matching, we find that, at this early stage, on average, the productivity gains from AI adoption are small, delayed, and short-lived in time. However, the heterogeneity analysis reveals more substantial, immediate, and persistent effects for firms that use AI for specific purposes, particularly in marketing, business administration, and ICT security as well as for those adopting technologies that automate workflows or assist in decision-making, such as robotic process automation (RPA).

**An Industry-Level Measure of Quality-Adjusted Human Capital in the European Union** (with Michelle Jordan and Iulia Siedschlag) [↗](#)

*Abstract:* This paper examines the role of human capital in driving labour productivity growth across industries in the EU and the UK from 2010 to 2021. Building on Égert et al. (2022), we introduce a novel quality-adjusted human capital (QAHC) measure that combines both the quantity and quality of education, incorporating data from OECD's Programme for International Student Assessment (PISA) and Programme for the International Assessment of Adult Competencies (PIAAC) on test scores and mean years of schooling, alongside employment composition from the EU KLEMS & INTANProd database. We show that this measure yields reasonable output elasticities in a Stochastic Frontier model and that it has statistically significant link to labour productivity growth, particularly in goods-producing industries, unlike traditional proxies such as education attainment shares.

SELECTED PUBLICATIONS

**Spatial Equilibrium and the Regional Effects of Trade Liberalization: Evidence from Mexico**, *Economía LACEA Journal*, 24(2025,1), 1–20. [↗](#)

**Structural Change and Gender Inequality: Trade, Industry Shifts, and Regional Labor Markets in Mexico**, *Journal of Regional Science*, 65 (2025): 1303-1320. [↗](#)

**Multinational Enterprises and Between-Firm Wage Inequality Across European Regions** (with Iulia Siedschlag), *The World Economy*, 8 (2025):2447–2466. [↗](#)

**Making Hard Choices: Trilemmas and Dilemmas of Macroeconomic Policy in Latin America**, *Journal Economía Chilena (The Chilean Economy)*, Central Bank of Chile, 22(2), 22-38. [↗](#)

TEACHING EXPERIENCE

**Topics in Political Economy**  
Trinity College Dublin 2023-I

**Applied Economics: Urban Economics** (with Martina Kirchberger)  
Trinity College Dublin 2022-II

**Introductory Mathematics (MSc)**  
Trinity College Dublin 2022-II

**Microeconomics III (Game Theory)**  
Universidad Nacional de Colombia 2016-II

PARTICIPATION IN SELECTED PROJECTS

Horizon Europe - Economic, Social and Spatial Inequalities in Europe in the Era of Global Mega-trends (ESSPIN) [↗](#) 11/2022-

Horizon Europe - Enhancing Efficiency and Effectiveness in Education (EFFEct) [↗](#) 01/2024-

SELECTED PRESENTATIONS

18 FIW Research Conference International Economics 2026

Productivity Research Conference (University of Manchester) 2025

Centre for Inclusive Trade Policy Annual Academic Conference 2024

12th European Meeting of the Urban Economics Association 2023

27th Meeting of the European Association of Young Economists - SMYE 2023

Latin American and Caribbean Economic Association Meeting - LACEA (virtual) 2022

AWARDS AND SCHOLARSHIPS	Irish Economic Association Travel Grant	2024
	Luis Toharia Grant for Young Researcher, Spanish Association of Labour Economists	2022
	PhD in Economics Scholarship, Trinity College Dublin	2018-2022
	Fee Waiver, Department of Economics, Universidad Nacional de Colombia	2016-2018
ACADEMIC ACTIVITIES AND SERVICES	Member of the Equality, Diversity, and Inclusion Committee (ESRI)	2024-2026
	Reviewer - European Economic Review	2026
	Reviewer - Journal of Economic Inequality	2026
	Reviewer - Cogent Economics & Finance Science	2025
	Reviewer - Regional Studies, Regional Science	2025
	Reviewer - Inter-American Development Bank Working Papers	2025
	Reviewer - Review of Development Economics	2022
LANGUAGES AND SKILLS	Spanish (first)	
	English (fluent)	
	French (intermediate)	
	Packages: Stata · R · QGIS · Matlab · LaTeX	