

Short CV

Inmaculada C. Álvarez

Contact details

Address: Department of Economics, School of Economics and Business, Universidad Autónoma de Madrid, 28049 Madrid, Spain.

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Education

2003: Ph.D in Quantitative Economics. Universidad Complutense de Madrid, Spain.

1996: Master in European Economics, Ortega y Gasset Institute, Spain.

1994: Bachelor of Economics, Universidad Carlos III, Spain.

Professional Positions

2021- : Full Professor (*CU*), Department of Economics, and Universidad Autónoma de Madrid.

2011-2014: Associate Professor (*TU*), Department of Economics, Universidad Autónoma de Madrid.

2005-2011: Assistant Professor, Department of Economics, Universidad Autónoma de Madrid.

1998-2002: FPI grant, Department of Economics, Universidad Complutense de Madrid.

1994-1995: Assistant Professor, Department of Economics, University of Alicante.

Research Interests / Research Profile

Efficiency and productivity analysis, spatial economics, economic development and quantitative methods

Publications

Articles in peer-reviewed journals (last 10 years)

Orea, L., Pérez-Méndez, J.A., **Álvarez, I.** (2024). Does land consolidation promote livestock production and combat rural depopulation in northern Spain?. *Journal of Agricultural Economics*, 75(3), 847-868.

Du, K., Orea, L., **Álvarez, I.** (2024). Fitting spatial stochastic frontier models in Stata. *Stata Journal*, 24(3), 402-426.

Álvarez, I., Orea, L., Wall, A. (2023). Estimating the propagation of both reported and undocumented COVID-19 cases in Spain: a panel data frontier approximation of epidemiological models. *Journal of Productivity Analysis*, 59, 259-279.

Orea, L., **Alvarez, I.** (2022): "How effective has the Spanish Lockdown been to battle COVID-19? A spatial analysis of the coronavirus propagation across provinces". *Health Economics*, 31(1), 154-173

Álvarez, I., Barbero, J., Zofío, J.L. (2020): "A Data Envelopment Analysis Toolbox for MATLAB". *Journal of Statistical Software*, 95(3), 1-49.

Orea, L., **Alvarez, I.** (2019): "A new stochastic frontier model with cross-sectional effects in both noise and inefficiency terms". *Journal of Econometrics*, 213, 556-577.

Gude, A., **Alvarez, I.**, Orea, L. (2018): "Heterogeneous spillovers among Spanish provinces: A generalized spatial stochastic frontier model". *Journal of Productivity Analysis*, 50 (3), 155-173.

Alvarez, I., Kao, C., Romero, D. (2018): "Long run effect of public grants and tax credits on R&D investment: a non-stationary panel data approach". *Economic modelling*, 75, 93-104.

Orea, L., **Alvarez, I.**, Jamasb, T. (2018): "Using a spatial econometric approach to mitigate omitted variables in stochastic frontier models: an application to Norwegian electricity distribution networks". *Energy Journal*, 39(3), 93-116.

Álvarez, I., Barbero, J., Rodríguez-Pose, A., Zofío, J.L. (2018): "Does institutional quality matter for trade? Institutional conditions in a sectorial trade framework". *World Development*, 103, 72-87.

Álvarez, I., Barbero, J., Zofío, J.L. (2017): "A panel data toolbox for MATLAB". *Journal of Statistical Software*, 76(6), 1-27.

Álvarez, I., Barbero, J., Zofío, J.L. (2016): "A spatial autoregressive panel model to analyze road network spillovers on production". *Transportation Research Part A: Policy and Practice*, 93, 83-92.

Álvarez, I., Condeço, A.M., Gutierrez, J., Zofío, J.L. (2016): "Integrating networks analysis with the production function approach to study the spillover effects of transport infrastructure". *Regional Studies*, 50 (6), 996-1015. DOI: 10.1080/00343404.2014.953472

Alvarez, I., Barbero, J. (2016): "Public sector and convergence with spatial interdependence: empirical evidence from Spain", *Applied Economics*, 48 (24), 2238-2252. DOI: 10.1080/00036846.2015.1117048

Prieto, A., Zofío, J.L., **Alvarez, I.** (2015): "Cost economies, urban patterns and population density: the case of public infrastructure for basic utilities". *Papers in Regional Science*, 94(4), 795-817. DOI:10.1111/pirs.12096

Romero, D., Delgado, M.J., **Alvarez, I.**, De Lucas, S. (2014): "Assesment of the public tools used to promote R&D investment in Spanish SMEs". *Small Business Economics*, 43(4), 959-976. DOI: 10.1007/s11187-014-9575-3

Álvarez, I., Prieto, A., Zofío, J.L. (2014): "Cost efficiency, urban patterns and population density when providing public infrastructure: a stochastic frontier approach". *European Planning Studies*, 22(6), 1235-1258. DOI:10.1080/09654313.2013.778957

Álvarez, I., Blazquez, R. (2014): "The influence of the road network on private productivity measures using Data Envelopment Analysis: a case study from Spain". *Transportation research part A: policy and practice*, 65, 33-43.

Chapters in books (last 10 years)

Orea, L., **Álvarez, I.**, Servén, L. (2024). The structural and productivity effects of infrastructure provision in developed and developing countries, *Advances in Econometrics: Essays in Honor of Subal Kumbhakar*, Editors: Parmeter, C., Tsionas, M., y Wang, H-J., volume 46, pages 265-308, Emerald Publishing Limited.

Orea, L., **Álvarez, I.** (2022). Production Economics in Spatial Analysis, in Ray, S.C., Chambers, R. y Kumbhakar, S. (eds.) *Handbook of Production Economics*, chapter 35, pages 1379-1409, Springer. <https://doi.org/10.1007/978-981-10-3450-3>

Orea, L., **Álvarez, I.**, Perez, J.A. (2020): "The impact of land consolidation on livestock production in Asturias' parishes: a spatial production analysis", in Aparicio, J., Lovell, C.A.K., Pastor, J. y Zhu, J. (eds.) *Advances in Efficiency and Productivity II*, Springer Nature's International Series in Operations Research & Management Science: NY, pp. 173-192. https://doi.org/10.1007/978-3-030-41618-8_2.

Orea, L., **Álvarez, I.**, Servén, L. (2020): "A two-level top-down decomposition of aggregate productivity growth: the role of infrastructure", in Aparicio, J., Lovell, C.A.K., Pastor, J. y Zhu, J. (eds.) *Advances in Efficiency and Productivity II*, Springer Nature's International Series in Operations Research & Management Science: NY, pp. 173-192. https://doi.org/10.1007/978-3-030-41618-8_2.

Associate Editor / Publisher Board

Investigaciones Regionales

Gestión y Política Pública

Paradigma Económico

Peer-reviewed working papers (last 10 years)

Du, K., Orea, L., **Álvarez, I.** (2023). *Fitting spatial stochastic frontier models in Stata*, Efficiency Series Papers, 2023/03, University of Oviedo, Department of Economics, Oviedo Efficiency Group (OEG).

Álvarez, I., Barbero, J., Orea, L., Rodríguez-Pose, A. (2023). *How institutions shape the economic returns of public investment in European regions*, Efficiency Series Papers, 2023/03, University of Oviedo, Department of Economics, Oviedo Efficiency Group (OEG).

Orea, L., **Álvarez, I.**, Servén, L. (2022). The structural and productivity effects of infrastructure provision in developed and developing countries, Working Papers 6-2022, Copenhagen Business School, Department of Economics.

Orea, L., **Álvarez, I.**, Servén, L. (2022). The structural and productivity effects of infrastructure provision in developed and developing countries, Efficiency Series Papers, 2022/01, University of Oviedo, Department of Economics, Oviedo Efficiency Group (OEG).

Orea, L., **Álvarez, I.**, Wall, A. (2021). Estimating the propagation of the COVID-19 virus with a stochastic frontier approximation of epidemiological models: a panel data econometrics model with an application to Spain, Efficiency Series Papers, 2021/01, University of Oviedo, Department of Economics, Oviedo Efficiency Group (OEG).

Orea, L., Pérez-Méndez, J.A., **Álvarez, I.** (2019). *Does land consolidation promote livestock production and combat rural depopulation? A multi-cohort multi-treatment Difference-in-Difference analysis of parishes in northern Spain*, Efficiency Series Papers, 2020/02, University of Oviedo, Department of Economics, Oviedo Efficiency Group (OEG).

Orea, L., **Álvarez, I.** (2020). *How effective has been the Spanish lockdown to battle COVID-19? A spatial analysis of the coronavirus propagation across provinces*, Working Papers 2020-03, FEDEA.

Orea, L., **Álvarez, I.** (2020). *How effective has been the Spanish lockdown to battle COVID-19? A spatial analysis of the coronavirus propagation across provinces*, Efficiency Series Papers, 2020/02, University of Oviedo, Department of Economics, Oviedo Efficiency Group (OEG).

Orea, L., **Álvarez, I.** (2019). *Spatial production Economics*, Efficiency Series Papers, 2019/06, University of Oviedo, Department of Economics, Oviedo Efficiency Group (OEG).

Álvarez, I., Orea, L., Pérez-Méndez, J.A. (2019). *Rural and agricultural development by land consolidation: a spatial production analysis of Asturias' parishes*, Efficiency Series Papers, 2019/04, University of Oviedo, Department of Economics, Oviedo Efficiency Group (OEG).

Orea, L., **Álvarez, I.** (2017). *A new stochastic frontier model with cross-sectional effects in both noise and inefficiency terms*, Efficiency Series Papers, 2017/04, University of Oviedo, Department of Economics, Oviedo Efficiency Group (OEG).

Gude, A., **Álvarez, I.**, Orea, L. (2017). *Heterogenous spillovers among spanish provinces: a generalized spatial stochastic frontier model*, Efficiency Series Papers, 2017/03, University of Oviedo, Department of Economics, Oviedo Efficiency Group (OEG).

Orea, L., **Álvarez, I.**, Jamasb, T. (2016). *A Spatial Econometric Approach to Mitigate Omitted Variables in Stochastic Frontier Models: An Application to Norwegian Electricity Distribution Networks*. Cambridge Working Paper in Economics, 1673, University of Cambridge, United Kingdom.

Álvarez, I., Barbero, J., Rodríguez-Pose, A., Zofío, J.L. (2015). *Does institutional quality matter for trade? Institutional conditions in a sectoral trade framework*. Discussion Paper N° 10876, Centre for Economic Policy Research, UK.

Recent Research Projects

Title: Digitalización, innovación, tecnología, automatización y atracción de empleo en la Comunidad de Madrid (PHS-2024/PH-HUM-530)

Sponsor: Comunidad de Madrid

Period: 01/01/2025 - 31/12/2027.

Principal Researcher: Inmaculada C. Álvarez

Title: Inter-sectoral and regional effects of institutional responses to the COVID-19 epidemic (PID2020-113076GB-10)

Sponsor: Ministerio de Ciencia e Innovación

Period: 01/01/2021 - 31/12/2023.

Principal Researcher: Inmaculada C. Álvarez

Title: ATRACCIÓN DE ACTIVIDADES ECONÓMICAS Y CREADORAS DE TRABAJO EN MADRID (INNJOBMAD-CM, H2019/HUM-5761).

Sponsor: Comunidad de Madrid

Period: 01/01/2020 - 31/12/2022.

Principal Researcher: Inmaculada C. Álvarez

Title: Strategies for guaranteeing the survival and sustainability of agricultural production: investment, organic production and land concentration.

Sponsor: Spanish Ministry of Economy, Industry and Competitiveness

Period, December 31, 2017 – December 31, 2020

Principal Researcher: Alan Wall

Title: Infrastructures, Economic Growth and Productivity

Sponsor: Centro de Estudios de América Latina, Universidad Autónoma de Madrid

Period, July 1, 2017 – December 31, 2018

Principal Researcher: José Luis Zofío Prieto

Title: Infraestructuras, Crecimiento Económico y Productividad

Sponsor: Centro de Estudios de América Latina, Universidad Autónoma de Madrid

Period, July 1, 2015 – December 31, 2016

Principal Researcher: Fernando García-Belenguer

Recent Research Visits

Institución: Centre for Productivity and Performance (CPP) at Loughborough University (UK)

Duración: 01/02/2020 - 01/06/2020 (4 months)

Supervisor: Profesor Anthony Glass.

Beca: "Salvador de Madariaga"