

**Part A. PERSONAL INFORMATION**

**CV date** 30/11/2020

First and Family name	Inmaculada C. Alvarez Ayuso		
Social Security, Passport, ID number		Age	48
Researcher codes	Open Researcher and Contributor ID (ORCID**)	0000-0003-0495-623X	
	SCOPUS Author ID (*)	12143592200	
	WoS Researcher ID (*)	K-5808-2014	

(\*) *Optional*

(\*\*) *Mandatory*

**A.1. Current position**

Name of University/Institution	Autonomous University of Madrid		
Department	Economic Theory		
Address and Country	Francisco Tomás y Valiente, 5		
Phone number	914972858	E-mail	<a href="mailto:inmaculada.alvarez@uam.es">inmaculada.alvarez@uam.es</a>
Current position	Associate Professor (TU)	From	03/11/2011
Key words	Efficiency and Productivity, Economic Growth, Spatial Economics, Quantitative Methods		

**A.2. Education**

PhD, Licensed, Graduate	University	Year
Graduate in Economics	University Carlos III of Madrid	1994
PhD. In Quantitative Economics	University Complutense of Madrid	2003

**A.3. General indicators of quality of scientific production** (see instructions)

Recognitions ("Sexenios"): 3 (1997-2007) (2008-2013) (2014-2019)

PhD. Students: 2

Total Citations: 206 (ResearchID, Web of Science); 973 (Google Scholar); 137 (Ideas)

Average citations: 15 (ResearchID, Web of Science); 100 (Google Scholar); 6 (Ideas)

Publications in first Quartile JCR journals: 8

H-index: 8 (ResearchID, Web of Science); 16 (Google Scholar); 7 (Ideas)

Top 5% Female Economist (last 10 years publications), of October 2020 (Repec)

**Part B. CV SUMMARY** (max. 3500 characters, including spaces)

Ph.D. Inmaculada C. Alvarez Ayuso (<http://www.inmaculadaalvarez.net>) is associate professor (profesora titular) in Department of Economics at Universidad Autónoma de Madrid since 2011 and member of the research team in Oviedo Efficiency Group. Her main research is focused on the analysis of the regional development, spatial economics, innovation and efficiency and productivity along with quantitative methods. She has applied those methods to the role of determinants of regional development and the incentives to the R&D investment. Among her most recent publications, we can highlight the following topics: i) regional science and urban economics (Prieto et al., 2015 and Alvarez et al., 2014) ; ii) innovation (Alvarez et al., 2018) ; iii) development and growth, (Alvarez and Barbero, 2016; Alvarez et al., 2016). During the last years she has oriented her research towards spatial analysis in different areas of the economy. In this sense, she has focused her research on the impact of infrastructures on regional development, obtaining publications in prestigious international journals (Regional Studies, Transportation Research Part A). She has also recently analysed the role of institutional quality and the existence of spillover effects among regions. This research has been published in World Development and Journal of Productivity analysis, being the last one awarded with the prize in the European congress about efficiency and productivity. From a methodological point of view, in recent years she has developed contributions in spatial economics, being possible to incorporate this aspect into the analysis of the efficiency as well as to introduce new dimensions applicable to the regional science and the analysis of firms' behaviour. These



researches have been published in specialized journals such as *Journal of Econometrics* or *Energy Journal*. Finally, she has developed software programmed in MATLAB, published in a journal edited by the *American Statistical Association*, *Journal of Statistical Software*. Her most relevant papers can be found at her IDEAS/RePEc page: <https://ideas.repec.org/f/pal460.html>. In addition, she has participated in numerous projects as research leader and researcher financed by Ministries and public institutions. She lectures on Economic Theory, both Microeconomics and Macroeconomics, at the graduate level and organizes advanced courses at postgraduate in collaboration with international reputed scholars, as Professor B.H. Baltagi (Syracuse University) and William H. Greene (New York University) in the context of Advanced Courses in Economics.

## **Part C. RELEVANT MERITS** (sorted by typology)

### **C.1. Publications** (see instructions)

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

Orea, L., **Alvarez, I.** and Jamasb, T. (2018): "A spatial stochastic frontier model with omitted variables: electricity distribution in Norway". *Energy Journal*, 39(3), 93-116.

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

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

**Álvarez, I.**, Barbero, J. and 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. and 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

Prieto, A., Zofío, J.L. and **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.** and 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.** and 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.

### **C.2. Research projects**

**Project:** Atracción de actividades económicas innovadoras y creadoras de trabajo en Madrid

**Reference:** H2019/HUM-5761

**Funding Source:** Comunidad Autonoma de Madrid

**Participating Centres:** Universidad Autónoma de Madrid, Universidad Complutense de Madrid, Universidad Rey Juan Carlos and Universidad de Alcalá de Henares.

**Duration:** 01/01/2020- 31/12/2022

**Principal Investigator:** Inmaculada C. Alvarez.



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

**Reference:** ECO2017-85788-R

**Funding Source:** Ministerio de Economía y Competitividad

**Participating Centres:** Universidad de Oviedo and Universidad Autónoma de Madrid.

**Duration:** December 2017- December 2020

**Principal Investigator:** Alan Wall.

**Project:** Infrastructure, economic growth, and productivity

**Reference:** 2017/EEUU/16

**Funding Source:** UAM-Banco Santander

**Participating Centres:** Universidad Autónoma de Madrid, University of Miami, World Bank, New York University and Binghamton University.

**Duration:** 01/07/2017 - 31/12/2018

**Principal Investigator:** José Luis Zofio.

**Project:** Infraestructuras, crecimiento económico y productividad

**Funding Source:** UAM-Banco Santander

**Participating Centres:** Universidad Autónoma de Madrid, University of Miami, New York University and World Bank

**Duration:** 01/07/2015 - 31/12/2016

**Principal Investigator:** Fernando Garcia-Belenguer

**Project:** Efectos macroeconómicos de la integración de Estados Unidos en los acuerdos de libre comercio

**Funding Source:** UAM-Banco Santander

**Participating Centres:** Universidad Autónoma de Madrid, University of Miami and Syracuse University.

**Duration:** 01/07/2013 - 31/12/2014

**Principal Investigator:** Inmaculada C. Alvarez.

**Project:** Comercio interregional e internacional de bienes y servicios en España y la UE: fundamentos teóricos y contrastación empírica en el contexto de la Nueva Economía Geográfica

**Reference:** ECO2010-21643

**Funding Source:** Ministerio de Ciencia e Innovación (ECO2010-21643)

**Participating Centres:** Universidad Autónoma de Madrid.

**Duration:** 01/01/2011 - 31/12/2013

**Principal Investigator:** Carlos Llano.

**Project:** Políticas económicas encaminadas a favorecer la cohesión social y económica en los países de América Latina

**Funding Source:** UAM- Banco Santander

**Participating Centres:** Universidad Autónoma de Madrid and Centro de Investigación y Docencia Económicas (CIDE).

**Duration:** 01/06/2011 - 30/05/2012

**Principal Investigator:** Inmaculada C. Alvarez.

**Project:** DESTINO: desarrollo de metodologías de evaluación del impacto económico del sistema de transportes mediante tablas input-output interregionales (P42/08).

**Reference:** P42/08

**Funding Source:** Ministerio de Fomento, Plan Nacional de i+D+i (P42/08)

**Participating Centres:** Universidad Autónoma de Madrid, CSIC, Universidad Politécnica Cataluña

**Duration:** 01/2009 - 12/2011

**Principal Investigator:** Julián Pérez García



**Project:** Modelización espacial aplicada al movimiento de mercancías y personas en el ámbito internacional e interregional español.

**Reference:** S2007/HUM/0467

**Funding Source:** Comunidad Autónoma de Madrid, IV PRICIT, S2007/HUM/0467

**Participating Centres:** Nacionales: Universidad Autónoma de Madrid, Universidad Complutense de Madrid, CSIC. Internacionales: Univ. Illinois at Urbana-Champaign (EE.UU.), Texas State University (EE.UU.), Universidad de Santiago (Chile), Institute of Advance Studies of Viena (Austria)

**Duration:** 01/2008 - 12/2011

**Principal Investigator:** José L. Zofío Prieto

### C.3 Visiting Research

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

**Duration:** 01/02/2020 - 01/06/2020 (4 months)

**Supervision:** Professor Anthony Glass.

**Grant:** "Salvador de Madariaga"

**Institution:** World Bank (USA)

**Duration:** 08/10/2016 - 18/10/2016 (2 weeks)

**Supervision:** Luis Servén.

**Institution:** Durham University (UK)

**Duration:** 16/11/2015 - 01/12/2015 (2 weeks)

**Supervision:** Professor Tooraj Jamasb.

**Institution:** *London School of Economics and Political Science* (UK)

**Duration:** 10/02/2014 - 28/03/2014 (7 weeks)

**Supervision:** Professor Andrés Rodríguez-Pose.

**Institution:** Syracuse University (USA)

**Duration:** 03/05/2012 - 08/08/2012 (14 weeks)

**Supervision:** Professor Badi H. Baltagi.

### C.4 International Evaluation Committee

Doctorate in Economics and Administration Sciences, Universidad Autónoma del Estado de México.

Master in applied economics, Universidad Autónoma del Estado de México.

### C.5 Editorial Board

*Paradigma Económico* (México) since september 2008.

Cuadernos de Economía (Spain) since december 2010.