



## CURRICULUM VITAE (CVA)

### Part A. PERSONAL INFORMATION

<b>CV date</b>	March 2023
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First name	Ester		
Family name	Gutiérrez Moya		
Open Researcher and Contributor ID (ORCID) (*):	0000-0001-9642-3195	<a href="https://www.us.es/trabaja-en-la-us/directorio/ester-gutierrez-moya">https://www.us.es/trabaja-en-la-us/directorio/ester-gutierrez-moya</a>	

(\*) Mandatory

#### A.1. Current position

Position	Full Professor
Institution	Universidad de Sevilla/ Escuela Técnica Superior de Ingenieros
Department/Center	Organización Industrial y Gestión de Empresas I
Key words	Statistical analysis; Data mining; Complex network analysis; Efficiency analysis

#### A.2. Previous positions (research activity interruptions, art. 14.2.b))


#### A.3. Education

PhD, Licensed, Graduate	University/Country	Year
Graduate in Business Administration and Management	Universidad de Sevilla/Spain	1998
Graduate in Data Science and Statistical Techniques	Universidad de Sevilla/Spain	2001
PhD in Business Administration	Universidad de Sevilla/Spain	2003
Master Science in Statistics and Operational Research	Universidad de Sevilla/Spain	2005

### Part B. CV SUMMARY (max. 5000 characters, including spaces)

Since 1999, Prof. Gutiérrez-Moya research and knowledge transfer activities has been carried out within the Engineering Organization research group (TEP 127) of the Higher Technical School of Engineers of Seville (Spain). Since 2009, she has been member of the multidisciplinary research group: Analysis and Business Decision Making, a constitution approved by the ANECA (Ministry of Science and Innovation) and composed of researchers from the University of Oviedo and the University of the Seville. She has been involved in 18 projects funded by national programs focused on the technology transfer to public and private companies, as well as contracts with the private sector, including Telvent Interactiva, SA, Everis Spain SL, Mac-puarsa, SA, Endesa, Puerto de Valencia, Thyssenkrupp Elevators, Central Lechera Asturiana, as well as organizations of a social demand as the Spanish Federation of Food Banks.

She has been awarded two six-year research sections (2005-2010 and 2011-2016) and one six-year technology transfer section (2006-2011) by the National Commission for the Evaluation of Research Activity. She is the co-author of about 52 papers in peer-reviewed international journals, which occupy relevant positions in the Journal Citation Reports (JCR)



and other journal quality indexes, receiving 1061 scientific citations (without self-citations, source: Web of Science database), 1213 citations (Scopus database), and 2004 citations (Scholar Google database) in March 2023, with an average of 72.2 cites per year carrying an h index of 19 (WOS) (i10 Index of 34). The average Field-Weighted Citation Impact (FWCI) over the period 2012-2022 is 1.65. One of the papers was nominated for the best article in a journal indexed in the JCR in 2015. She has supervised of about 50 Master's students and internship students. She is the co-author of four scientific books that have also received citations in scientific journals. She has also participated in 56 international and national conferences. She regularly serves as a reviewer for multiple scientific journals.

Her research perspective has been mainly focused on providing added value of data-driven solutions to tackle issues related to the achievement of the Sustainable Development Goals (Industry, Innovation and Infrastructure, Responsible Consumption and Production, Climate action, Gender quality), involving relevant stakeholders during the research process. Besides, her research has had influence the uptake and use of the results beyond academia, having effect on economy, environment, public policy and society. The dissemination of her research meets open access to publications, databases and software.

Moreover, she has carried out research stays in several internationally acknowledged reputation research groups (Department of Mechanical Engineering at the Politecnico di Milano-Italy, Department of Economics and Management at the University of Pavia-Italy, Department of Statistics at University of California-USA) and this fact provided her an important multidisciplinary network for future research collaborations. Her technology transfer activity has been undertaken in the field of statistical data analysis, efficiency techniques, complex networks and its applications to Industrial Organization Engineering, Transportation, Environment and Social Sciences (in particular, gender development and status of women).

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

### **C.1. Publications:** *Sample of 10 papers over the 2011-2021 period*

*All the journals belong to at least one Q1 ranking impact indices- WOS/Scopus  
All publications have Green Open Access(available in an open access repository)  
Field-Weighted Citation Impact (FWCI)*

- 1. E. Gutiérrez,** B. Adenso-Díaz, S. Lozano (2021) "Analysis and vulnerability of the international wheat trade network", *FOOD SECURITY*, 13, 113-128 (JIF2020: 3.304, Q2; CiteScore2020: 4.4, Q1) FCWI2021=2.45
- 2. E. Gutiérrez,** S. Lozano (2020) "Cross-country comparison of the efficiency of the European forest sector and second stage DEA approach", *ANNALS OF OPERATIONS RESEARCH*, DOI: 10.1007/s10479-020-03756-9 (JIF2020: 4.851, Q1; CiteScore2020: 5.2, Q1) FCWI2021=0.84
- 3. E. Gutiérrez,** S. Lozano (2020) "Efficiency performance of Current Account-BoP flows in advanced world economies considering GHG emissions", *JOURNAL OF CLEANER PRODUCTION*, 254, 120139 (JIF2020: 9.297, Q1; CiteScore2020: 13.1, Q1) FCWI2021=0.17
- 4. E. Gutiérrez,** S. Lozano, J. Guillén (2020) "Efficiency data analysis in EU aquaculture production", *AQUACULTURE*, 520, 734962 (JIF2020: 4.242, Q1; CiteScore2020: 5.5, Q1) FCWI2021=4.12
- 5. B. Adenso-Díaz,** S. Lozano, **E. Gutiérrez,** L. Calzada-Infante, S. Carvajal (2017) "Assessing individual performance based on the efficiency of projects", *COMPUTERS & INDUSTRIAL ENGINEERING*, 107, 280-288 (JIF2017: 3.195, Q1; CiteScore2017: 4.9, Q1) FCWI2021=0.6
- 6. E. Gutiérrez,** E. Aguilera, S. Lozano, G.I. Guzmán (2017) "A two-stage DEA approach for quantifying and analysing the inefficiency of conventional and organic rain-fed cereals in Spain", *JOURNAL OF CLEANER PRODUCTION*, 149, 335-348 (JIF2017: 5.651, Q1; CiteScore2017: 7.7, Q1) FCWI2021=1.85



7. **E. Gutiérrez**, S. Lozano (2012) "A Competing Risks Analysis of the Duration of Federal Target Funds Rates", *COMPUTERS & OPERATIONS RESEARCH*, 39, 785-791 (JIF2012: 1.909, Q1; CiteScore2012: 5.6, Q1) FCWI2021=0.37
8. **E. Gutiérrez**, S. Lozano (2013) "Avoidable damage assessment of forest fires in European countries: an efficient frontier approach", *EUROPEAN JOURNAL OF FOREST RESEARCH*, 132, 9-21 (JIF2013: 1.682, Q1; CiteScore2013: 3.8, Q1) FCWI2021=0.19
9. B. Adenso-Díaz, P. Moreno, **E. Gutiérrez**, S. Lozano (2012) "An analysis of the main factors affecting bullwhip inverse supply chains", *INTERNATIONAL JOURNAL OF PRODUCTION ECONOMICS*, 135, 917-928 (JIF2012: 2.081, Q1; CiteScore2012: 4.8, Q1) FCWI2021=3.74
10. S. Lozano, **E. Gutiérrez** (2011) "A Multiobjective Approach to Fleet, Fuel and Operating Cost Efficiency of European Airlines", *COMPUTERS & INDUSTRIAL ENGINEERING*, 61, 473-481 (JIF2011: 1.589, Q1; CiteScore2011: 4.1, Q1) FCWI2021=1.55

## C.2. Congress

1. **E. Gutiérrez**, Lozano, S., B. Adenso-Díaz Analysing the structure of the global wheat trade network: an ERGM approach. SEMINAR ON BIGDATA AND DECISION SUPPORT SYSTEMS IN AGRICULTURE (BIGDSSAGRO 2020) AND VI WORKSHOP ON OR IN AGRICULTURE AND FOREST MANAGEMENT. Lérida (España). 2020. Oral presentation.
2. **E. Gutiérrez**, Lozano, S., J. Guillén Efficiency data analysis in EU aquaculture production sector. III INTERNATIONAL CONFERENCE ON AGRO BIGDATA AND DECISION SUPPORT SYSTEMS IN AGRICULTURE. Valparaiso (Chile). 2019. Oral presentation.
3. **E. Gutiérrez**, Lozano, S. Cross-country comparison of the efficiency of the European forest sector by DEA approach. II INTERNATIONAL CONFERENCE ON AGRO BIGDATA AND DECISION SUPPORT SYSTEMS IN AGRICULTURE. Lérida (España). 2018. Oral presentation.
4. S. Lozano, **E. Gutiérrez**, Exploring the Pareto Frontier of Regional Airports. 27th EUROPEAN CONFERENCE ON OPERATIONAL RESEARCH. Glasgow (Reino Unido). 2015. Oral presentation.
5. **E. Gutiérrez**, Lozano, S. Risks Analysis and Bootstrap Applications to Shipping Lines Performance. CBMS REGIONAL CONFERENCE IN THE MATHEMATICAL SCIENCES. Santa Cruz (USA). 2012. Oral presentation.
6. J.L. Salmerón, **E. Gutiérrez**. Fuzzy Cognitive Maps in FMEA. 14TH INTERNATIONAL CONFERENCE ON MODERN INFORMATION TECHNOLOGY IN THE INNOVATION PROCESSES OF THE INDUSTRIAL ENTERPRISES. Budapest (Hungría). 2012. Oral presentation.
7. S. Lozano, **E. Gutiérrez**, J.L. Salmerón. Network Data Envelopment Analysis of Container Shipping Lines. 9TH INTERNATIONAL MULTIDISCIPLINARY MODELLING & IMULATION MULTICONFERENCE. Viena (Austria). 2012. Oral presentation.
8. S. Lozano, **E. Gutiérrez**, S. Furió, J. L. Salmerón. Network Data Envelopment Analysis of Container Shipping Lines. 14TH INTERNATIONAL CONFERENCE ON HARBOR, MARITIME & MULTIMODAL LOGISTICS MODELLING AND SIMULATION. Viena (Austria). 2012. Oral presentation.
9. S. Lozano, **E. Gutiérrez**. Performance Assessment of Shipping Agents. INTERNATIONAL FEDERATION OF OPERATIONAL RESEARCH SOCIETIES. Melbourne (Australia). 2011. Oral presentation.
10. B. A. Díaz, A.P. Moreno, **E. Gutiérrez**, S. Lozano. Studying the Increasing Upstream Bullwhip Phenomenon in Reverse Logistics Networks. EURAM. MANAGEMENT CULTURE IN THE 21ST CENTURY. Tallín (Estonia). 2011. Oral presentation.
11. J.L. Salmerón, **E. Gutiérrez**. Modelling Complex Systems with Fuzzy Grey Cognitive Maps. THE 2011 WORLD CONGRESS IN COMPUTER SCIENCE, COMPUTER ENGINEERING AND APPLIED COMPUTING. Las Vegas (USA). 2011. Oral presentation.
12. **E. Gutiérrez**, J.L. Salmerón. Data Envelopment Analysis of Formula One Constructors' Championship. THIRD INSTITUTE OF MATHEMATICS AND ITS APPLICATIONS INTERNATIONAL CONFERENCE ON MATHEMATICS IN SPORT. Manchester (Reino Unido). 2011. Oral presentation.



### C.3. Research projects

1. PID2021-123515NB-I00, “ Análisis de la robustez de las redes logísticas y de transporte, con un énfasis en el sector alimentario, y desarrollo de nuevos enfoques”, MC e Innovación, 2022-2025, 50,941€. Position: Principal Researcher.
2. 516RT0513, “Red Iberoamericana de Agro- Big Data y Bigdssagro”, Lluís Miquel Plá Aragonés (IP), Programa Iberoamericano de Ciencia y Tecnología para el Desarrollo (CYTED), 2016-2020. 45.000€. Position: Researcher.
3. MINECO-18-DPI2017-85343-P, “Diseño y operación de redes logísticas complejas y eficientes”, Adenso Díaz (IP), MinEcolndComp, 2018-2021, 60.500€ . Participating entities: Universidad de Oviedo y Universidad de Sevilla. Position: Researcher.
4. MINECO-13-DPI2013-41469-P, “Análisis y diseño de redes logísticas eficientes, robustas y sostenibles”, Adenso Díaz (IP), MCyT, 2014-2017, 50.820€ (+1 FPI). Participating entities: Universidad de Oviedo y Universidad de Sevilla. Position: Researcher.
5. DPI2010-16201, “Nuevos retos en el diseño de redes logísticas eficientes: entornos de riesgo y de logística inversa”, Adenso Díaz (IP), MCyT, 2011-2013, 45.000€ (+1 FPI). Universidad de Oviedo y Universidad de Sevilla. Position: Researcher.
6. DPI2010-15352, “Sistema integrado de transporte vertical”, Pablo Cortés Achedad(IP), MCI, 2011-2013, 48.400€ (+1 FPI). Position: Researcher
7. P07-TEP-02832, “Plataforma de Investigación y Desarrollo de Soluciones de Transporte Vertical (Pi+d-Trvertical)”, Pablo Cortés Achedad(IP), Proyectos de Excelencia de la Junta de Andalucía, 2008-2012, 219.915,45 €. Position: Researcher.

### C.4. Contracts, technological or transfer merits

1. Participation in the Coffee with Science cycle of the scientific publishing Fundación Descubre (funded by Plan Propio de Investigación y Transferencia de la Universidad de Sevilla). 11/02/2019. Lecture title: How can we improve the functioning of airports?. Audience: High school students.
2. PI-0317/05/10, “Análisis de fiabilidad y supervivencia en sistemas de transporte vertical”, Mac Puar, S.A, Pablo Cortes Achedad (IP), 2010-2011, 21.000€. Position: Researcher.
3. PI-0717/05/09, “Subestaciones para una Smart Grid S2G”, Telvent Interactiva, S.A., Luis Onieva Giménez, 2008-2011, 140.000€. Position: Researcher.
4. Exp.88/2006/J/2341-762, “Curso de Calidad en la Industria Aeronáutica”- Master Program, Asociación de Empresas Aeronáuticas, 2008-2010, Position: Teacher.
5. Collaboration in the Postgraduate Master “Global Supply Chain and Aeronautical Industry Operations”- AIRBUS D&S (2009-2011).
6. Awarded a six-year Transfer of Knowledge term by the Spanish Ministry of Education and Science(2019).
7. Awarded two periods of six-year Research work term by the Spanish Ministry of Education and Science(2019).