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# 1. THE INSTITUTE'S MAIN OBJECTIVES

The Valencian Institute of Economic Research (Instituto Valenciano de Investigaciones Económicas, **Ivie**) works to promote and conduct economic research and disseminate it in Spain and abroad.

Created in 1990 by the Department of Economy and Finance of the Generalitat Valenciana (Valencian Regional Government), the **Ivie** is supported by CaixaBank, Ford Spain, BBVA Foundation, Mediterráneo Foundation, Cañada Blanch Foundation and Ceca Foundation of commercial and savings banks (Fundación de las Cajas de Ahorros).

The **Ivie** has two main aims: to create stable teams of specialists capable of producing a steady output of research in certain areas of general interest; and to help build bridges between research and the decisions made by economic agents. Many of those decisions require careful analysis of the available options, taking research findings, statistical information and the experience of specialists into account. The **Ivie** therefore also offers technical assistance in economic matters to institutions and companies that request it.

To achieve its goals, the **Ivie** organizes its work in lines of theoretical and applied research, with the support of various shared services. The research activity is carried out by the Institute's research associates, who have extensive academic experience, and its staff of economists and subject specialists.

To carry out its activities and execute its projects, the **Ivie** has built relationships with large numbers of researchers and has entered into collaboration agreements with various universities. It supports the economic research groups in carrying out and disseminating their activities and promotes the exploitation of their research efforts for the benefit of society.

The **Ivie** started its activities in November 1990. Throughout this period it has been sponsored by the Valencian Regional Government's Ministry of Finance, which has allowed it to foster economic research. The rest of its activities are financed through partnership agreements and contracts with various public and private sector institutions in Spain, Europe and the Americas.



## 2. PEOPLE

### 2.1. Board of Directors

#### President

Vicent Soler i Marco

*Regional Minister of Finance and Economic Model*

#### Secretary

Cañada Blanch Foundation: Antonio Lleó García

*Trustee of the Cañada Blanch Foundation*

#### Members

Ford Spain: Juan Fernando Acebrón Rodicio

*Director of Institutional Relations*

Inmogestión y Patrimonios, S.A.: Carlos Aguilera Aguilera

*Corporate Business Director for the Valencian and Murcia Regions, Bankia (until 27 September 2021)*

Vicente Castellano Cervera. *Director of Risk Management in the Levante Region. CaixaBank*

Valoración y Control, S.L.: Isabel Rubio León

*Communication and External Relations Manager for the Valencian, Murcia and Balearic Regions, Bankia (until 27 September 2021)*

Manuel Bañuls Sendra. *Director of Institutions in the Valencian Community. CaixaBank*

BBVA Foundation: Vicente Gutiérrez Hernando

*Deputy Director of the BBVA Foundation*

Carlos Ocaña Pérez de Tudela

*General Manager of the Ceca Foundation of commercial and savings banks*

Luis Manuel Boyer Cantó

*President of Mediterráneo Foundation*

Eva Martínez Ruíz

*Director General for Budgets of the Valencian Ministry of Finance and Economic Model*

## 2.2. Advisory Council

Francesco Giavazzi

*Innocenzo Gasparini Institute for Economic Research, Milan*

Emilio Ontiveros

*Autonomous University of Madrid and AFI (Analistas Financieros Internacionales)*

Vicente Salas

*University of Zaragoza*

Joaquim Silvestre

*University of California-Davis*

José Viñals

*Standard Chartered Bank*

## 2.3. Management

### Research Director

Francisco Pérez

*Universitat de València*

### Research Deputy Director

Joaquín Maudos

*Universitat de València*

### Director of International Projects

Matilde Mas

*Universitat de València*

### Managing Director

Pilar Chorén

## 2.4. Research professors



### **Francisco Alcalá** (*Center for Economic Policy Research*)

Dr Alcalá is a graduate in Economics with special honors (1980), holds a Master in Economics from CIDE (Center for Research and Teaching in Economics, Mexico, 1983) and has a PhD from the Universitat de València (1985). At present he is Research Fellow at the Center for Economic Policy Research (London) and member of the Advisory Board of the Ministry of Transport, Mobility and Urban Agenda. He has been Full Professor at the Economic Analysis Department of the University of Murcia, Visiting Lecturer at the Pompeu Fabra University (Barcelona) and at the CIDE (Mexico) and Visiting Scholar for over a total of six years at the Universities of California (Berkeley), Harvard, New York and Columbia. He has been a member of the Board of Directors of the Spanish Economic Association and economic advisor for social and governmental institutions. His specialist fields are economic growth, international trade and industrial organization, topics on which he has directed several National R&D Plan projects and published articles in some of the most prestigious international academic journals and written a number of books and book chapters. (Personal webpage: [sites.google.com/site/alcalapaco](https://sites.google.com/site/alcalapaco)).



### **Joaquín Aldás** (*Universitat de València*)

Dr Aldás graduated (1993) and obtained his PhD (1998) in Economics and Business Studies from the Universitat de València, where he is Professor in Marketing and Market Research. He has been Visiting Research Fellow at the University of Glasgow. His main research fields are quantitative methods in marketing research. He has published his research in specialized journals such as *European Journal of Marketing*, *Journal of Services Marketing*, *Online Information Review*, *Journal of Business Ethics*, *Journal of Interactive Marketing* and *Tourism Management*. He is co-author of the books *Análisis Multivariante Aplicado* (Thomson, 2005) and *Análisis Multivariante Aplicado con R* (Paraninfo, 2017). Since 2018, he is Vice-Chancellor of Strategy, Quality and Information Technologies at the Universitat de València. (Personal webpage: <https://www.uv.es/persona/aldas>).





### **Santiago Carbó** (*Universidad de Granada*)

Dr Carbó graduated in Economics from the Universitat de València (1989) and took his PhD in Economics (1993) and Master in Banking and Finance at the University of Wales (1990). He is currently Professor of Economic Analysis at the University of Granada. In addition he is Head of the Financial Studies Division and Executive Director of the Observatory of Financial Digitalisation of the Cajas de Ahorros Foundation (Funcas). He has been Professor of Economics and Finance at CUNEF (University School for Financial Studies, Madrid) and at Bangor University (UK). He is independent advisor for Cecabank and President of its Remunerations Committee, as well as Independent Advisor to the Valencian Institute of Finances (IVF) and President of its Risk Management Commission. He is Past-President (2017) of IBEFA (the International Banking, Economics and Finance Association). He was member of the Group of Economic Advisors of ESMA (European Securities and Market Authority) from 2014 to 2018. Currently, he is member of the Advisory Board of the World Bank. He has been, and still is, consultant and collaborator for public institutions such as the European Central Bank (ECB) and the Federal Reserve Bank of Chicago, as well as to financial institutions and international consulting firms. He is Chief Editor of the *Journal of Financial Management, markets and Institutions*. He is author of more than two-hundred articles and publications on the financial system, among others, in journals such as *The Review of Economics and Statistics*, *European Economic Review*, *Review of Finance*, *Nature-Scientific Reports*, *Journal of Money, Credit and Banking*, *Journal of Corporate Finance*, *Journal of International Money and Finance* and *Journal of Banking and Finance*. He also frequently collaborates with the written press, at present being regular columnist in *El País* and stating his views in other Spanish national dailies (*El Mundo*, *ABC*, *Cinco Dias*, among others), radio and television (*TVE*, *Cadena SER*, *Radio Nacional de España*, etc.) in Spain, as well as in foreign newspapers (*Financial Times*, *BBC*, *Business Week*, *International Herald Tribune*, among others). (Personal webpage: [www.santiagocarbo.com](http://www.santiagocarbo.com), Twitter: @scarboval).



### **José García-Montalvo** (*Pompeu Fabra University*)

Dr García-Montalvo is Professor of Applied Economics at the Pompeu Fabra University (UPF). He graduated in Economics from the Universitat de València in 1987 with special honors. He received the First National Graduation Prize (1988, Ministry of Education and Science), followed by a PhD in Economics from Harvard University (1993). In 2008 and 2013 he was awarded the ICREA Acadèmia distinction prize for his research work. In 2010 he received the Knowledge Transfer Award of the Board of Trustees of the UPF and in 2013 the Rector of the UPF awarded him the Medal of the Pompeu Fabra University. In 2018 he was awarded the 'Premio Catalunya Economía' and in 2019 the King Jaume I Prize in Economics. He was former Director of the Department of Economics and Business of the UPF and currently is Vice-Rector of Science Strategy at the same university. He is consultant to OECD, World Bank and Inter-American Development Bank. His research is concentrated on the areas of econometrics, economic development, the labor market for youth and the economy of the housing market. He was Guest Lecturer at the Department of Economics at Harvard (1996) and worked for one year as a researcher in the Technology and Economic Policy Program of the Kennedy School of Government (1995). He has published 17 books and more than 150 articles in *American Economic Review*, *Review of Economics and Statistics*, *Economic Journal*, *Journal of Business and Economic Statistics*, *Journal of Development Economics*, *Journal of Economic Growth and Applied Psychology*, among others. (Personal webpage: [jgmontalvo.com](http://jgmontalvo.com)).



### **Francisco J. Goerlich** (*Universitat de València*)

Dr Goerlich graduated and obtained a PhD in Economics from the Universitat de València. He also holds a M.Sc. in Economics from the London School of Economics & Political Science (University of London). At present, he is a Professor at the Department of Economic Analysis at the Universitat de València. His research fields are macroeconomics, income distribution, demographics, regional economics and applied econometrics. He is co-author of several books, among which worth mentioning are those for the BBVA Foundation, *Una grid de densidad de población para España*, *Zonas de morfología urbana: Coberturas del suelo y demografía*, *Cambios en la estructura y localización de la población*, *Distribución de la renta, crisis económica y políticas redistributivas* and *Delimitación de áreas rurales y urbanas a nivel local: Demografía, coberturas del suelo y accesibilidad*. He has published his work in specialized journals such as *Applied Economics*, *Econometric Theory*, *Economics Letters*, *Journal of Regional Science*, *International Journal of Geographical Information Science*, *Social Indicators Research*, *Empirical Economics*, *Regional Studies* and *Review of Income and Wealth*, among others. He has participated in various national and international congresses, both on his own initiative and as a guest. He has taken part in the SPINTAN research project on smart public intangibles funded by the EU 7th Framework Programme. He currently participates in DICTA (Data for European ICT Industries Analysis), a study commissioned by the European Commission's Joint Research Centre, Directorate B. (Personal webpage: [www.uv.es/goerlich](http://www.uv.es/goerlich)).



### **Carmen Herrero** (*University of Alicante*)

Awarded with an honorary degree from the University of Granada, Dr Herrero graduated from the Complutense University of Madrid and obtained her PhD in Mathematics from the Universitat de València. She is Professor Emeritus at the University of Alicante. Her latest research focuses on the application of axiomatic techniques to the analysis of distributive problems, particularly justice and on the construction of social indicators. She was awarded with the 2017 King Jaime I Prize in Economics. She is Past-President of ASSET (Association of Southern-European Economic Theorists), and of the Spanish Economic Association. She has been Visiting Lecturer at the Universities of Vienna, LUISS Guido Carli (Rome), California (Davis) and Rochester and at the Institute for Economic Analysis (IAE, Barcelona), and Visiting Resident at IMÉRA Institute for Advanced Study of Aix-Marseille University (AMU). She has taught courses at the Barcelona Graduate School of Economics, the University of Paris X (Nanterre) and at the Institute of Advanced Studies in Vienna. She has been member of the Council of the Game Theory Society and of ArbolMat ('The Math Tree'), a joint initiative of the Spanish Royal Mathematical Society and Universia. She has also been a member of the Editorial Board of the *Social Choice and Welfare* review and the Managers Board of the Spanish Science and Technology Foundation. She has also been a consultant to the Scientific Policy Secretary General of the Spanish Ministry of Education and Science, Spanish coordinator of the TMR Network Cooperation and Information (FMRX-CT96-0055), as well as the Spanish representative for the EC Marie Curie Project PMD-CT-2000-00010 Topics on Quantitative Economics. Among her more than 70 articles, recent ones have appeared in *Journal of Risk and Uncertainty*, *Journal of Economic Inequality*, *European Journal of Operational Research*, *Applied Energy*, *Social Indicators Research*, *Journal of Informetrics*, *Economics of Education Review*, *Health Economics*, *Journal of Health Economics*, *Journal of Human Development and Capabilities*, *PLOS ONE* and *Social Choice and Welfare*. (Personal webpage: <http://fae.ua.es/FAEX/herrero-blancocarmen/>).



### **Matilde Mas** (*Universitat de València*)

Dr Mas, Director of International Projects of the **Ivie**, graduated and took a PhD in Economics at the Universitat de València, where she was Professor of Economic Analysis until September 2021. Currently, she is Professor Emeritus at the Universitat de València and Director of International Projects of the **Ivie**. Also, she has obtained five six-year periods (sexennials) of research activity and one of knowledge transfer. Her specialized fields are the knowledge economy, analysis of public capital, new technologies and intangible assets. She is currently co-director of the DIGITES (Digital Technologies Segment Data) Project commissioned by the European Commission's Joint Research Centre, Directorate B. She has been coordinator of the SPINTAN (Smart Public Intangibles) Project funded by the 7th Framework Programme of the European Union and has participated in other EU projects (EU KLEMS, INDICSER, ICTNET, DICTA and PREDICT). Also, she has been advisor to the LA KLEMS Project for Latin America. She is co-author of 88 books and book chapters, co-editor of *Industrial Productivity in Europe. Growth and Crisis* (Edward Elgar, 2011) and has published more than 90 articles in specialist journals such as *Journal of Productivity Analysis*, *NBER*, *Journal of Regional Science*, *Regional Studies* and *Review of Income and Wealth*, among others. She is member of the Editorial Board of the journal *Hacienda Pública Española*, member of the Advisory Board of *Ekonomiaz* and member of the Scientific Board of *Cuadernos Económicos* of ICE. In 2020 she was awarded by the General Council of Economists of Spain with the Grand Cross of Merit in Service to the Economy. In July of that same year, she was appointed Member of the Advisory Council for Economic Affairs of the Spanish First Vice-Presidency and Ministry of Economic Affairs and Digital Transformation. She frequently participates in the media discussing economic issues and is member of Cotec's Top 100 Experts as expert in intangible assets and in 2021 she was appointed expert advisor to the Economic and Social Council (CES) of Spain. (Personal webpage: [www.uv.es/masm](http://www.uv.es/masm)).



### **Joaquín Maudos** (*Universitat de València and CUNEF*)

Dr Maudos graduated (1989) and obtained his PhD (with special honors) in Economics from the Universitat de València (1995), where he is currently Professor in Economic Analysis. He is also Research Deputy Director of the **Ivie** and collaborator at the CUNEF. He is member of the Advisory Board of Asín-SGR of the Valencian Community and Cotec's Top 100 Experts. His specialist fields are banking and regional economics. He was Visiting Researcher in 1995-96 at the Florida State University Finance Department, at the College of Business at Bangor University (UK) in 2008-2009, and at the School of Business of the University of Glasgow, in addition to being consultant to the European Commission, the European Investment Bank and the United Nations. He has jointly published 35 books and 150 articles in specialized journals, both national and international (*Annals of Regional Science*, *Growth and Change*, *Economics Letters*, *Entrepreneurship and Regional Development*, *International Journal of Transport Economics*, *Journal of Banking and Finance*, *Journal of Business Economics and Management*, *Journal of Comparative Economics*, *Journal of Financial Services Research*, *Journal of International Financial Markets, Institutions and Money*, *Journal of International Money and Finance*, *Regional Studies*, *Review of Income and Wealth* and *Transportation Research*, among others), and has also taken part in various joint works. He is Director of competitive projects (Spanish Ministry of Education and Science, BBVA Foundation, etc.), as well as of projects with firms and government agencies. Citations: 9,182 in Google Scholar and 1,483 in Web of Science. H-Index= 47, i10-Index=84 in Google Scholar and H-index=19 in Web of Science. He is listed as number 2,454/101,121 in the ranking of scientists in Spain by Cybermetrics Lab-Scimago Group, IPP-CSIC. According to the University of Stanford Ranking, he is in the top 2% most-cited researchers worldwide. (Personal webpage: [www.uv.es/maudosj](http://www.uv.es/maudosj)).



### **José Manuel Pastor** (*Universitat de València*)

Dr Pastor graduated in Economics in 1990 and received his PhD with special honors from the Universitat de València in 1996, where he is Professor of Economic Analysis. Former Vice-Dean for Internships, Business and Economy Relations and for Communication and Business Relations at the Universitat de València, where he is currently Dean of the Faculty of Economics. He has been consultant for the Children and Youth Observatory (València City Council) and member of the cross-departmental committee of Valencia's Youth Programme and of the Board of Administration of Universitat de València's Language Center. He is also member of the Chair of Business Culture and of the General Foundation of the Universitat de València. His fields of research are economics of education, regional economics and banking. He has been a visiting researcher at Florida State University (USA) and at the College of Business, Law, Education and Social Sciences of Bangor University (UK), as well as an external consultant to the World Bank. He has published more than 50 books in collaboration and 80 articles in specialized journals (*Journal of Policy Modeling, Journal of International Financial Markets, Institutions and Money, Regional Studies, Scientometrics, Transportation*, etc.). He has been the main researcher of various competitive projects, as well as of projects with firms, government agencies, and has participated in several European projects. He is currently Director of the Chair for a Sustainable Economic Model of València and its Surroundings sponsored by the City Council of València. (Personal webpage: [www.uv.es/jmpastor](http://www.uv.es/jmpastor)).



### **José María Peiró** (*Universitat de València*)

Dr José María Peiró graduated (1975) and took his PhD (1977) in Philosophy and the Arts at the Universitat de València. He also graduated in Psychology at the Complutense University of Madrid (1976). He was awarded with an honorary degree from Maastricht University (2020), Miguel Hernández University (2017) and Universidade Metodista de São Paulo (2010). He was Professor of Organizational and Social Psychology at the Universitat de València until September 2020. Currently, he is Professor Emeritus at the Universitat de València, as well as Research Professor at the **Ivie**. He was Past-President of the International Association of Applied Psychology and Founding Director of the Research Institute of Personnel Psychology, Organizational Development and Quality of Working Life (IDOCAL). He was awarded by Psicofundación with the 2016 *José Luis Pinillos* Prize for Excellency and Innovation in Psychology "Psychologist of the Year". He was awarded the 2015 Aristotle Prize by the European Federation of Psychologists' Associations (EFPA), honored with the European Association of Work and Organizational Psychologists (EAWOP) Lifetime Contribution Award for his scientific and professional career (2013), granted the Advanced International Research Service and Fukuhara Award of the International Council of Psychologists (ICP) (2013) and received the Gold Medal from the General Council for Industrial Relations and Work Sciences (2010). He was director of the PhD Program of Human Resources and coordinator of the European Master Erasmus Mundus of Work, Organizational and Personnel Psychology of the Universitat de València. He was Director of the Observatory for Employment Access and Vocational Guidance of the Universitat de València (2003-2009). Author of more than 50 books and book chapters and 200 articles published in *Computers in Human Behavior, European Journal of Work and Organizational Psychology, International Journal of Hospitality Management, Journal of Applied Psychology, Journal of Occupational Health Psychology, Social Science & Medicine* and *Work & Stress*, among others. His research fields are transition of youth to the labor market, the prevention of psychosocial risks, human and social capital, quality of service, climate and culture in organizations, work teams, psychosocial aspects of ICT, management and development of the human resources. (Personal webpage: [www.uv.es/jmpeiro](http://www.uv.es/jmpeiro)).



### **Francisco Pérez** (*Universitat de València*)

Dr Pérez graduated (1973, with special honors and National Graduation Award) and obtained his PhD in Economics at the Universitat de València (1977). He has been Professor of Economic Analysis at the Universitat de València (1986-2020) and is currently Professor Emeritus at the same university and Research Director of the **Ivie** (since 1990). He has carried out and directed various studies on economic growth and international integration, competitiveness, regional economics, public finance, economics of education (mainly associated with universities and their results). He is author or co-author of 87 books and over 200 book chapters and articles in international and Spanish specialized journals. He has obtained six research sexennials and his research has been quoted more than 6,600 times, reaching an H-index of 37. He has directed ten PhD theses and has participated in over one hundred research projects for public and private institutions. He is a regular lecturer at many institutions and has participated in scientific meetings at over 50 different universities and research centers in Spain, Europe and North and South America. He is member of the Spanish Economic Association, the Spanish Association of Regional Science, the Wolpertinger Club, the European Economic Association as well as member of the boards of trustees and scientific councils of various institutions and foundations dedicated to promoting research and its diffusion. He is Eisenhower Fellow USA since 1998. In 2010 he was awarded the 8th Societat Catalana d'Economia Prize and in 2016 he received the Francesc de Vinatea distinction, the highest recognition from the Valencian Parliament. (Personal webpage: [www.uv.es/perezgar](http://www.uv.es/perezgar)).



### **Javier Quesada** (*Universitat de València*)

Dr Quesada graduated in Economics from the Universitat de València and took his PhD in Economics at the University of Cincinnati (Ohio). He served as Professor of Economic Analysis at the Universitat de València until September 2021, he was Director General of the Economy (1995-98) and Director of the Science and Technology Office of the Valencian Regional Government (1999-2003). His fields of research are financial and monetary economics, economic growth, new technologies, intangible assets and retention and attraction of talent. He has jointly published 20 books —*Infraestructuras, inversión privada e intangibles* (CAM, 2009), BBVA Foundation-**Ivie** Reports on *Growth and Competitiveness* (2011, 2012, 2013 and 2014), *Activos intangibles: Una inversión necesaria para el crecimiento económico en España* (Ariel and Telefónica Foundation 2014), among others— and articles in E. Gardener et al. (eds.) *Banking in the New Europe* (Palgrave Macmillan 2003), in J.R. Cuadrado (ed.) *Regional policy, economic growth and convergence: Lessons from the Spanish case* (Springer 2009) and in F. Fiordelisi et al. (eds.) *New Issues in Financial and Credit Markets* (Palgrave Macmillan, 2010), as well as in specialized journals such as *Applied Economics*, *European Journal of Finance*, *European Journal of Operational Research*, *Journal of International Financial Markets* and *Institutions and Money*. He was Visiting Scholar at Harvard University (1985-86). He is General Director of the Valencian Foundation for Advanced Studies, Executive President of the King Jaume I Awards, member of the European Academy of Science and Arts and member of the advisory council of the Príncipe Felipe Science Museum. (Personal webpage: [www.uv.es/quesada](http://www.uv.es/quesada)).





### **José Ramos** (*Universitat de València*)

Dr Ramos graduated (1988) and obtained his PhD in Psychology (1993) from the Universitat de València where he is currently Professor in Organizational Psychology in the Department of Social Psychology and member of IDOCAL (Research Institute of Personnel Psychology, Organizational Development and Quality of Working Life). He was Director of the Department of Social Psychology (2015-2021), Dean of the Faculty of Psychology (2006-2012) and Vice-Dean for Academic Organization (1999-2006). Also, he was member of the Executive Committee of the European Association of Work and Organizational Psychologists (EAWOP) from 2015 to 2019. He is coordinator of the National Referee Committee that awards the European Qualification for Psychologists (Europsy) of the European Federation of Psychologists Associations (EFPA). His specialist fields are the organizational climate and the psychological contract, analysis of managerial work, service quality, occupational stress, and employment, unemployment, psychological well-being and barriers to women's access to management positions. He has directed National R&D Plan projects and has also taken part in projects for the European Union. He has attended numerous national and international congresses, and has published over fifty works in national and international journals such as *Applied Psychology: An International Review*, *European Journal of Work and Organizational Psychology*, *International Journal of Stress Management*, *Psychological Reports*, *Psicothema*, *Total Quality Management & Business Excellence*, *Stress & Health* and *Work & Stress*. He has directed 10 PhD theses and is co-author of 20 books and book chapters, among which worth mentioning are *Productividad y gestión de recursos humanos en las Administraciones Públicas* (Funcas, 2010), *Psicología de las Organizaciones* (Editorial Síntesis, 2015) and *Creativity and Innovation in Organizations: Current Research and Recent Trends in Management* (Routledge, 2017).



### **Ernest Reig** (*Universitat de València*)

Dr Reig graduated and obtained his PhD in Economics from the Universitat de València, where he was Professor of Applied Economics from 1987-2021. He is specialized in regional and agricultural economics and in the analysis of efficiency and productivity amidst environmental effects. At present, he is studying the calculation of sustainability indexes and eco-efficiency. He has published several books and reports, among them *La multifuncionalidad de la agricultura en España* (Ministry of Agriculture-EUDEMA 2007), *La sostenibilidad del crecimiento económico en España* (Funcas 2011), *La sostenibilidad de la agricultura en España* (Cajamar 2013) and *Delimitación de áreas rurales y urbanas a nivel local: Demografía, coberturas del suelo y accesibilidad* (BBVA Foundation 2016) and *Las áreas urbanas funcionales en España. Economía y calidad de vida* (BBVA Foundation 2020). He is author of approximately 50 articles in various specialized journals such as *Agricultural Economics*, *Applied Economics*, *Economic Modelling*, *Environmental and Resources Economics*, *Investigaciones Económicas*, *Journal of Productivity Analysis*, *Land Use Policy*, *Resource and Energy Economics*, *Revista de Economía Aplicada* and *Social Indicators Research*. He was Research Scholar at the London School of Economics (1983-84), Director of the Instituto Valenciano de Economía de la Institució Alfons el Magnànim (1986-1991) and Director General of the Economy of the Valencian Regional Government (1991-95). He has been main researcher of several National R&D Plan projects, the most recent one titled *Indicadores sintéticos de sostenibilidad para la mejora de la gobernanza del sector agrario* (AGL2010-17560-C02-02). In 1997, he was awarded the 6th Premi Catalunya d'Economia (Prize in Economics of Catalonia) by the Societat Catalana d'Economia. (Personal webpage: [www.uv.es/ereig](http://www.uv.es/ereig)).





### **Lorenzo Serrano** (*Universitat de València*)

Dr Serrano is Professor at the Universitat de València where he graduated in Economics in 1991 (with special honors) and received his PhD in 1998 (with special honors). He also obtained a degree in Monetary Economics at the Centre of Financial and Monetary Studies in Madrid (1993). His work covers topics such as growth, human capital and regional economics. He has had scholarships from the Bank of Spain (1991-1993) and the Council of Education of the Valencian Regional Government (2001). He has also been Research Fellow at the SOM Research School of the University of Groningen (2000-2001). He has jointly published more than sixty books and more than 50 articles in Spanish (*Investigaciones Económicas, Moneda y Crédito, Revista Española de Economía, Revista de Economía Aplicada*, among others) as well as international reviews (*Applied Economics, Economics Letters, Journal of Productivity Analysis, Journal of Transport, Economics and Policy, Regional Studies, Review of Income and Wealth, Review of International Economics, Transportation and Transport Policy*). (Personal webpage: [www.uv.es/lherrano](http://www.uv.es/lherrano)).



### **Ezequiel Uriel** (*Universitat de València*)

Dr Uriel, Professor Emeritus at the Universitat de València and Research Professor at the **Ivie**, he took degrees in Law (1960) and Economics (1963) and did his PhD (1972) at the Complutense University of Madrid. His specialized fields are the labor market, statistical information systems and forecasting techniques. He has published fifty books individually and in collaboration with others, on the social accounting matrix and national accounting, statistical and econometric methods, regional analysis, statistical information systems and the labor market —*El stock y los servicios de capital en España y su distribución territorial* (1964-2002). *Nueva metodología* (BBVA Foundation 2005), *Balanzas fiscales de las comunidades autónomas con la Administración Pública Central, 1991-2005* (BBVA Foundation 2007) and *Cuentas de la Educación en España 2000-2013: Recursos, gastos y resultados* (BBVA Foundation 2016). Also he is author of over 100 articles in specialized journals such as *Estadística Española, Entrepreneurship and Regional Development, Investigaciones Económicas, Cuadernos del ICE, Anales de Economía, Moneda y Crédito, Revista de Economía Aplicada, Applied Economic Letters, Review of Income and Wealth, International Review of Law and Economics* and *Papeles de Economía Española*. He has participated in over 40 studies for public and private institutions, and directed 11 doctoral theses. He has 6 six-year periods (sexennials) of research activity. He was a Visiting Fellow at Warwick University in 1988-1989, Guest Lecturer at the Harvard School of Business in 1979 and Visiting Professor at the University of Berkeley (2000-2001). (Personal webpage: [www.uv.es/=uriel](http://www.uv.es/=uriel)).



**Fernando Vega-Redondo** (*Bocconi University, Italy*)

Dr Vega-Redondo has a degree in Economics from the Complutense University of Madrid and a PhD in Economics from the University of Minnesota. He is currently Professor at the Department of Decision Sciences of Bocconi University in Milan, Italy. He has been chosen fellow of the Econometric Society, Game Theory Society, and the Society for the Advancement of Economic Theory. He has also been member of multiple editorial committees. In 2011, he was awarded the FUE Research Diversity Prize by the Urrutia Elejalde Foundation. His research interests are focused on the field of networks, game theory, learning, and their applications to evolutionary processes such as growth and institutional change. His more than 100 published articles can be found in journals such as *Econometrica*, *Review of Economics Studies*, *Journal of Economic Theory*, *Games and Economic Behavior*, *International Economic Review*, *International Journal of Economic Theory*, *Journal of Theoretical Biology*, *Physical Review Letters*, *Science* and *Proceedings of the National Academy of Sciences*. He is the author of several books such as *Complex Social Networks* published as an Econometric Society Monograph, *Economics and Theory of Games* published by Cambridge University Press, and *Evolution Games and Economic Behavior* published by Oxford University Press. He has directed over twenty doctoral theses and has taught at the Universities of Alicante, Pompeu Fabra, Essex, and the European University Institute in Florence. He has also been Visiting Professor at the Indian Statistical Institute, the Institute for Advanced Studies in Vienna, the Hebrew University of Jerusalem and the Universities of Harvard, California-San Diego, Boston and Cornell. (Personal webpage: [www.igier.unibocconi.it/vegaredondo](http://www.igier.unibocconi.it/vegaredondo)).



**Antonio Villar** (*Pablo de Olavide University, Seville*)

Dr Villar has a degree in Economics from the Universitat de València and holds PhDs from the University of Alicante and the University of Oxford. Regarded as a researcher worthy of his reputation, he is at present Professor at Pablo Olavide University in Seville. He was awarded the XVI Andalusian Prize for Research in Social Sciences and Humanities. His specialized fields cover subjects of general equilibrium and welfare economics. He is the author of 19 books and over 90 research articles. He has been Visiting Scholar at the Centre for Operation Research and Econometrics (Belgium), at the Universities of Stanford, Oxford, York and Cardiff, the Institute for Advanced Studies (Vienna) and the European University Institute (Florence). He was head of the Economics and Law Division of the National Evaluation and Prospective Agency (1989-91), and in charge of the Evaluation Unit of the Science and Technology Office of the Valencian Regional Government (2002-2003), of the 2010 Consolider-Ingenio Program for the Spanish Ministry of Education and Science and Vice-Rector of Research and Technological Transference and First Vice-Rector of the Pablo Olavide University (2007-2010). He has participated in the revision of the criteria for preparing human development indices for the United Nations, and has directed several projects for the Andalusian Regional Government and National R&D Plan research projects. He has been member of the Advisory Commission for Special Research Infrastructures of the Ministry of Science and Innovation, and has been named Thomas J. Alexander Fellow (OECD 2015) and Fernand Braudel Fellow (European University Institute 2015). He is currently the delegate of the Rector for Strategic Projects at the International University of Andalusia. (Personal webpage: [sites.google.com/site/avillarupo](http://sites.google.com/site/avillarupo)).

## 2.5. Associate Researchers



### **Iván Arribas** (*Universitat de València*)

Dr Arribas graduated in Mathematics with special honors (1991) and obtained his PhD in Economy from the Universitat de València (2002), where he is currently Associate Professor. His main fields of research are techniques of quantitative analysis, time series analysis, game theory and international integration. He is co-author of the book *La medición de la integración comercial en una economía globalizada* published by the BBVA Foundation (2010), and has published numerous articles in specialized journals, such as *World Development*, *Economic Geography*, *Empirical Economics*, *Management Decision*, *Journal of Policy Modeling*, *Mathematical Social Sciences* and *Studies in Nonlinear Dynamics & Econometrics*, among others. He has participated in several studies for public and private entities (Iberdrola, Central Bank of the Dominican Republic, European Commission) and competitive projects of the National R&D Plan and Eurostat. Currently, he is member of a Prometeo project (PROMETEOII/2019/095) funded by the Valencian Regional Government. He is also member of the Research Group ERI-CES (Estructura de Recerca Interdisciplinar-Comportament Econòmic i Social). He has given courses at the Central Bank of the Dominican Republic and the University Mar del Plata (Argentina), and has taken part in numerous international scientific meetings. (Personal webpage: [www.uv.es/iarribas](http://www.uv.es/iarribas)).



### **José Enrique Devesa** (*Universitat de València*)

Dr Devesa graduated and obtained his PhD in Economics and Business Sciences from the Universitat de València and is a certified Actuary from the Complutense University of Madrid. He is Professor at the Department of Financial and Actuarial Economics of the Universitat de València. He is a member of the Spanish Institute of Social Welfare Policies of the Universitat de València and member of the research team "Research Group on Pensions and Social Protection (GIPPS)". He was proposed by the Spanish Council of Ministers as member of the Committee of Experts that developed in 2013 the sustainability factor of the public pension system in Spain. His research activity focuses on social protection systems, both public and private, related to benefits and pensions (retirement, disability, widowhood, orphanage, family care and unemployment). His main research has been published in national and international specialized journals such as *Journal of Risk and Insurance*, *Journal of Economic Policy Reform*, *Revista de Economía Aplicada*, *Revista de Análisis Económico* (University of Georgetown and ILADES), *Revista de Economía Financiera*, *Innovar*, *Moneda y Crédito*, *Hacienda Pública Española*, *Revista Española de Financiación y Contabilidad*, among others. He has directed several research projects obtained by public tenders such as Fipros, Instituto de Estudios Fiscales, Premio Landaburu 2013 de Eurobask, Cátedra ATA-Trabajador Autónomo and Fundación Edad&Vida. He has also participated in national and international workshops related to social protection, the sustainability of the pension system, the unemployment system, as well as on financial and insurance products.



### **Alejandro Escribá** (*Universitat de València*)

Dr Escribá obtained his PhD in Economics and Business Studies from the Universitat de València. Currently, he is Professor of Business Administration at the said university and Director of the Universitat de València Chair of Family Business. He has been Guest Lecturer at Bocconi University (Italy), HEC Montreal and Concordia University (Canada). His research interests focus on the study of business strategy and competitiveness, as well as on the role of management teams and of corporate governance in this area. His work also addresses the strategic analysis of university systems and of academic performance. He has published more than thirty articles on these issues in several Spanish and international journals, among them *Long Range Planning*, *Business Research Quarterly*, *Journal of Management Studies*, *Group and Organization Management*, *British Journal of Management*, *Journal of Family Business Management*, *International Small Business Journal*, and *International Marketing Review*. He has been Associate Editor of the journals *Long Range Planning* and *Business Research Quarterly* and invited editor of *Journal of Management Studies*, *International Studies of Management and Organization* and *European Journal of International Management*.



### **Juan Fernández de Guevara** (*Universitat de València*)

Dr Fernández de Guevara graduated and obtained his PhD (with special honors) in Economics from the Universitat de València, where he is currently Assistant Professor of Economic Analysis. His specialized fields are banking, social capital, productivity analysis and the role of ICT and intangible assets in economic growth. He has been researcher in the projects INDICSER and SPINTAN, funded by the EU 7th Framework Programme, and advisor to the European Investment Bank, the European Commission and the United Nations. Currently, he took part in a National R&D Plan Project and is author of more than 30 books and book chapters and has co-edited three books for Cambridge University Press, Palgrave MacMillan and BBVA Foundation. Also, he has published more than 30 articles in specialized journals such as *Journal of Banking and Finance*, *The Manchester School*, *The European Journal of Finance*, *Journal of International Money and Finance*, *Revista de Economía Aplicada*, *Regional Studies*, *Applied Economics Letters*, *Journal of Higher Education* and *Journal of Financial Stability*, among others, and has participated in numerous national and international congresses. In 2015, he received the prize for the best co-authored paper from Funcas Research Promotion Programme. (Personal webpage: [www.uv.es/radoselo](http://www.uv.es/radoselo)).



**Alicia Gómez** (*Universitat de València*)

Dr Gómez graduated in Economics, with special honors, from the Universitat de València (2008) and obtained her PhD in Applied Economics, with international mention and honors, from the Universitat Autònoma de Barcelona (2016). During her doctorate studies, she spent six months at the Institut de Recherches économiques et sociales (Université Catholique de Louvain). She also holds a Master's Degree in Research in Economics by the Barcelona Graduate School of Economics and the Universitat Pompeu Fabra (2010). Since 2019, she is Assistant Professor in the Department of Economic Analysis at the Universitat de València. Her fields of research are applied economy, international economics and regional economics. She has published 5 articles in specialized journals, one book and one book chapter. She has participated in 5 research project and various national and international workshops and seminars. (Personal page: <https://www.uv.es/agote2/>).



**Manuel Illueca** (*Universitat Jaume I*)

Dr Illueca graduated in Economics and Business Studies from the Universitat de València (1993) and obtained a PhD in Business Administration and Management from the Universitat Jaume I in Castellón (2001), where he is Associate Professor in Financial Economics and Accounting (on leave). Currently he is Director of the Valencian Institute of Finance. In 2007 he was Visiting Scholar in the Finance Department of the University of Indiana (US). His research fields are financial statement analysis, the economics of banking, and financial derivatives. He is co-author of *Banca relacional y capital social en España: Competencia y confianza* (BBVA Foundation, 2006), and has published articles in national (*Investigaciones Económicas, Revista de Contabilidad, Revista Española de Financiación y Contabilidad, Spanish Economic Review*, among others) and international (*Applied Economics, Energy Economics, International Small Business Journal, Journal of Futures Markets, Journal of Productivity Analysis, Review of Finance*, among others) journals. He has been member of the editorial boards of *PYME-Revista Internacional de la Pequeña y Mediana Empresa* and *Revista Valenciana de Economía y Hacienda*, editor of the *Revista de Contabilidad-Spanish Accounting Review*, and referee for leading Spanish and international journals. He has taught several courses and seminars, and participated in numerous national and international conferences and scientific meetings.



**Jesús Rodríguez-López** (*Pablo de Olavide University, Seville*)

Dr Rodríguez graduated in Economics from the University of Seville (1992), holds a Master in Economics from the Pompeu Fabra University of Barcelona (1997) and obtained his PhD in Economics from the Pablo de Olavide University of Seville (2003), where he is currently Professor. Since March 2011 he is collaborator of the UNICAJA Financial Education Platform (eduFlnet). He has been Visiting Researcher at the University of Minnesota (2009, 2010 and 2011) and at the European University Institute of Florence (2004). He has also been Assistant Professor in specialized courses for Professor Dr. Albert Marcet on Bayesian Econometrics (2002) and Time Series Analysis: SVAR (1998), organized by the International Menéndez y Pelayo University. His research focuses on economic cycles, progress in investment-specific technology, analysis of exchange rate regimes and international economy. He has published several book chapters and articles in indexed journals: *Macroeconomic Dynamics*, *Energy Economics*, *Journal of Economic Behavior and Organization*, *Information Economics and Policy*, *Journal of Macroeconomics*, *Open Economies Review*, *Papers in Regional Science*, *Review of International Economics*, *Telecommunications Policy* and *The Berkeley Electronic Press Journal of Macroeconomics*. He has been a researcher of various competitive projects with government agencies, and main researcher for the project funded by the European Commission *The role of information and communication technologies in the economic growth of the Andalusian region*. (Personal webpage: <https://sites.google.com/view/jesus-rodriguez-lopez/home?authuser=0>)).



**Vicente Safón** (*Universitat de València*)

Dr Safón graduated in Economic and Business Sciences and holds a PhD in Business Management from the Universitat de València. Currently, he is Associate Professor at the Department of Business Administration "Juan José Renau Piqueras" of the Universitat de València. He has also been director of the former department and of the Master's Degree in Business Management (MBA) of the said university and Statutory Director of the Florida Universitaria, a center associated to the Universitat de València. His areas of interest are corporate governance, management teams, business strategy and competitiveness and strategic analysis applied to universities, on which he has published different articles in academic journals, for example, in *Academy of Management Learning and Education*, *Scientometrics*, *International Business Review*, *Corporate Reputation Review*, *Long Range Planning* among others, and is the author and co-author of several national and international books and book chapters. He has collaborated in projects for private and public institutions, in competitive projects of the public administration and the National R&D&I Plan as main researcher of the projects "Roots for growth and competitiveness in Family and Non-Family SMEs. Microfoundations in the governance, management and ownership bodies" (ECO-2016-80002R) and "Resiliencia de las PYMES: el papel de los equipos directivos, la propiedad en la creación de capacidades dinámicas" (AICO/2021/309). He has also presented numerous papers at national and international congresses.





### **Ángel Soler** (*Universitat de València*)

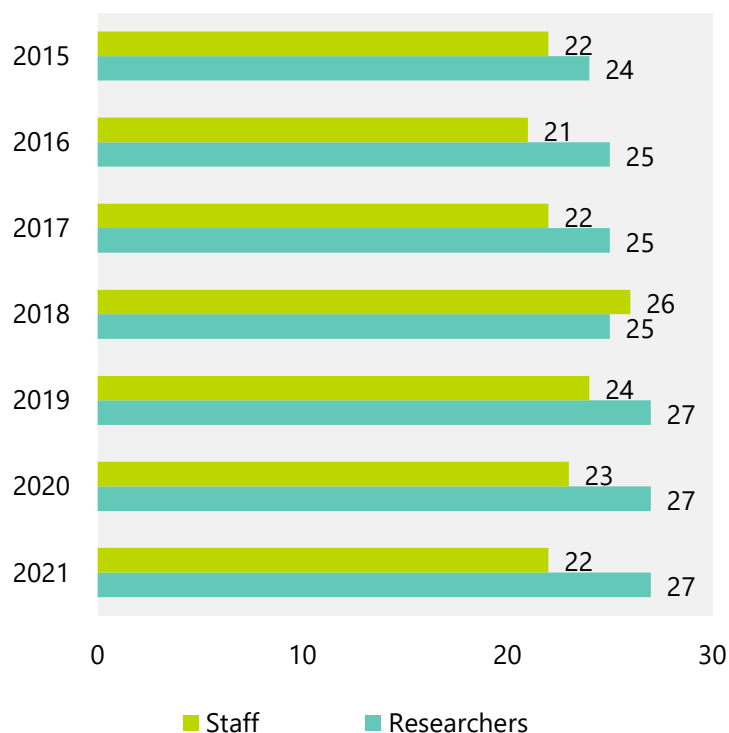
Dr Soler graduated in Economics and Business Administration from the Universitat de València, he holds a Master's Degree in Industrial Economics and a PhD in Economics from the Universitat de València. He worked as a research technician at the **Ivie** from 1996 to 2019 and is currently Assistant Professor at the Department of Applied Economics at the Universitat de València. His main fields of research are the economics of education, human development and the labor market, subjects on which he has published 84 books and book chapters, as well as 12 articles in national and international journals. He has participated in more than 95 research projects and is co-author of the database *Human Capital Series for Spain, its Regions and Provinces*, which has been the main focus of collaboration with the Bancaja Foundation for more than twenty years. He has dedicated an important part of his professional career to the design and construction of the Human Development Index (HDI) for the Spanish regions, a very relevant topic for many important institutions such as the United Nations. In addition, he has participated in international projects such as EUKLEMS and SPINTAN. He is currently the International Mobility Coordinator of the Faculty of Economics at the Universitat de València and collaborating professor of the Chair for a Sustainable Economic Model of València and its Surroundings (MESVAL) sponsored by València City Council since its creation in 2017. He was awarded by the Faculty of Economics with the IV Premi d'Igualtat in 2017, and was part of the team that developed the study "El Desarrollo del Arco Mediterráneo Español. Trajectory and perspectives", which received the VIII Premi Societat Catalana d'Economia in 2010.



### **Emili Tortosa-Ausina** (*Universitat Jaume I*)

Dr Tortosa graduated in Economics and Business Studies from the Universitat de València and obtained his PhD with special honors from the Universitat Jaume I in Castellón, where he is currently Professor in Applied Economics. He has also lectured in the Economic Analysis Department at the University of Alicante and has held scholarships at various institutions. He has been a guest researcher at the Business Economics Department at the Autonomous University of Barcelona, the School of Economics at the University of New South Wales (Sydney, Australia), the Economics Department at Oregon State University (USA), the School of Management at the University of Leicester (UK), and the Faculty of Business and Economics at the Diego Portales University (Chile). His specialist research areas are economic measurement, in particular, the analysis of efficiency and productivity. He has published various books in collaboration with others, and his articles have appeared in specialized journals such as *Annals of Regional Science*, *Applied Economics*, *Economic Geography*, *Economics Letters*, *Economics of Education Review*, *Empirical Economics*, *Environment and Planning A*, *European Economic Review*, *Journal of Business Economics and Management*, *Journal of Policy Modeling*, *Journal of Productivity Analysis*, *Journal of Regional Science*, *Papers in Regional Science*, *Review of Industrial Organization and World Development*, among others. He has participated and organized numerous national and international congresses and scientific meetings. (Personal webpage: [www3.uji.es/~Tortosa](http://www3.uji.es/~Tortosa)).

**Figure 1.**  
Staff and  
researchers



## 2.6. Management



### **Pilar Chorén Rodríguez**

Graduate in Economics from the Universitat de València (Extraordinary Prize, 1999), specializing in International Economics, she holds a Bachelor of Arts in European Economics from the University of Middlesex (London, 1998). She obtained her research proficiency qualification from the Universitat de València in international finance (2002). She also holds a Diploma in Public Policy and Program Evaluation from the University of Carleton (Canada, 2008). She joined the **Ivie** in 1999 and from 2006 to 2012 worked simultaneously as research technician and adjunct professor in the Department of Economic Analysis at the Universitat de València. Currently, she holds the position of Managing Director of the **Ivie**. She has taken part in over 50 economic studies and research projects, acquiring broad experience in project management and team leadership, and in dealing with clients and partner institutions. Her main fields of research are demography, foreign competition, and public policy and program evaluation for the public administration, on which she has published 13 monographs, reports and articles in specialized journals.

## 2.7. Technical staff



### **Carlos Albert** (*Economist*)

Graduate in Economics (2006), he holds a Master's Degree in Development, Institutions and Economic Integration (2008) from the Universitat de València. He obtained a collaboration scholarship in 2007 from the Department of Economic Analysis (Universitat de València) and is adjunct professor of this department since 2012. He joined the **Ivie**'s research department in 2008. He is co-author of several book chapters and reports, among which worth mentioning is *Las áreas urbanas funcionales en España: economía y calidad de vida* (Fundación BBVA-Ivie 2019).



### **Rodrigo Aragón** (*Computer engineer*)

Graduate in Computer Science from the Polytechnic University of Valencia (1989), he is head of the IT department at the **Ivie** since 1991. He is responsible of developing information systems and databases within the **Ivie** and gives technical support to users. Also, he has actively participated in 77 research projects and in the construction of eight databases, including the first editions of *El stock y los servicios del capital en España y su distribución territorial* and the different editions of *Observatory of Young people's transition to the labor market*, and several projects based on the calculation of university indicators and the U-Ranking project.



### **Eva Benages** (*Economist*)

Graduated in Economics from the Universitat de València with special honors in 2004, she holds a University Professional Specialization Diploma in Spanish Stock and Financial Markets (2003) and completed her postgraduate studies at the Universitat de València, majoring in Economic Integration and Development (2007). Since 2003, she is part of the **Ivie**'s technical research team. She has participated in more than 30 national and international (EU KLEMS, PREDICT, SPINTAN, etc.) projects and is co-author of numerous books, articles and specialized reports. She is adjunct professor at the Universitat de València.



### **Miguel Ángel Casquet** (*Economist*)

Graduated in Economics from the University of Murcia in 2020, he holds a Master's Degree in Applied Research in Economics and Business (MAREB). During his undergraduate studies, he worked as an intern in the Department of Applied Economics at the University of Murcia. Since September 2021 he is part of the **Ivie**'s technical research team.



### **Héctor García** (*Computer engineer*)

Graduate in Computer Engineering from the Polytechnic University of Valencia (1999), majoring in Computer and Software Engineering. In 2007 he obtained the 'Corporate Networks and Integrated Systems Specialist' diploma from the Polytechnic University of Valencia. He has also completed the Cisco Certified Networking Associate and Cisco Wireless LANs courses. While finishing his degree, he was granted a scholarship at the **Ivie**. Since 1999 he is part of the **Ivie**'s IT department where he is in charge of computer resources, several databases, the **Ivie** website and other websites created by the **Ivie** (ABACO, U-Ranking, SPINTAN).



### **Ignacio Gordo** (*Economist, until 31 August 2021*).

Graduate in Economics from the University Carlos III of Madrid (2017), he holds a Master's Degree in Industrial Economics and Markets from the same university (2019). During his studies he worked in the Fiscal Policy Unit of the Research Department at the Bank of Spain. Upon completing his master's degree, he obtained a research grant to collaborate in the study on Tax Benefits of Phase II of the Spending Review by the Independent Authority for Fiscal Responsibility (AIReF) (2020). In March 2021, he began to work as a research technician at the **Ivie**, until August 2021 when he started working for the Bank of Spain.



### **Laura Hernández** (*Economist*)

Graduate in Economics from the Universitat de València (2006), she obtained a Master of Research in Economics by the Barcelona Graduate School of Economics and the Pompeu Fabra University (2007-2009). Since 2007, she is a research technician at the **Ivie**. Recently, she has collaborated in several projects financed by the European Union, such as PREDICT and SPINTAN, and currently participates in the DICTA Project on ICT industries in Europe. Also, she is co-author of the book *Servicios públicos, diferencias territoriales e igualdad de oportunidades* (BBVA Foundation, 2015).



### **Consuelo Mínguez** (*Economist*)

Graduate in Economics, majoring in Economic Analysis (2016), she holds a Master's Degree in Economics, majoring in International Economics, from the Universitat de València (2017). During her studies, she did work training at the **Ivie**. Since 2017, she is a research technician at the **Ivie**. She has participated in several national and international (DICTA, PREDICT) projects financed by the European Union.



### **Silvia Mollá** (*Economist*)

Graduate in Economics from the Universitat de València (2014) as top student of her class, with special honors, she holds a Master's Degree in Economic Analysis (International Doctorate in Economic Analysis Program) from the Autonomous University of Barcelona (2016). During her studies she obtained a collaboration scholarship from the Department of Economic Analysis of the Universitat de València, was research assistant at the **Ivie** and teacher assistant at the Autonomous University of Barcelona. Since 2016, she is a research technician at the **Ivie**.



### **María Moraga** (*Economista, until 31 July 2021*)

Graduate in Business Administration from the University of Castilla-La Mancha with special honors (2016), she holds a Master's Degree in Economic Development and Growth from the University Carlos III of Madrid and Lund University. She worked at the **Ivie** as a research technician from May 2020 to July 2021, when she was accepted for a Marie Curie Fellowship in France. She previously worked as an economist in the Global Macro Scenarios Unit at BBVA Research and as a research assistant in the Structural Analysis Division of the Bank of Spain. In 2020, she joined the **Ivie's** technical team.



### **Juan Pérez** (*Economist*)

Graduate in Business Administration (2005) from the Universitat de València, he holds a Master's Degree in Globalization, majoring in Economic Integration (2011) from the same university, graduating with special honors in both degrees. During his academic studies, he collaborated with the Business Administration Department of the Universitat de València and worked as a market analyst in the IVEX office in Cuba. He also worked as an auditor and strategy consultant at Deloitte and T-Systems. In 2007, he joined the **Ivie's** technical research team. He has participated in more than 30 research projects developed by the **Ivie** for public and private institutions and the European Union. In 2019 he was appointed General Director of the Economic Model, Regional Funding and Financial Policy of the Valencian Regional Government, returning in May 2021 to his position as a research technician at the **Ivie**.



### **Fernando Pascual Lavilla** (*Economist*)

Graduate in Economics from the Universitat de València with special honors (2006), he holds a Master's degree in Economics and Finance from the Centre for Monetary and Financial Studies (2008). During his undergraduate studies, he collaborated with the Department of Economic Analysis. He has spent most of his working life at financial firms, such as Bankia and Mutua Madrileña. In March 2018, he joined the **Ivie's** technical team.



### **Juan Carlos Robledo** (*Economist*)

Graduate in Economic and Business Administration from the Universitat de València (1993), since 1994 he is a research technician at the **Ivie**. He has collaborated in more than 70 economic studies developed by the **Ivie**, including *El stock y los servicios del capital en España y su distribución territorial* (BBVA Foundation), *Desarrollo del Arco Mediterráneo Español* (CAM) and *Intangibles en la nueva economía* (Telefónica Foundation), as well as projects funded by the European Union: EU KLEMS, DICTA, PREDICT, INDICSER and SPINTAN. He is co-author of several books and articles published in specialized journals.



### **Inés Rosell** (*Economist, until 31 January 2021*).

Graduate in International Business, majoring in Finance, from the Universitat de València and the University of North Carolina at Wilmington (Cum Laude, 2017), she holds a Master's Degree in Economics from la Universitat de València (2018), majoring in International Economics. She had the chance to complete the last two years of her Bachelor's Degree in the US, where she worked as an intern in the financial sector. In September 2018, she joined the **Ivie**'s technician team, until January 2021 when she started working at S2 Grupo as a Customer Insights Analyst.



### **Jimena Salamanca** (*Economist*)

Graduate in Economics from the Universidad Católica Boliviana, she completed her postgraduate studies at the Universitat de València (2005). She is a research technician at the **Ivie** since 2006, participating in various studies including the FIAB-Cajamar-**Ivie** Research Program (2014-2015), *Endeudamiento de las empresas españolas en el contexto europeo* (BBVA Foundation, 2014), and European projects such as INDICSER (2012). Currently, she is part of the DICTA Project research team (2015). She is co-author of several books and articles and responsible for the InnDEA Foundation reports *Valencia, ciudad del conocimiento*.



### **Marta Solaz** (*Economist, until 4 August 2021*)

Graduate in Economics (2009) and Master in International Economics (2011), majoring in economic integration, with special honors (Universitat de València), she also holds a Master's degree in Economics from Université de Nantes France, 2008). In 2017 she received her Ph.D. in International Economics from the Universitat de València, obtaining the Cum Laude distinction. During her postgraduate studies, she worked as a research technician in a Prometeo project (2009-2012). After that, she was granted an FPU scholarship from the Spanish Ministry of Education to complete her Ph.D. at the Department of Economic Analysis (Universitat de València). She joined the **Ivie**'s technical team in 2015 until August 2021 when she accepted a position as an Assistant Professor at the Universitat de València..





**Irene Zaera** *(Economist)*

Graduate in Business Administration (2004) and in Research and Marketing Techniques (2005) from the Universitat de València, she also holds a Bachelor's degree in International Management, majoring in Marketing from Euromed Marseille-École de Management (France, 2003). Since 2007, she is part of the **lvie**'s technical research team. She has participated in various projects developed by the **lvie** on the socioeconomic contribution of Spanish universities and is highly experienced in consultancy work and strategic planning.

## 2.8. General Services



**Mª Cruz Ballesteros** *(Design and publications)*

She holds a BA in Fine Arts (2010), specializing in graphic design. Upon completing her university studies, she worked at the Department of Culture of the Valencia City Council in the exhibition division, where she was responsible for designing the displays. In March 2018, she joined **lvie**'s Design and Editing Department as a graphic designer. Her tasks include the design and layout of reports and other dissemination documents.



**Rosa Buitrago** *(Secretary)*

She has been **lvie**'s management secretary since 1992. She is in charge of managing the agenda for **lvie**'s Directors and Researchers, and coordinating meetings and is responsible for the technical secretariat of scientific meetings organized by **lvie** and collaborates with database updating.



**Yolanda Jover** *(Press)*

Graduate in Journalism from the CEU Cardenal Herrera University (1998), she holds a Master's Degree in Marketing and Digital Communication from the IEM Business School (2015). She is specialized in economic and corporate information and has extensive professional experience in the media and press office areas. Since 2016, she has been in charge of **lvie**'s Communication Department, her main task being to achieve the maximum dissemination of the results from the research carried out in the **lvie**. To this end, she maintains close contact with the media, manages **lvie**'s social networks and is responsible for updating the website's contents.



### **Leo Marqués** (*Administration*)

She holds a degree in Business Studies from the Universitat de València (1988). Since 1991, she has worked for the **Ivie** and is currently in charge of the Institute's financial, labor, and management accounting.



### **Belén Miravalles** (*Documentation*)

She holds an honors degree in Documentation from the Polytechnic University of Valencia (2004) and a degree in Librarianship and Documentation from the Universitat de València (2001). She joined **Ivie** in 2008, where she is responsible for the Institute's library and document management. She supports research by searching for information and helping update **Ivie's** websites, the ABACO Observatory, and researcher profiles and the scientific dissemination of their work. She is also in charge of the ABACO twitter account and helps the communication area compile news and disseminate the Institute's activities.



### **Natalia Mora** (*Administration*)

Graduate in Business Administration and Management from the Universitat de València (2005), she joined **Ivie** in 2006, and is in charge of the Institute's financial and administrative control. She is also responsible for the administrative management of **Ivie's** European projects (7th Framework Programme and Horizon 2020 Programme) and has worked on various research projects, specializing in economic and financial analysis.



### **Alicia Raya** (*Design and publications*)

She holds an honors degree in Fine Arts (2011) and a Master's Degree in Design and Illustration from the Polytechnic University of Valencia (2012). Between the end of 2012 and 2014 she obtained professional experience at the *Muovo* and *Kokoro & Moi* design studios in Helsinki (Finland). In May 2015 she joined **Ivie**, where she is in charge of the corporate image of the Institute and its research projects. Her tasks include the design and layout of reports and the dissemination notebooks published. She also designs images for the website and prepares the presentation material for scientific meetings.



### **Susana Sabater** (*Publications*)

Graduated as Salutatorian from Lee High School (Michigan, USA), she has a Computer Applications Certificate from Grand Rapids Community College. During her studies, she worked as a teller at First of America Bank. Since 1995, she has been part of **Ivie's** team where she is in charge of coordinating, preparing layouts and publishing the Institute's Working Paper Series, as well as the monographs and reports. She has extensive experience in preparing research articles for specialist journals and translates texts for the Institute's website and international projects.

## 2.9. Collaborators in research projects and other activities

Among all the collaborators who participated in research projects and other scientific activities carried out by the **Ivie**, the following 39 researchers from 11 institutions took part in different economic studies conducted by the **Ivie** in 2021:

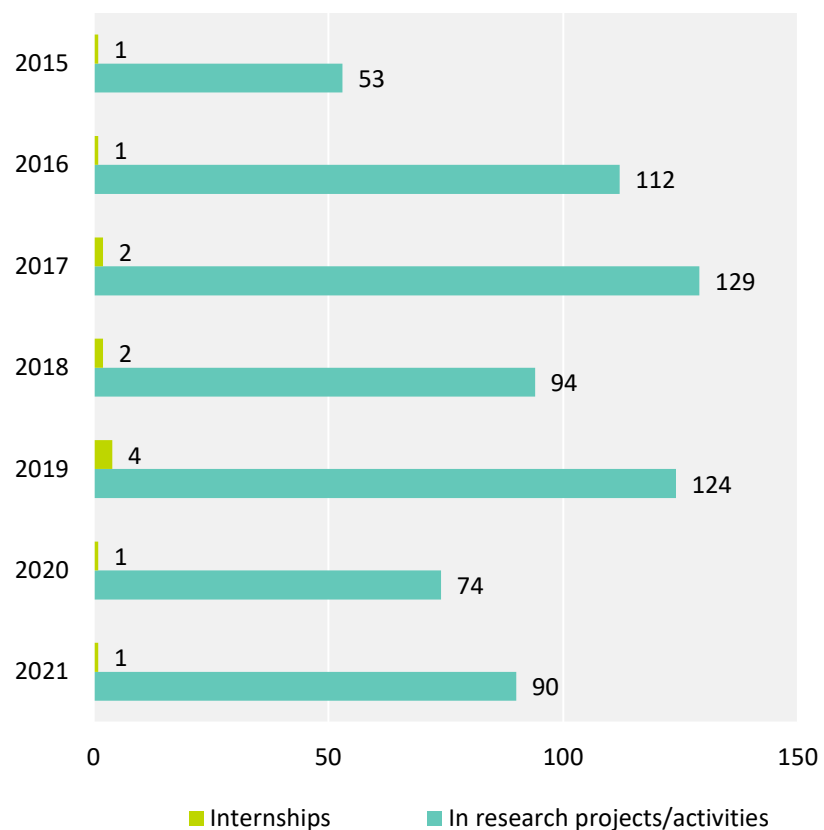
Patricia Barber Pérez (Universidad de Las Palmas de Gran Canaria)  
Gloria Berenguer Contrí (Universitat de València)  
Enrique Bernal Delgado (Instituto Aragonés de Ciencias de la Salud)  
Enrique Bigné Alcáñiz (Universitat de València)  
Susana Borraz Perales (AFI)  
Pedro Cantos Sánchez (Universitat de València)  
Enrique Castellón Leal (Universidad de Las Palmas de Gran Canaria)  
Sara de la Rica Goiricelaya (Fundación ISEAK)  
Marta Frasset Deltoro (Universitat de València)  
Amadeo Fuenmayor Fernández (Universitat de València)  
Irene Gil Saura (Universitat de València)  
Beatriz González López-Valcárcel (Universidad de Las Palmas de Gran Canaria)  
Lucía Gorjón García (Fundación ISEAK)  
Rafael Granell Pérez (Universitat de València)  
María Iborra Juan (Universitat de València)  
Totti Konnola (UTE- SPTCV)  
Marie Laffaire (KSNET)  
Ignacio Lago Peñas (Universitat Pompeu Fabra)  
Santiago Lago Peñas (Universidade de Vigo)  
José Manuel Leceta (UTE- SPTCV)  
Carmen López Herrera (AFI)  
Vicente Martínez-Tur (Universitat de València)  
Robert Meneu Gaya (Universitat de València)  
Alejandro Mollá Descals (Universitat de València)  
María Romero Paniagua (AFI)  
Ainhoa Osés Arranz (Fundación ISEAK)  
Jordi Paniagua Soriano (Universitat de València)  
Salvador Peiró Moreno (FISABIO, Generalitat valenciana)  
Manuela Pardo del Val (Universitat de València)  
José A. Pérez García (Universitat Politècnica de València)  
Jaime Pinilla Domínguez (Universidad de Las Palmas de Gran Canaria)  
Francisco Requena Silvente (Universitat de València)  
Manuel Ridao López (Instituto Aragonés de Ciencias de la Salud)  
María Eugenia Ruiz Molina (Universitat de València)

Carlos Salvador Muñoz (Universitat de València)  
 María Sánchez Vidal (KSNET)  
 Javier Serrano Martínez (AFI)  
 Pere A. Taberner (KSNET)  
 Laura Vallejo Torres (Universidad de Las Palmas de Gran Canaria)

## 2.10. Collaborators with training contracts<sup>1</sup>

Through an agreement signed with the Universitat de València, Antonio Pantoja Rodríguez did an internship at the **Ivie** while taking a Degree in Economy at the said university (September 2021 – January 2022).

**Figure 2.**  
 Collaborators  
 in activities  
 carried out by  
 the **Ivie** and  
 internships



<sup>1</sup> Activities related to internships within the **Ivie** are funded by the Valencian Regional Government's Ministry for Finance and the Economic Model, through a cooperation agreement signed between both institutions to promote and consolidate the **Ivie**'s basic and applied economic research activities.

### 3. COLLABORATION AGREEMENTS

The Institute's initiatives are possible thanks to the financial support of the institutions which sponsor **Ivie**'s lines of research and share the Institute's aims. Likewise, all research undertaken by the **Ivie** is based mainly on the initiatives and projects of the university professors who are associated with the Institute as researchers and, in general, on the research potential of the Valencian Universities. To favor this relationship, cooperation agreements have been signed with:

- Agència Valenciana de Foment i Garantia Agrària (AVFGA)
- Air Nostrum
- Asociación Valenciana de Empresarios (AVE)
- Autoridad Independiente de Responsabilidad Fiscal (AIReF)
- Bankia
- Banco de Crédito Social Cooperativo, S.A.
- CaixaBank
- Cajamar
- Comisión Europea
- Conselleria d'Economia Sostenible, Sectors Productius, Comerç i Treball (Generalitat Valenciana)
- Conselleria d'Hisenda i Model Econòmic (Generalitat Valenciana)
- Conselleria d'Innovació, Universitats, Ciència i Societat Digital (Generalitat Valenciana)
- Feria Valencia
- Fundació Ernest Lluch
- Fundación Bancaja
- Fundación BBVA
- Fundación LAB Mediterráneo
- Fundación COTEC para la Innovación
- Fundación Ramón Areces
- Fundació València Bàsquet 2000
- Mercadona
- Presidència (Generalitat Valenciana)
- Sociedad de Proyectos Temáticos de la Comunitat Valenciana
- Universitat d'Alacant
- Universidad de Castilla-La Mancha
- Universidad Miguel Hernández
- Universitat de València
- Universitat Jaume I
- Universitat Politècnica de València

## 4. ACKNOWLEDGMENTS

The work carried out by the **Ivie** has been acknowledged both in academic circles and on a social level. During its three decades of existence, the Institute and its researchers have received the following awards:

- In 2021, the Spanish Economic and Social Council (ESC) designated **Ivie**'s Director of International Projects, Matilde Mas, as expert advisor for Economy.
- **Ivie** Researchers Ángel Soler and José Manuel Pastor received the Best Paper Award at the 2021 MESVAL Congress for *Resiliencia, educación y sostenibilidad*, carried out in collaboration with economist Iván Vicente.
- On 26 November 2020, the General Council of Economists of Spain awarded Matilde Mas the Grand Cross of Merit in Service to the Economy in recognition of her outstanding contribution to the economy and for making economic results available to society as a whole.
- Matilde Mas and Joaquín Maudos, both **Ivie** Researchers and Professors at the University of Valencia, were appointed on 7 January and 9 September 2020, respectively, as members of Cotec's Top 100 Experts, a network of specialists in diverse areas of knowledge which aims to promote innovation.
- On 30 January 2019, **Ivie** Research Professor and Professor of Organizational and Social Psychology at the Universitat de València, José María Peiró, was awarded an Honorary Degree (Doctor Honoris Causa) by the Maastricht University.
- On 25 November 2019, **Ivie** researcher, José García-Montalvo, was awarded the 2019 King Jaume I Prize in Economics for his valuable work closely linked to economic reality.
- The Spanish Regional Science Association (AEER) awarded the 5th Prize for Regional Science to the **Ivie** for "the effort it has made over the years, both as an institution that promotes and drives economic research and also on an individual level for the specific work done by its researchers". The award ceremony was held on 22 November 2018. Francisco Pérez, **Ivie** Research Director, accepted the award from the Valencian Regional Government's Minister of Finance and Economic Model, Vicent Soler.
- José María Peiró received the Scientific Award granted by the Healthier Society Fostering Healthy Organizations International Group. The award ceremony took place in Florence, at the Università degli Studi di Firenze (UniFI), on 30 August 2018.
- On 15 May 2018, the Social Board of the University of Alicante awarded its 2018 Research Award to Carmen Herrero, **Ivie** researcher and Professor of Economic Analysis. The award was given in recognition of Professor Herrero's special research achievements and record of excellence, inspired by a deep concern for social problems, in particular in relation to fairness, social welfare and health economics.
- The paper *The Impact of Lending Relationships on the Choice and Structure of Bond Underwriting Syndicates* by Santiago Carbó (co-author with P.J. Cuadros and F. Rodríguez) was awarded the



'Premio Accésit' of the FEF Antonio Dionis Soler 2017 Research Awards and delivered on 6 March 2018.

- The Societat Catalana d'Economia, affiliate of Institut d'Estudis Catalans, awarded José García-Montalvo the XV Catalunya d'Economia 2017 Prize for the research study *Política de precios públicos y eficiencia del sistema de becas de Catalunya*. The prize was given on 7 February 2018.
- **Ivie** researcher, Carmen Herrero, was awarded the 2017 Rey Jaime I Prize in Economics, one of Spain's most important scientific awards. The ceremony, presided by HM Queen Letizia, took place at the Lonja in Valencia on 30 October 2017.
- On 26 October 2017, the Spanish Economic and Social Council (ESC) awarded the **Ivie** with its XXI Research Prize. **Ivie's** project, which was chosen from among the 17 presented, aimed to analyze the social and economic impacts of the progressive introduction of the digital economy in Spain.
- On 4 July 2017, José María Peiró, received the Honorary Degree from the Miguel Hernández University in recognition of his important role as leading expert in the field of work and organizational psychology.
- On 16 December 2016, Professor José María Peiró was awarded the *José Luis Pinillos Prize* for Excellence and Innovation in Psychology, in the category of 'Psychologist of the Year', by Psicofundación (the Spanish Foundation for the Scientific and Professional Promotion of Psychology). The **Ivie** researcher received the award at the closing conference ceremony of the III Jornadas de Excelencia e Innovación en Psicología, in which his academic, scientific and professional career was recognized.
- On 15 December 2016 at the Simposio de la Asociación Española de Economía (Spanish Economic Association) in Bilbao, Jose García-Montalvo was granted the 2016 SERIEs Award for his article *The real estate and credit bubble: Evidence from Spain*.
- Also in 2016, José María Peiró was made member of the Spanish Academy of Psychology on 30 November. The Academy, created by the Ministry of Education, Culture and Sport, recognizes his excellent track record as **Ivie** researcher and Professor of the Universitat de València.
- On 25 November 2016, Francisco Pérez was named honorary member of the Colegio Mayor San Juan de Ribera. The event was held during the Closing Ceremony of the Institute's Centenary, which took place in the auditorium of the Universitat de València.
- The prize-giving ceremony of the Valencian Parliament *Alta Distinción Parlamentaria de Corts Francesc de Vinatea* was held at the Borgia Palace in Valencia on 25 April 2016. The award was presented to the committee of experts on regional funding made up by **Ivie** members, Francisco Pérez (**Ivie** Research Director) and Vicent Cucarella (**Ivie** Research technician), together with Rafael Beneyto, José Antonio Pérez, José Ismael Fernández and Vicent Peiró.
- In 2015, the journal *Economía 3* presented the **Ivie** with the Economía 3 Research Career Award for the work carried out over its 25-year trajectory. The prize was given to the **Ivie** on 27 January 2016 at The Westin Hotel in Valencia.

- Also in 2015, the Fundación de Estudios Bursátiles y Financieros (dedicated to the stock market and financial studies) awarded the prize for Financial Dissemination to the **Ivie** for its “outstanding work in this area since its inception 25 years ago”. The award was presented to the **Ivie** at the headquarters of the Presidency of the Valencian Government on 29 March 2016.
- On 18 December 2015, **Ivie** Researchers Juan Fernández de Guevara and José Manuel Pastor received the 2014 Research Promotion Award by Funcas for their working paper *The adjustment of bank ratings in the financial crisis: International evidence* written in collaboration with Carlos Salvador (Universitat de València).
- On 12 November 2015, José M. Peiró received the award 'Profesionalidad y Compromiso' for his professionalism and commitment by the Fundación Diagrama in Villena (Alicante).
- On 7 July 2015, during the XIV European Congress of Psychology in Milan, the European Federation of Psychologists' Associations (EFPA) awarded their 2015 Aristotle Prize to José María Peiró. This award is granted to European psychologists who are internationally recognized for their contributions to psychology in research or in the professional area.
- On 2 September 2014, José García-Montalvo was awarded the ICREA Academia prize aimed at promoting research excellence among professors and researchers of Catalan public universities.
- In 2014, the Spanish Economic Association Award (1st edition) for the best article published in the *SERIEs*-Journal of the Spanish Economic Association in the period 2010-2013 was given to *Firm's Main Market, Human Capital, and Wages*, written by **Ivie** researcher and Professor at the University of Murcia, Francisco Alcalá in collaboration with Pedro J. Hernández.
- Also in 2014, the Institute of Financial Studies granted the **Ivie** the 7th IEF Award for Financial Excellence 2014 in the dissemination category for “its brilliant career and contribution to the knowledge society in general and, in particular, to the economy.” The award was presented to **Ivie**'s Research Director and Professor at the Universitat de València, Francisco Pérez, in an event held in Barcelona on 3 November 2014.
- On 23 May 2014, **Ivie** researcher and Professor at the University of Alicante, Carmen Herrero was awarded with an honorary degree from the University of Granada.
- During the LXXI Annual ICP Conference in Honolulu (Hawaii) on 3 August 2013, the International Council of Psychologists (ICP) granted the Advanced International Research and Service Fukuhara Award to **Ivie** Researcher and Professor at the Universitat de València, José María Peiró.
- Also during 2013, the European Association of Work and Organizational Psychology (EAWOP) honored Jose María Peiró with the EAWOP Lifetime Contribution Award for his scientific and professional career during the 16th Congress of the European Association of Work and Organizational Psychology held in Münster (Germany) on 22 May.
- Furthermore, in 2013 the Governing Body of the Pompeu Fabra University awarded the UPF Medal of Honor to Professor José García-Montalvo, Vice-Chancellor of Science Policy (2011-2013).
- In 2012, **Ivie** Associate Researcher Belén Gill de Albornoz received a prize from the Fundación de Estudios Financieros for her research work *Income smoothing and idiosyncratic volatility*.

- On 24 November 2010, the President of the Institut d'Estudis Catalans, Salvador Giner, awarded the **Ivie** Research Director, Francisco Pérez, the VIII Societat Catalana d'Economia 2010 Prize for the study carried out at the **Ivie** *El Desarrollo del Arco Mediterráneo Español. Trayectoria y perspectivas*, published in 2010.
- The Andalusian Regional Government awarded the **Ivie** researcher and Professor at the Pablo de Olavide University, Antonio Villar, the 'XVI Premio Andalucía de Investigación Ibn al Jatib' (Prize in Research of Andalusia) in the areas of humanities, law and social sciences on 22 March 2010. The award recognizes the theoretical relevance of Antonio Villar's research, in addition to his institutional involvement in the development of economics in Andalusia.
- In July 2010, **Ivie** Research Professor José María Peiró was awarded an Honorary Degree by the Metodista de São Paulo University.
- In 2010, the Social Advisory Board of the Pompeu Fabra University granted José García-Montalvo the Knowledge Transfer Award.
- In November 2009, Professors Matilde Mas and Francisco Pérez were appointed Honorary Members of the Argentinian Association of Public Economics.
- On 18 February 2009 the **Ivie** researcher and Professor at the Pompeu Fabra University, José García-Montalvo, received the ICREA Acadèmia Prize for his research work.
- On 21 May 2008 José María Peiró, **Ivie** researcher and Professor at the Universitat de València, was given the Research and Development Award by the Universitat de València Social Council. This recognition values Peiró's research trajectory in human resources management and work climate.
- The **Ivie** was awarded the 2005 Research and Development Prize 'Premio Universidad-Sociedad a la Investigación y el Desarrollo' by the Universitat de València Social Council on 20 June 2005. This prize distinguishes those institutions and members of the university community whose work and efforts have helped to strengthen ties between the Universitat de València and its cultural, social and economic environment.
- The journal *Economía 3* presented the **Ivie** with the 'Premio Centro Investigador' (Research Centre Award) on 11 December 2003.
- In 1997 **Ivie** Research Professor Ernest Reig received the 'Premio d'Economia de Catalunya' (Prize in Economics of Catalonia) from the Societat Catalana d'Economia for the study *Capitalización y Crecimiento de la Economía Catalana 1955-1995*.

## 5. INSTITUTIONAL INFORMATION

The **Ivie** has had the institutional structure of a public limited company since it was established. Although considered a public firm during its first few years, the **Ivie** has been a mercantile company subject to private law following the incorporation of its shareholders in 1995.

Throughout the years, the **Ivie** has always complied with current legislation so as to ensure the good of the public and private resources entrusted by different institutions for the development of its activities. In addition, the **Ivie** provides the required accounting information in the Mercantile Register.

The **Ivie** is annually controlled by independent auditors with the aim of receiving opinions regarding the quality of the financial data which the Administration Board develops.

In 2011, the **Ivie** created the **Ivie** Foundation of the Valencian Community to increase the development of economic research and education activities of general interest and to strengthen the collaboration with other institutions in this area. Since 2013, the **Ivie** is a research center associated to the Universitat de València, registered in the Spanish Registry of Universities, Centres and Qualifications (RUCT).

Comunicado de AUREN AUDITORES SP, S.L.P.

En Valencia a 22 de marzo de 2022

A la atención de los administradores del INSTITUTO VALENCIANO DE INVESTIGACIONES ECONÓMICAS, S.A.,

Muy señores nuestros, por la presente, les comunicamos que estamos finalizando los trabajos de auditoría de las cuentas anuales abreviadas del Instituto Valenciano de Investigaciones Económicas, S.A., correspondientes al ejercicio cerrado el 31 de diciembre de 2021, y tenemos pendientes de obtener y revisar la siguiente información:

- Cuentas anuales abreviadas formuladas por los administradores.
- Obtención de la Carta de Manifestaciones de la Dirección y Certificado de Actas.
- Actualización de los hechos posteriores.

Les manifestamos igualmente que según se desprende del trabajo realizado hasta la fecha presente, y sin considerar las conclusiones que pudiéramos obtener del análisis de la documentación pendiente de recibir, anteriormente señalada, el informe de auditoría para el ejercicio cerrado a 31 de diciembre de 2021 sería el siguiente:

## Opinión

Hemos auditado las cuentas anuales abreviadas del Instituto Valenciano de Investigaciones Económicas, S.A. (la Sociedad), que comprenden el balance abreviado a 31 de diciembre de 2021, la cuenta de pérdidas y ganancias abreviada, el estado abreviado de cambios en el patrimonio neto y la memoria abreviada correspondientes al ejercicio terminado en dicha fecha.

En nuestra opinión, las cuentas anuales abreviadas adjuntas expresan, en todos los aspectos significativos, la imagen fiel del patrimonio y de la situación financiera de la Sociedad a 31 de diciembre de 2021, así como de sus resultados correspondientes al ejercicio terminado en dicha fecha, de conformidad con el marco normativo de información financiera que resulta de aplicación (que se identifica en la nota 2 de la memoria abreviada) y, en particular, con los principios y criterios contables contenidos en el mismo.

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## Fundamento de la opinión

Hemos llevado a cabo nuestra auditoría de conformidad con la normativa reguladora de la actividad de auditoría de cuentas vigente en España. Nuestras responsabilidades de acuerdo con dichas normas se describen más adelante en la sección *Responsabilidades del auditor en relación con la auditoría de las cuentas anuales abreviadas* de nuestro informe.

Somos independientes de la Sociedad de conformidad con los requerimientos de ética, incluidos los de independencia, que son aplicables a nuestra auditoría de las cuentas anuales abreviadas en España según lo exigido por la normativa reguladora de la actividad de auditoría de cuentas. En este sentido, no hemos prestado servicios distintos a los de la auditoría de cuentas ni han concurrido situaciones o circunstancias que, de acuerdo con lo establecido en la citada normativa reguladora, hayan afectado a la necesaria independencia de modo que se haya visto comprometida.

Consideramos que la evidencia de auditoría que hemos obtenido proporciona una base suficiente y adecuada para nuestra opinión.

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### Aspectos más relevantes de la auditoría

Los aspectos más relevantes de la auditoría son aquellos que, según nuestro juicio profesional, han sido considerados como los riesgos de incorrección material más significativos en nuestra auditoría de las cuentas anuales abreviadas del período actual. Estos riesgos han sido tratados en el contexto de nuestra auditoría de las cuentas anuales abreviadas en su conjunto, y en la formación de nuestra opinión sobre éstas, y no expresamos una opinión por separado sobre esos riesgos.

### Reconocimiento de ingresos

**Descripción** El importe de la cifra de negocios corresponde a los ingresos por prestaciones de servicios en concepto de proyectos de investigación económica a escala nacional e internacional, cuya duración, en determinados casos, puede ser superior al ejercicio. El reconocimiento de ingresos y los resultados de estos proyectos requiere, por tanto, un elevado grado de juicio y control de las estimaciones realizadas y de las desviaciones que se pudieran producir a lo largo de la duración de los mismos. Las estimaciones tienen en cuenta todos los ingresos y costes relacionados con los proyectos. Debido a la incertidumbre asociada a las citadas estimaciones y a que cambios en las mismas podrían dar lugar a diferencias en los ingresos registrados, se ha considerado este asunto como un aspecto relevante de la auditoría.

**Nuestra respuesta** Nuestros procedimientos de auditoría han consistido en evaluar los procedimientos y criterios empleados por la Sociedad para el reconocimiento de los ingresos y costes asociados a los proyectos. Seleccionamos una muestra representativa de los proyectos para evaluar las estimaciones más significativas llevadas a cabo en el reconocimiento de ingresos. Asimismo, hemos obtenido confirmaciones externas para una muestra de clientes pendientes de cobro y realizando, en su caso, procedimientos de comprobación alternativos mediante justificantes de cobro posteriores o documentación soporte justificativa de la prestación del servicio. Por último, hemos evaluado la idoneidad de la información revelada en las cuentas anuales abreviadas de acuerdo con los requerimientos del marco normativo de información financiera.

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### Responsabilidad de los administradores en relación con las cuentas anuales abreviadas

Los administradores son responsables de formular las cuentas anuales abreviadas adjuntas, de forma que expresen la imagen fiel del patrimonio, de la situación financiera y de los resultados de la Sociedad, de conformidad con el marco normativo de información financiera aplicable a la Entidad en España, y del control interno que consideren necesario para permitir la preparación de cuentas anuales abreviadas libres de incorrección material, debida a fraude o error.

En la preparación de las cuentas anuales abreviadas, los administradores son responsables de la valoración de la capacidad de la Sociedad para continuar como empresa en funcionamiento, revelando, según corresponda, las cuestiones relacionadas con la empresa en funcionamiento y utilizando el principio contable de empresa en funcionamiento excepto si los administradores tienen la intención de liquidar la Sociedad o de cesar sus operaciones, o bien no exista otra alternativa realista.



## **Responsabilidades del auditor en relación con la auditoría de las cuentas anuales abreviadas**

Nuestros objetivos son obtener una seguridad razonable de que las cuentas anuales abreviadas en su conjunto están libres de incorrección material, debida a fraude o error, y emitir un informe de auditoría que contiene nuestra opinión.

Seguridad razonable es un alto grado de seguridad pero no garantiza que una auditoría realizada de conformidad con la normativa reguladora de la actividad de auditoría de cuentas vigente en España siempre detecte una incorrección material cuando existe. Las incorrecciones pueden deberse a fraude o error y se consideran materiales si, individualmente o de forma agregada, puede preverse razonablemente que influyan en las decisiones económicas que los usuarios toman basándose en las cuentas anuales abreviadas.

Como parte de una auditoría de conformidad con la normativa reguladora de la actividad de auditoría de cuentas vigente en España, aplicamos nuestro juicio profesional y mantenemos una actitud de escepticismo profesional durante toda la auditoría. También:

- Identificamos y valoramos los riesgos de incorrección material en las cuentas anuales abreviadas, debida a fraude o error, diseñamos y aplicamos procedimientos de auditoría para responder a dichos riesgos y obtenemos evidencia de auditoría suficiente y adecuada para proporcionar una base para nuestra opinión. El riesgo de no detectar una incorrección material debida a fraude es más elevado que en el caso de una incorrección material debida a error, ya que el fraude puede implicar colusión, falsificación, omisiones deliberadas, manifestaciones intencionadamente erróneas, o la elusión del control interno.
- Obtenemos conocimiento del control interno relevante para la auditoría con el fin de diseñar procedimientos de auditoría que sean adecuados en función de las circunstancias, y no con la finalidad de expresar una opinión sobre la eficacia del control interno de la Entidad.
- Evaluamos si las políticas contables aplicadas son adecuadas y la razonabilidad de las estimaciones contables y la correspondiente información revelada por los administradores.
- Concluimos sobre si es adecuada la utilización, por los administradores, del principio contable de empresa en funcionamiento y, basándonos en la evidencia de auditoría obtenida, concluimos sobre si existe o no una incertidumbre material relacionada con hechos o con condiciones que pueden generar dudas significativas sobre la capacidad de la Sociedad para continuar como empresa en funcionamiento. Si concluimos que existe una incertidumbre material, se requiere que llamemos la atención en nuestro informe de auditoría sobre la correspondiente información revelada en las cuentas anuales abreviadas o, si dichas revelaciones no son adecuadas, que expresemos una opinión modificada. Nuestras conclusiones se basan en la evidencia de auditoría obtenida hasta la fecha de nuestro informe de auditoría. Sin embargo, los hechos o condiciones futuros pueden ser la causa de que la Sociedad deje de ser una empresa en funcionamiento.
- Evaluamos la presentación global, la estructura y el contenido de las cuentas anuales abreviadas, incluida la información revelada, y si las cuentas anuales abreviadas representan las transacciones y hechos subyacentes de un modo que logran expresar la imagen fiel.

Nos comunicamos con los administradores de la Entidad en relación con, entre otras cuestiones, el alcance y el momento de realización de la auditoría planificados y los hallazgos significativos de la auditoría, así como cualquier deficiencia significativa del control interno que identifiquemos en el transcurso de la auditoría.

Entre los riesgos significativos que han sido objeto de comunicación a los administradores de la Entidad, determinamos los que han sido de la mayor significatividad en la auditoría de las cuentas anuales abreviadas del período actual y que son, en consecuencia, los riesgos considerados más significativos.

Describimos esos riesgos en nuestro informe de auditoría salvo que las disposiciones legales o reglamentarias prohíban revelar públicamente la cuestión.

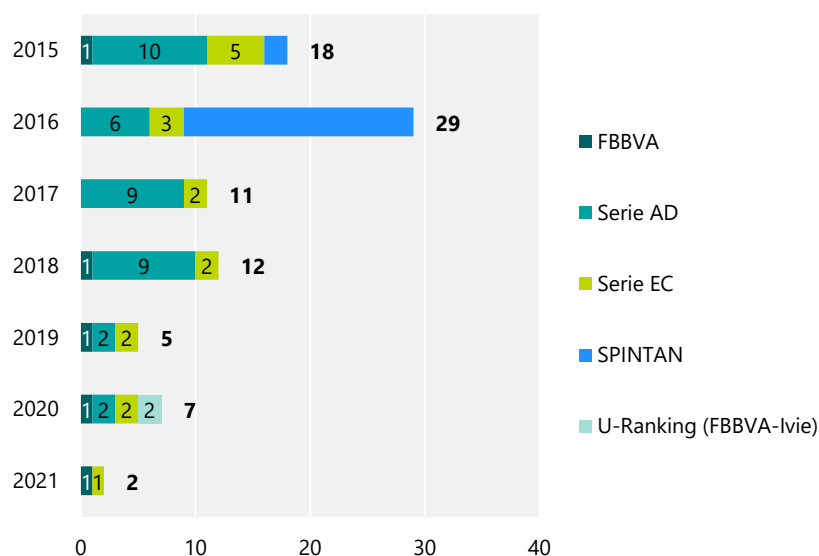
AUREN AUDITORES SP, S.L.P.

## 6. PUBLICATIONS

One of the Institute's aims is to foster the dissemination of quality economic research. Over the last three decades, the **Ivie** has promoted and disseminated high quality economic research through its two series of working papers, AD (A Discusión) and EC. The AD series focuses on theoretical research, while the EC series includes papers of a more applied character. In 2021, the following working paper was published:

WP-EC 2021-01 «Limitaciones de las metodologías basadas en opiniones de expertos. El caso de la automatización del empleo», Navarro, S.

**Gráfico 3.**  
Documentos de trabajo\*

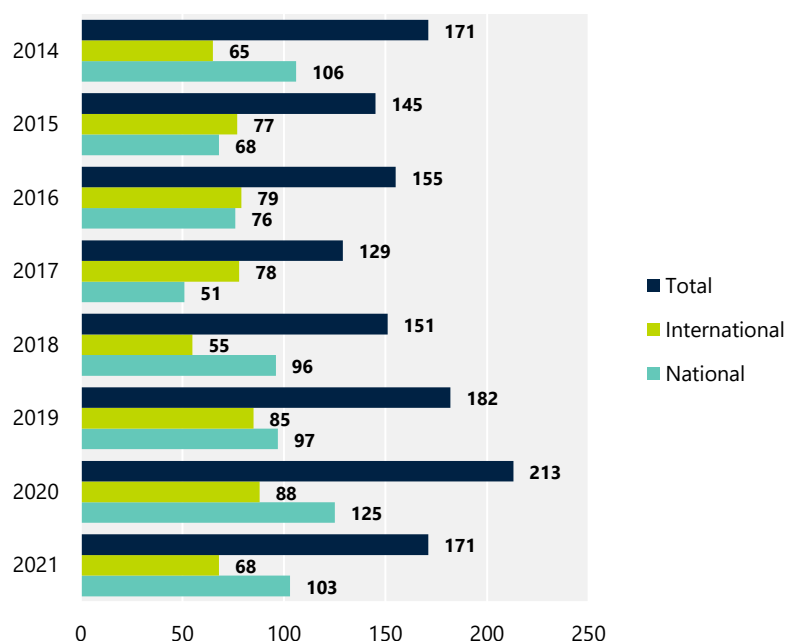


However, these two series were discontinued in July 2021. As of January 2022, the **Ivie** has developed a new series that publishes working papers from its research professors and are no longer subject to external evaluation.

The **Ivie** seeks to encourage the diffusion of research activity, the final aim being their publication in scientific journals, and especially values the work of its researchers and technicians. For this reason, information about the articles published by the associates is also given. In 2021, **Ivie's** researchers produced 25 books, published or forthcoming, and 17 chapters in joint works. They also published 96 scientific articles, 58 of which were for international journals, 18 books and 15 working papers and other documents.

## 6.1. Publications by researchers and technicians

**Figure 4.**  
Publications by  
researchers and  
technicians.  
Books and articles



### 6.1.1. Books

**Arribas, I.** (dir.) and **J. Salamanca**: *Consumo y bienestar social. Consecuencias de la crisis*. Bilbao: BBVA Foundation, forthcoming.

**Barona, S., F. Pérez** and **A. Iranzo**: *El funcionamiento de la justicia en España: Estructuras, recursos y resultados*. Bilbao: BBVA Foundation, forthcoming.

**Catalán, A.** and **J. Maudos**: *Dimensiones económicas de la longevidad: Evidencia del caso español*. Bilbao: BBVA Foundation, forthcoming.

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**Maudos, J.** (dir.) and **J. Salamanca:** *El sector agroalimentario español en el contexto de las regiones españolas. Informe 2020*. Almería: Cajamar Caja Rural.

**Maudos, J.** (dir.) and **J. Salamanca:** *Observatorio sobre el sector agroalimentario de las regiones españolas. Informe 2019*. Almería: Cajamar Caja Rural.

**Maudos, J.** (dir.) and **J. Salamanca:** *Observatorio sobre el sector agroalimentario español en el contexto europeo. Informe 2020*. Almería: Cajamar Caja Rural.

**Maudos, J.** and **L. Hernández:** *Competencias digitales y colectivos en riesgos de exclusión en España: Determinantes en el contexto de la COVID-19*. Madrid: Cotec Foundation for Innovation; València: **Ivie**.

**Monzón, J.L., Á. Soler** and **R. Chaves:** *El empleo de la mujer en las cooperativas y sociedades laborales valencianas tras un año de crisis COVID-19*. València: CIRIEC-España (Centro Internacional de Investigación e Información sobre la Economía Pública, Social y Cooperativa).

**Pastor, J.M.** (coord.): *Avanzando hacia un modelo económico sostenible*. València: Universitat de València.

**Pastor, J.M.** (dir.), **J. Aldás-Manzano, M. Moraga, F. Pascual, I. Rosell, L. Serrano, Á. Soler** and **I. Zaera:** *La contribución socioeconómica de la Universidad de Castilla-La Mancha (2021)*. Ciudad Real: Universidad de Castilla-La Mancha.

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## 7. RESEARCH AND ECONOMIC STUDIES

The Institute conducts research and economic studies not only to further its own areas of specialization, but also in response to demands by other institutions and firms with which the **Ivie** has contracts. The following projects were carried out during 2021 (the financial year during which the project was developed is in brackets next to the title):

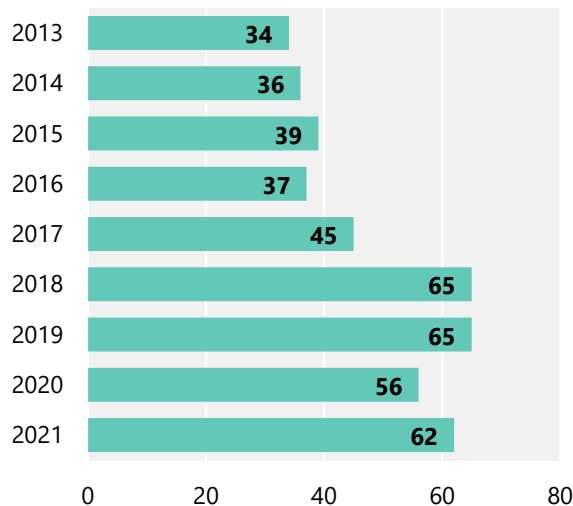
### 7.1. Contracts with other institutions

#### 7.1.1. National

##### BBVA FOUNDATION-IVIE RESEARCH PROGRAM

The BBVA Foundation and the **Ivie** have been regularly pursuing various joint lines of research since 1995. The current program is designed to continue this partnership, consolidating priority research areas, and taking into account the strengths of accumulated experience and the new challenges facing Spanish society. Currently, its core lines are *Development, Productivity and Competitiveness in the Digital Age, Well-being and Sustainability*, and *Business, Institutions and Policy Evaluation*.

**Figure 5**  
Studies and reports  
carried out or in course



In 2021, the following projects were developed for the BBVA Foundation:

##### **The stock of productive capital in Spain and its regions. Physical infrastructure endowments and their relationship with monetary measures 1964-2019 (2020-2021)**

The BBVA Foundation and the **Ivie** have been jointly developing the capital stock series for Spain for more than twenty-five years already. Currently, it is a national and international reference for the analysis of capital accumulation in the Spanish economy and its territories. The 2020 work program on investment and capital stock will address, as in previous editions, the corresponding updates of the data until 2019 (with a preview of 2020 and 2021).

The report that accompanies the 2020 edition will analyze the changes in the composition of investment and stock -by assets, sectors and territories- that have taken place during the last two decades, covering the years of expansion and crisis, as well as the last years of economic recovery in Spain. As a novelty, it will also analyze the capital stock figures of public transport infrastructures in physical units.

*Research team:*

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Juan Fernández de Guevara (Ivие and Universitat de València)  
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Héctor García (Ivие)  
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Belén Miravalles (Ivие)

## **U-Ranking 2021. Synthetic indicators of Spanish universities (2021)**

The aim of the ISSUE (Indicadores Sintéticos del Sistema Universitario Español – Synthetic Indicators of the Spanish University System) project, jointly developed by the Ivие and the BBVA Foundation, is to analyze the performance of Spanish universities and to offer comparable and synthetic images of these higher education institutions. As a result of this work, each year U-Ranking is published, based on the analysis of the teaching, research and innovation and technological development activities of the universities. The 2021 edition includes a detailed analysis of the degrees offered in Spanish universities during the last decade.

*Research team:*

Joaquín Aldás-Manzano (dir.) (Ivие and Universitat de València)  
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Irene Zaera (Ivие)  
María Moraga (Ivие, until 31 July 2021)  
Rosa Buitrago (Ivие)  
Alicia Raya (Ivие)  
Susana Sabater (Ivие)

### **Esenciales Series (2021)**

In 2015, the **Ivie** and the BBVA Foundation launched *Esenciales* [Essentials], a new series of periodicals designed to disseminate the main results of the Research Program conducted by the two institutions over the last twenty years. Brief, accessible and up to date, the different issues in this series offer information on recent research topics.

During 2021, a new issue has been published focusing on the analysis of Spanish universities and their comparison with leading international institutions.

#### *Research team:*

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### **Education and skills in Spain: conditioning factors and personal, social and productive use (2020-2021)**

The exceptional situation experienced to stop the spread of COVID-19 through social distancing and confinement measures has required an effort in the use of digitalization to avoid a complete interruption of the learning process in schools. But it has also revealed inequality gaps in the access to education, as attendance at educational centers, at all levels, had to be suspended and virtual learning options have been much more intensely implemented. In this situation, the level of digital equipment in homes -large but unequal among families of distinct levels of income and education- has proved decisive for taking advantage of these alternatives. The “digital qualification” of family members and the capacity of schools and teachers to offer tools and support for distance-learning is another relevant issue that is influenced by regional policies and the type of ownership of schools.

This project takes an in-depth look at the socio-economic determinants of educational results and cognitive skills and analyzes their consequences for opportunities for personal development and productive use of knowledge. The research is proposed bearing in mind three coordinates: the acceleration of the processes of knowledge accumulation, the digital transformation, and the risk of generating digital gaps.

#### *Research team:*

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Lorenzo Serrano (dir.) (**Ivie** and Universitat de València)

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María Moraga (**Ivie**, until 31 July 2021)

Belén Miravalles (**Ivie**)

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## **Economy and environment in Spain: Analysis of the flow of materials and natural capital (2020-2021)**

This report includes a new objective for the BBVA Foundation-**Ivie** Research Program: to establish bridges between, first, the extensive information and analysis accumulated by the Program on the evolution of human and material assets on which income generation and welfare are based, and, second, the stocks and flows that reflect the relationship between human activities and nature. The speed with which natural resources are currently being depleted, and the impact that human activities have on the environment, such as water and soil pollution, deforestation, erosion, atmospheric emissions, etc., are damaging the capacity of nature to regenerate. For this reason, the need to reduce the negative environmental impacts derived from the massive use of natural resources and to economize their use has been stressed for years, especially within the European Union.

The aim of this report is to provide data that allows to analyze the relationship between the behaviour of the Spanish economy and the use of the resources that it demands from the natural environment. For this purpose, work will be done in two directions: the Analysis of Material Flows and the construction of a monetary valuation of the Stock of Natural Capital that complements those that have been developed for years through the BBVA Foundation-**Ivie** collaboration regarding the stock of public, private and human capital.

### *Research team:*

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Eva Benages (**Ivie** and Universitat de València)

Juan Carlos Robledo (**Ivie**)

José Antonio Franco (Generalitat Valenciana)

Belén Miravalles (**Ivie**)

M.<sup>a</sup> Cruz Ballesteros (**Ivie**)

Susana Sabater (**Ivie**)

## **Consumer behavior after COVID-19: feedback and trends. Impact on trade and tourism (2020-2021)**

The end of the current crisis caused by the COVID-19 pandemic is yet unknown, thus, making it difficult to have an overview of how it is changing and will further change consumer behavior. However, some of the questions that this document seeks to answer are: How are consumers responding to the situation created by the pandemic? Will the changes that are taking place in the way consumers purchase products and services remain? How are changes in consumer behavior affecting some critical sectors that have been severely affected by the pandemic, such as retail trade or tourism? How are these sectors adapting to changes in consumer behavior in a context of social distancing, are they changing the design of their services or are they making them more accessible?

The methodology will combine a conceptual and an empirical approach, focusing mainly on Spain, although a comparative analysis will be carried out when necessary based on statistics from sources such as, the European Union or the World Tourism Organization (UNWTO), among others.

#### *Research team:*

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Marta Frasquet (Universitat de València)

Carlos Albert (Ivie y Universitat de València)

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Susana Sabater (Ivie)

### **Diversity and decentralization in the Spanish National Health System. An economic perspective (2020-2021)**

The COVID-19 crisis has put the health system under an extraordinary stress, raising questions on the amount of equipment and supplies available, as well as the organization of health and social care to meet the needs of hospitalization and intensive care units and their capacity to face emergencies of this dimension. In this context, the objectives of this project are, in the first place, to analyze the determinants of the trajectory of healthcare spending in Spain during the recent decades. Second, to analyze the differences in health expenditure regarding primary care, specialized care, pharmacy, etc. among regions, and within the health areas of each region. And thirdly, to study the causes and effects of regional differences on the quality of the services offered and the equality of access to them. In these three areas, the research will assess the response to the COVID-19 pandemic, particularly regarding the capacity of the health system to resist strong stress situations resulting from specific increases in the demand for services.

#### *Research team:*

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Salvador Peiró (FISABIO, Generalitat Valenciana)

Manuel Ridao (Instituto Aragonés de Ciencias de la Salud)

Silvia Mollá (Ivie)

Marta Solaz (Ivie, hasta 31 de agosto de 2021 y Universitat de València)

Alicia Raya (Ivie)

Susana Sabater (Ivie)

### **Present and outlook for Spanish youths (2021- )**

The aim of this study is to take an in-depth look at the current situation and outlook of Spain's younger generations, based on the extensive empirical evidence available. The main part of the analysis will focus on the employment and economic aspects that most affect the condition in which people live. The large amount of data and statistics available make it possible to study the differences between youths and mature adults, and the differences among young people of the same generation. The project aims to assess the significant differences among generations, after eliminating factors that differentiate people of the same generation. The results may aid in the design of public policies to support the social and labor integration of young people.



#### *Research team:*

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Robert Meneu (Universitat de València)

José Ramos (IvIE and Universitat de València)

Ángel Soler (IvIE and Universitat de València)

Consuelo Mínguez (IvIE)

Antonio Pantoja (Universitat de València)

Fernando Pascual (IvIE)

### **The digitization of the business fabric in Spain: productive transformation and competition (2021- )**

One of the key issues that will determine the future of the productive sectors is their rate of digital penetration, as it will define their capacity to grow, compete and adapt. This study will analyze the pace at which the digital transformation of the productive fabric is taking place, whether the Spanish economy is flexible enough to meet the challenge of digital transformation, and the intensity of competition in the productive sectors, comparing whether it is greater or lesser in the sectors most affected by digitalization.

The study will combine an aggregate view of the productive sectors of the Spanish economy with a micro analysis that uses firms as the main unit. The aggregate sectoral perspective will make it possible to evaluate, to the extent that the available indicators allow, the impact of the onset of the COVID-19 pandemic on the progress of digitalization. While the microeconomic firm data will enrich the analyses by allowing the study of intra-industry dynamics and market power situations, although, due to the time lag with which this information is available, they will not yet allow to determine the effects of COVID-19.

#### *Research team:*

Joaquín Maudos (IvIE, Universitat de València and CUNEF)

Juan Fernández de Guevara (IvIE and Universitat de València)

Carlos Salvador (Universitat de València)

Consuelo Mínguez (IvIE)

### **The value of knowledge in the response of the health system to COVID-19 (2021- )**

The objective of this project is to analyze the value of knowledge in responding to problems as critical as the one the world is facing with the pandemic. This interesting case study allows us to appreciate not only the importance of having knowledge (discoveries of biomedicine) and applying it (production of treatments and vaccines); but it also allows us to examine how a country, particularly Spain, responds to important problems and the ability to cope of their public health care system (e.g. human resources, technological equipment/infrastructure, organization, management, etc.). An important aspect of this knowledge involves the impact on health and on the economy of the measures implemented to control the spread and avoid the collapse of hospitals. During the last year, much progress was made in the modeling of public health care non-pharmacological interventions and their impact, and in the creation and global sharing of large epidemiological databases.

*Research team:*

Beatriz González (Dir.) (Universidad de Las Palmas de Gran Canaria)  
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Patricia Barber (Universidad de Las Palmas de Gran Canaria)  
Enrique Castellón (Universidad de Las Palmas de Gran Canaria)  
Jaime Pinilla (Universidad de Las Palmas de Gran Canaria)  
Laura Vallejo (Universidad de Las Palmas de Gran Canaria)  
Irene Zaera (**Ivie**)

**Collective response to the COVID-19 pandemic (2021- )**

The objective of this study is to take an in-depth look from a broad perspective and with a multidisciplinary approach at the collective response from public and private agents to the problems created by the COVID-19 pandemic. The study will consider the capacity of response and coordination of governments and also of other public and private agents, i.e., firms, education system, health system, productive sectors, the world of knowledge, population in general. The analysis of the changes in behavior over the duration of the crisis will make it possible to examine the collective learning capacity and resilience (resistance and reinvention) of the Spanish society.

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Santiago Lago (Universidade de Vigo)  
Silvia Mollá (**Ivie**)  
Juan Pérez (**Ivie**)  
Miguel Ángel Casquet (**Ivie**)

## **IVIELAB (LABORATORY FOR THE ANALYSIS AND EVALUATION OF PUBLIC POLICY) RESEARCH PROGRAM**

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In 2018, the **Ivie**, in collaboration with the Valencian Regional Government, started the Laboratory for the Analysis and Evaluation of Public Policy (IvieLAB) to study the action of governments and government agencies in different areas. IvieLAB serves to promote a debate, design of new methodologies and development of tools (such as databases and indicators) to foster knowledge and awareness of the state of public policy in Spain. In 2021, through the IvieLAB program, several seminars and conferences have been held, various methodological working papers have been produced and 12 reports have been prepared, 7 of which are aimed at analyzing the effects of COVID-19 on the productive sectors of the Valencian Community.

### **Economic impact of the COVID-19 pandemic in the Valencian Community: Disaggregation by sectors (2021)**

The objective of this report is to estimate the economic impact of the pandemic in the Valencian Community by offering estimates on GVA and employment by sectors, with the highest disaggregation possible with the available data. In addition, an estimate of the impact is offered in terms of gross operating surplus, given the interest in knowing the magnitude of the impact in order to compensate with funds the losses suffered by businesses as a result of the pandemic. The report also contains a description of the types of businesses by sectors that have been affected the most by the COVID-19 derived crisis, to have an estimate of the number of firms that could potentially receive the funds. Thus, two specific analyses have been carried out on the catering and media sector in the Valencian Community:

- Companies in the media sector of the Comunitat Valenciana.
- Catering sector of the Valencian Region

#### *Research team:*

Joaquín Maudos (Dir.) (**Ivie**, Universitat de València and CUNEF)

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### **Economic impact of COVID-19 on the Valencian Community: Automotive sector (2021)**

The measures taken to protect citizens against the COVID-19 pandemic have had important consequences on the Spanish and Valencian economies. However, the impact has been uneven across sectors. Businesses that rely on personal interactions have been the most affected, since their activity was completely or partially disrupted during the last year. The automotive industry, the main focus of this report, has also seen its business decline.

In order to adopt specific measures and provide support to these sectors, it is necessary to have a detailed understanding of their features and functioning, as well as the real effects that the crisis has had on them. This report will focus on the automotive industry in the Valencian Community.

To accomplish this, the document is divided into five chapters. The first one offers an overview of the sector on a global scale. Next, the importance of the automotive sector in the Valencian economy is measured and the impact of COVID-19 is assessed in its main magnitudes. The macro approach of the previous point continues with a micro approach, based on business microdata of secondary origin, analyzing the situation of firms in the automotive sector in 2019, the fiscal year prior to the pandemic. This chapter is followed by an analysis of the business response to the crisis and the degree of resilience and recovery of companies during the pandemic, and ends with a summary of the challenges facing the sector and some recommendations for companies and administrations.

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### **Economic Impact of COVID-19 on the Valencian Community: Trade (2021)**

The measures taken to protect citizens against the COVID-19 pandemic have had important consequences on the Spanish and Valencian economies. However, the impact has been uneven across sectors. Businesses that rely on personal interactions have been the most affected, since their activity was completely or partially disrupted during the last year.

In order to adopt specific measures and provide support to these sectors, it is necessary to have a detailed understanding of their features and functioning, as well as the real effects that the crisis has had on them. This report will focus its objectives on analyzing the commerce sector in the Valencian Community. The document aims to identify the situation of the sector, its characteristics, composition, evolution, trends and needs at a general level and, in particular, its situation in the Valencian Community and in relation to the impact of COVID-19.

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## **Economic Impact of COVID-19 on the Valencian Community: Leisure and Entertainment (2021)**

The Culture and Leisure Sector generated 3.6% of total employment in the Valencian Community, the equivalent of 69,600 full-time workers, which is lower than the national figure (3.9%). Most of the employment created is in the Culture and Leisure Sector is related to Leisure activities (49.4% of total employment), Books and Press (14%) and Advertising (10.7%). In Architecture, Plastic and Performing Arts, and Audiovisual and Multimedia the weight is between 5.9% and 7.8%, respectively. Employment in the Valencian Culture and Leisure Sector is characterized by a high degree of atomization and precariousness, greater than in Spain: 30% of those employed have temporary contracts, 24% work part-time, and 25% are self-employed. However, the human capital of the sector is superior to that of the economy as a whole: 57% of those employed in the Valencian Region have university studies and 30% have secondary education, compared to 42% and 25%, respectively.

This report analyzes the economic-financial situation of Valencian firms in the Culture and Leisure Sector, as well as the impact suffered by COVID-19, which has been more intense where attendance is vital for the activity, and where digitalization has not allowed its continuity, especially in Cultural and Natural Heritage, Leisure and Plastic and Performing Arts.

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## **Economic impact of COVID-19 on the Valencian Community: Transportation services (2021)**

The transport sector is one of the fundamental pillars of the Valencian economy. It is the seventh most important private sector in terms of GVA and the sixth in terms of employment, representing 3.9% of GVA and 4.1% of employment in the Valencian Community.

The report has carried out a two-level analysis. First, it begins by characterizing and contextualizing the transport sector within the Valencian economy, reviewing its importance in the economy in terms of GVA and employment generated, as well as the number and type of firms that comprise it. We also review the business competitiveness indicators of the sector and their influence on indicators such as productivity, profitability, solvency and indebtedness. Secondly, and following this review of the sector's situation, the most recent information available on the impact of the COVID-19 crisis on the activity of the different subsectors is considered.

### *Research team:*

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## **Economic impact of COVID-19 on the Valencian Community: Tourism (2021)**

The economic weight of tourism-related activities is highly significant in the Valencian Community. Most studies and reports attribute a great importance to this activity in terms of contribution to wealth and employment (15.5% of GDP and 15.9% of employment in 2019, respectively, according to Exceltur), and its activity in different modalities is present throughout the Valencian territory.

In this report we classify the Tourism sector as the set of activities related to the following sectors: accommodation services, food and beverage services, car and light motor vehicle rental, leisure and sporting goods rental, travel agencies and tour operator activities and other reservation services and related activities. The pre-pandemic characteristics of the sector are considered, such as, its starting situation, competitiveness and resilience. Following, It explains the impact of the pandemic and the pace of recovery, as well as the business responses to the crisis.

### *Research team:*

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## **Employment and the COVID-19 pandemic in the Valencian Community: A sectoral approach (2021)**

The aim of this study is to analyze jobs and employment quality in the Valencia Region from a sectoral perspective, with special interest placed on the impact of the pandemic and aspects such as the evolution of effective employment which considers both people affiliated to the Spanish Social Security system (including those who have been temporarily laid-off under the government's ERTE plan) and self-employed workers, in order to identify the sectors with the lowest quality of employment.

In addition, a proposal for a synthetic index to measure job quality will be developed offering a general view of the situation. Among the dimensions considered will be salary level and the relative capacity of the sectors to offer decent wages, as well as the limitations in this regard.

Finally, the report will include public policy recommendations and proposals aimed at improving the quality of employment in the Valencian Region, with special attention to the gender gap, youth employment and other measures to improve the employment situation of the most vulnerable groups.

### *Research team:*

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## Impact of Brexit on the Valencian Community (2021)

The objective of this study is to quantify the economic impact that UK's exit from the European Union will have on the Valencian Community. Although there is still no empirical evidence to assess the impact, it is possible to approach this analysis from different perspectives.

First, it will be necessary to consider the advantages and disadvantages of the EU-UK Trade and Cooperation Agreement concluded between the EU and the UK. Second, an exploratory analysis of the economic relations (trade, investment or tourism, among others) that currently exists between the UK and the Valencian Community is needed. Third, the report aims to review, summarize and analyze the points of view, forecasts and micro-experiences of the agents and entities most directly involved in the relationship between the Valencian Community and the United Kingdom. Finally, the work is completed with a modeling exercise that allows to launch quantitative results regarding the impact of the new EU-UK trade agreement on the Valencian economy.

### *Research team:*

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## Valencian firms in public procurement procedures (comparative perspective) (2021)

Public procurement represents a high volume of government spending and its results are relevant for the proper functioning of policies that support procurement. After the studies carried out in 2018 and 2019 on the duration of procurement processes and on the degree of competition, based on the ContraPublvie2019 database, this report will analyze the characteristics of Valencian firms participating in the different types of procurement procedures with the public administration, differentiating by type of administration (state, autonomous and local), in comparison to companies from other regions.

The objective is to analyze the amount of Valencian firms that participate in public sector contracting procedures in order to detect possible limitations in access to certain companies, as well as the territorial bias of the different administrations. In particular, the report will consider the participation of SMEs in the contracting processes, the location of the headquarters of awarded companies, the existence of competition, as well as the degree of participation of the companies, i.e., the frequency with which they are awarded contracts. For this reason, the database of public contracts built by the Ivие based on public contractual information from the Public Sector Contracts Platform will be updated and used.



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### **Madrid: capital city, knowledge economy and fiscal competition. June 2021 (2021)**

This report is an update of some of the data included in the report *Madrid: capitalidad, economía del conocimiento y competencia fiscal de 2020* (Madrid: capital city, knowledge economy and fiscal competition in 2020). It analyzes the trajectory of Madrid as Spain's capital city and how this status has influenced its economic dynamism. The research carried out shows how, in the 21st century, the State public sector and the Madrid regional government have contributed with their policies to the continuous increase of Madrid's population, income and wealth, strengthening the powerful mechanisms of agglomeration generated by private activity.

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### **Collaboration to participate in the recovery strategy of the Valencian Community and in the estimation of the economic impact of traction projects (2021)**

The pandemic put enormous pressure on our health system, imposing a strict lockdown on the population, interrupting numerous economic activities and causing the loss of many jobs, as well as business closures. The recovery from this shock poses the dual challenge of proposing solid projects and actions that attract resources, and that can be implemented in a profitable way to a sustainable growth.

This document is an update of the collaboration with the Valencian Regional Government in the Valencian Strategy for Recovery, developed in 2020, and whose objectives are to overcome the challenges presented by the weaknesses that existed prior to the pandemic.

The work includes two reports on the economic impact of two key projects in the Region: the Vega Renhace Plan and the installation in Alicante of an editorial and training center of Euronews.

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## **Business economics articulation in the media and audiovisual sector in the Valencian Community (2021)**

This project is part of the document prepared by the Generalitat Valenciana on the audiovisual and media sector. Specifically, this chapter of the document analyzes the economic contribution of the media and audiovisual sector of the Valencian Community, as well as its economic and financial characteristics. To this end, it provides information on this sector in the Valencian Community and the rest of Spain and its regions, to quantify the contribution of the Valencian sector to its national counterpart.

The analysis extends the delimitation of the sector to both the media sector and the audiovisual industry for all the Spanish regions. Thus, allowing to compare the Valencian region with other regions, as well as its weight in the national total. In addition, it includes a micro analysis at company level with the main economic-financial characteristics of Valencian firms in the national context; and it analyzes the public media and audiovisual sector, comparing the Valencian Media Corporation with other regional radio and television corporations.

### *Research team:*

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## **RESEARCH PROGRAMS WITH OTHER INSTITUTIONS**

### **HUMAN CAPITAL, EDUCATION AND EMPLOYMENT**

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#### **The quality of employment in Spain and its regions (2021-)**

This report aims to evaluate the quality of employment in Spain and its regions. Until the outbreak of the coronavirus, the employed population in Spain had increased steadily since 2014, from 16.95 million employed at the beginning of that year to 19.67 million at the end of 2019. Despite falling short of recovering the employment peaks recorded at the end of 2007 (20.75 million), the levels substantially increased over the 2014-2019 period. Although initially the coronavirus had a profound impact on the labor market, it is difficult to predict the intensity and duration of the long-term negative effects.

A proper assessment of the labor market should combine the analysis of quantitative aspects of employment (number of employed people) with the quality of employment. To accomplish this, the study aims to address various aspects related to the qualitative side of employment, for example, relevant job characteristics such as salary, type of contract (permanent, temporary or self-employed), job position, schedule (full- or part-time), number of working hours, possibilities of teleworking, exposure to health risks, etc. All of these factors have an effect on the quality of employment, making a job more or less attractive in terms of pay, stability and satisfaction. Another factor that will be addressed is the degree of match between job characteristics and workers' preferences

(e.g., whether educational level corresponds with job requirements; satisfaction with type of contract in the case of part-time, etc.). In addition, the analysis will include data on gender differences and the study of specific groups of interest, such as, young people, elderly people, workers with basic education and immigrants.

*Institution:* Fundación Ramón Areces

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## UNIVERSITY SYSTEM

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### Updating and maintenance of the Valencian Public University System of Information – SIUVP (2021)

SIUVP (Valencian Public University System of Information) was born in 2012 from the collaboration of the five Valencian public universities with the aim of offering a complete set of indicators on their activities and results. SIUVP is a window to the Valencian university activity, a tool through which public universities account in a transparent manner to society for the effectiveness and efficiency achieved in their performance. This website offers a complete information system with more than 60 indicators. The information in this platform allows the user to know the situation and development of the five universities in areas related to the supply and demand of degrees, the academic performance of their students, internationalization, research activity, knowledge transfer to society and economic results of its activity. The indicators are structured in seven different areas:

1. Admission
2. Students
3. Academic results
4. Internationalization
5. Human resources
6. Research and tech transfer
7. Economic data

The SIUVP website is updated twice a year with the latest information available.

*Institution:* Universidades Públicas Valencianas

*Research team:*

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## **The socio-economic contribution of the University of Castilla-La Mancha: effects on territorial development and the change in the productive model (2020-2021)**

The aim of this project is to study the socio-economic contribution of the University of Castilla-La Mancha (UCLM), quantifying the importance that its main activities, i.e., research, human capital formation and technological development, have on its environment.

To evaluate the magnitude of the effects of such a complex institution on society requires an adequate systematization of its activities with accurate data, as well as the measurement of all the resources available and their direct and indirect impacts.

The project includes a second report that will offer an in-depth look at the activities carried out by the UCLM and their contribution to the economic, innovation and social fields.

*Institution:* Universidad de Castilla-La Mancha

*Research team:*

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## **Estimation of the potential demand for a degree in Engineering, Sustainability And Territory adapted to the needs of the productive fabric (2021)**

The objective of the study is to make an estimate of the number of students that would be interested in studying a bachelor's degree in Engineering, Sustainability and Territory at the Universitat Politècnica de València. This report is structured in two parts, first, an estimation of the potential demand of the new degree will be examined, and, second, a qualitative assessment of the actual productive fabric demand for graduates of this degree and whether the skills attained will meet such needs.

*Institution:* Universitat Politècnica de València

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## **Estimation of the potential demand for a degree in Transport, Logistics and Sustainable Mobility adapted to the needs of the productive fabric (2021)**

The objective of the study is to make an estimate of the number of students that would be interested in studying a bachelor's degree in Transport, Logistics and Sustainable Mobility at the Universitat Politècnica de València (UPV). This report is structured in two parts, first, an estimation of the potential demand of the new degree will be examined, and, second, a qualitative assessment of the actual productive fabric demand for graduates of this degree and whether the skills attained will meet such needs.

*Institution:* Universitat Politècnica de València

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## **Study and diagnosis of the situation of the Valencian public universities: Activity, results and funding (2021)**

The aim of this project is to develop a comparative analysis and diagnosis of the state of the Valencian public universities, focusing on three essential aspects: their activity, their results and their financing.

The analysis carried out will use as reference the university systems of other Spanish regions, the Spanish University System (SUE) as a whole and of other countries.

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## KNOWLEDGE ECONOMY AND DIGITALIZATION

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### **Plan for the Digital Transformation of the Productive Fabric of the Valencian Community (2020-2021)**

This study aims to develop a Plan for the Digital Transformation of the Productive Fabric of the Valencian Community that will serve as a basis to present to the Recovery Plan of the European Union.

Its objectives are:

- To develop a diagnosis of the Valencian economy, identifying primarily the weaknesses and threats posed by its digitalization, allowing to focus on its development in an effective way.
- To define a intervention plan broken down by sectors with a 3- to 5-year time horizon that allows to define the program to obtain the European economic recovery funds.
- To estimate the costs and budget needed for the management of the proposed interventions and a plan to apply for the European Union aids through the Valencian Regional Government.

*Institution:* Sociedad Proyectos Temáticos de la Comunidad Valenciana (SPTCV)

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### **Report on the situation of intangible assets in Spain, Portugal and Italy for the 2021 Summit of Heads of State and Government (2020-2021)**

The objective of this study is to develop a detailed report on the current status and progress of investments made in intangible assets by Spain, Portugal and Italy, three participating countries in the 2020 Summit of Heads of State and Government. To carry out this work, the Euklems database will be used to make a comparative analysis of the three countries, as it is more up-to-date and complete than Intaninvest which does not include information for Portugal. In this sense, the report requires the construction of a series of indicators with data on intangible assets from Euklems, including an additional year to cover the period 1995-2017.

*Institution:* Fundación Cotec para la Innovación

*Research team:*

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## **Digital skills and groups at risk of exclusion: changes in the 2019-2020 determinants as a result of COVID-19 (2020-2021)**

This project aims to identify the groups that are at a greater risk of being excluded from the digital society, not only in terms of access to certain technologies or digital tools, but also in terms of management and skills related to new technologies, paying special attention to different dimensions of digital skills and the effect that the COVID-19 pandemic may have had on them. Examples of these groups are unemployed vs. employed, elderly vs. young ones, highly-educated vs. less-educated, foreigners vs. nationals, or women vs. men.

*Institution:* Fundación Cotec para la Innovación

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## **Intangible economy in Spain: Evolution and distribution by region and sector (2021-)**

The project is an update of the database and report on "Intangible economy in Spain: Evolution and distribution by region and sector" developed by the Ivie during 2016-2017. In addition to the database on intangible assets at regional and sectoral level, the project includes a brief report with the main results and individual information cards for each of the Spanish regions and by sectors. Data will also be prepared to present the results to the media and general public.

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## Digital economy of the Spanish Regions (2021-)

The objective of this project is to assess and compare the degree of progress of the Spanish regions in digitalization, highlighting the greatest differences among them. The proposed approach consists of analyzing how digitalization penetrates the sectors through two fundamental channels that generate value: investments in digital assets and the structure of occupations with different degrees of digitalization. In this way, the impact of digitalization can be quantified by estimating its contribution to value added/GDP. To develop this approach, the project will rely on an innovative methodology and the creation of its own database.

*Institution:* Fundación Cotec para la Innovación

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## REGIONAL FUNDING

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### Technical support and consultation to the Generalitat Valenciana in the area of regional funding (2021)

Technical support and consultation services to the Valencian Regional Government, Generalitat Valenciana (GVA), in the area of regional funding with the aim of designing and developing a new regional funding model by means of:

- Analysis and collection of available information to evaluate the different proposals for regional funding for the Regional Ministry of Finance and Economic Model.
- Preparation of brief notes, statistical data and reports to guide the proposals of the GVA in defining the new funding model for the Regional Ministry of Finance and Economic Model.
- Participation in meetings organized with other experts.
- Preparation of materials for discussion and support, upon request by the Regional Ministry of Finance and Economic Model or by the high commissioners of regional funding.

*Institution:* Generalitat Valenciana

*Research team:*

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Alicia Raya (**Ivie**)

## ECONOMIC IMPACT

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### Economic impact of Mercadona 2020 (2021)

The objective of the study is to estimate the total economic impact generated by Mercadona during 2020 in terms of employment and income (value added), distinguishing among direct, indirect and induced impacts. The economic impact of Mercadona is generated both through its activity or operations (sale of its products) and its investments. In addition, investments made by its suppliers ("Totaler") in order to meet the supermarket's demands can also be considered to be caused by Mercadona. Consequently, the report breaks down the impact of Mercadona derived from its activity and from that associated with investments which also includes those made by its "Totaler" suppliers (related to their sales to Mercadona).

The report estimates the impacts at an aggregate level as well as by sectors. In this way, in addition to Mercadona's total contribution to the Spanish economy's GDP and employment, results will also be provided by sector of activity. Thus it will be possible to identify and quantify the sectors or productive branches in which Mercadona (and its "Totaler" suppliers and other suppliers) has the greatest economic impact.

In summary, the report estimates the total impact of Mercadona and its contribution to GDP and employment of the Spanish economy. The report will also estimate the tax return obtained by the Public Administration as a result of Mercadona's activity. For this purpose, the tax revenues obtained by the public sector through the different taxes associated with production, trade or the generation of income are also quantified.

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### Economic impact of Mercadona in Catalonia 2020 (2021)

The report has two objectives. First, to estimate the total economic impact of Mercadona in the Spanish region of Catalonia and its contribution to the region's GDP and employment during 2020. Second, it aims to assess the impact of Mercadona derived from its activity and related investments which also include the investments made by the local suppliers based in Catalonia. For this purpose, aggregate information is provided for the whole economy, as well as by sectors.

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M.ª Cruz Ballesteros (Ivie)

Belén Miravalles (Ivie)

## **Economic impact of the sporting events at the l'Alqueria del Basket during the 2020-2021 season (2021)**

In 2017, Valencia Basket inaugurated L' Alquería del Basket, the largest basketball training facility in Europe. The project originated with the intention of being a center of talent and training in values for the development of basketball and as the main venue for the activities of all its youth teams. In addition, L' Alquería del Basket aims to host various sporting events, especially those related to basketball.

The objective of this project is to estimate the total impact of the sporting events that take place during the 2020-2021 season in L' Alquería del Basket on the Valencian economy in terms of income, value added and employment, distinguishing the direct, indirect and induced impacts. The estimation is carried out by using an input-output methodology based on the latest information updated by the **Ivie** from input-output tables on the Valencian economy.

*Institution:* Fundació València Bàsquet 2000

*Research team:*

Joaquín Maudos (dir.) (**Ivie**, Universitat de València and CUNEF)

Carlos Albert (**Ivie** and Universitat de València)

M.<sup>a</sup> Cruz Ballesteros (**Ivie**)

## **Economic impact of Grupo Cooperativo Cajamar (2021)**

The project consists in the development of two reports on the economic impact of Grupo Cooperativo Cajamar (GCC) during 2020, one with aggregate data and the other consists of a final comprehensive report. The project will estimate the impact that GCC activity generates in Spain in terms of value added (GDP), employment and fiscal return. The methodology used to estimate the impact is based on the input-output analysis on the total economic impact (direct, indirect and induced) derived from the increase in demand generated by GCC activity.

The reports will estimate the impacts generated through two channels. On the one hand, the impacts derived from financial intermediation activity and, on the other hand, those generated from the demand of consumption and investment financed by GCC through loans granted to both companies and individuals.

*Institution:* Grupo Cooperativo Cajamar

*Research team:*

Joaquín Maudos (dir.) (**Ivie**, Universitat de València and CUNEF)

Amadeo Fuenmayor (Universitat de València)

Rafael Granell (Universitat de València)

Eva Benages (**Ivie** and Universitat de València)

M.<sup>a</sup> Cruz Ballesteros (**Ivie**)

Belén Miravalles (**Ivie**)

## Social and economic contribution of Air Nostrum (2021)

Air transport is a strategic sector on which the rest of the sectors depend on to function. It also plays an important quantitative role in the Spanish economy as a whole, since it generates 3.9% of the country's value added and 4.1% of its employment.

Air Nostrum is a leading regional aviation company in Spain, being considered by far the most important Valencian airline in the Valencian Community and one of the five most important companies in the region. Its activity plays a very important role as an economic engine by generating GVA, employment and tax revenue throughout Spain.

However, Air Nostrum's impact is not only economical; it also has multiple direct social contributions, some of which have very significant long-term economic effects. Worth highlighting are Air Nostrum's role as a feeder and distributor of Iberia Group traffic in Madrid's Airport, its contribution to the development of tourism in Spain and as the backbone airline of Spain in niche markets, ultra-peripheral communities and PSO (Public Service Obligations) flight routes.

This report highlights the numerous contributions of Air Nostrum to Spain, not only economically with its impact on GDP, employment or tax revenue, but also to the structuring and accessibility of the territory and to its tourism activity.

*Institution:* Air Nostrum

*Research team:*

Joaquín Maudos (dir.) (Ivie, Universitat de València and CUNEF)

José Manuel Pastor (dir.) (Ivie and Universitat de València)

Amadeo Fuenmayor (Universitat de València)

Rafael Granell (Universitat de València)

Manuela Pardo del Val (Universitat de València)

Carlos Albert (Ivie and Universitat de València)

Irene Zaera (Ivie)

Alicia Raya (Ivie)

Belén Miravalles (Ivie)

## POPULATION AND TERRITORY

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### Distribution of the population and access to public services (2020-2021)

The objective of this project is to study the concentration of the population in Spain at municipal level in relation to public services available (health and educational centers) and access to banking services, as well as other issues depending on the information available. The study is closely related to the phenomenon of depopulation known as "empty Spain".

*Institution:* Fundación Ramón Areces

*Research team:*

Francisco J. Goerlich (dir.) (Ivie and Universitat de València)

Joaquín Maudos (dir.) (Ivie, Universitat de València and CUNEF)

Silvia Mollá (Ivie)

Belén Miravalles (Ivie)

Susana Sabater (Ivie)

## DESIGN AND EVALUATION OF PUBLIC POLICIES

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### Active employment policies of the Castilla and Leon (2021)

The objective of this project is to provide technical assistance with the supply, processing and analysis of information that will enable AIReF to evaluate the procedures and indicators to monitor the active employment policies of the Regional Government of Castilla and Leon, as well as the effectiveness of certain programs in the labor market insertion of their participants, in accordance with the Action Plan drawn up by AIReF and approved by the Regional Government of Castilla and Leon. This work will be carried out through REDEV (Network for Good Practices of Evaluation Processes), a joint project formed by **Ivie**, AFI, Iseak and KSNET to promote policy evaluation in Spain, both in the public and private sectors.

*Institution:* AIReF

*Research team:*

Pilar Chorén (**Ivie**)

Carlos Albert (**Ivie** and Universitat de València)

Silvia Mollá (**Ivie**)

Fernando Pascual (**Ivie**)

Sara de la Rica (Fundación Iseak)

Lucía Gorjón (Fundación Iseak)

Ainhoa Osés (Fundación Iseak)

María Romero (AFI)

Carmen López (AFI)

Susana Borraz (AFI)

Javier Serrano (AFI)

María Laffaire (KSNET)

María Sánchez (KSNET)

Pere A. Taberner (KSNET)

### Study to develop a strategic plan for public spending policy evaluation for the Valencian public sector budgetary planning (2021)

The objective of this project is to develop a study to create a system of evaluation of public spending policies, economic control and assessment of results, within the framework of the Valencian public sector budgetary planning.

*Institution:* Conselleria de Hacienda y Modelo Económico – Generalitat Valenciana

*Research team:*

José Antonio Pérez (dir.) (Universitat Politècnica de València)

Juan Pérez (**Ivie**)

Alicia Raya (**Ivie**)

## Technical assistance to update the analysis used to determine unit costs to be paid to wine producers for vineyard restructuring operations (2021)

The purpose of this work is to review the sources of information and to update the indicators used in calculating the real unit costs incurred by wine producers in vineyard restructuring and for which they receive an in-kind contribution under the PASVE program. As stated in Article 24 of the Commission Implementing Regulation (EU) 2016/1150, these unit costs should be adjusted to the standard scale unit costs established for all transactions, regardless of whether they are carried out with their own resources or by third parties. This measure is included in the current National Support Program 2019-2023.

*Institution:* Agència Valenciana de Foment i Garantia Agrària – Generalitat Valenciana

*Research team:*

Carlos Albert (**Ivie** and Universitat de València)

Pilar Chorén (**Ivie**)

## GLOBALIZATION

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### Data for European ICT Industries Analysis. 3rd pase, Digital Technologies Segment Data (DIGITES) (2020-2022)

The objective of this study is to update the report undertaken for the Joint Research Centre of the European Commission, which analyzes not only the ICT sector, but also the media and electronic content sectors and retailers, as well as the intensity of ICT use in European industries and the position of the EU in the global value chain of technology products.

*Institution:* Comisión Europea

*Research team:*

Matilde Mas (dir.) (**Ivie** and Universitat de València)

Juan Fernández de Guevara (dir.) (**Ivie** and Universitat de València)

Rodrigo Aragón (**Ivie**)

Eva Benages (**Ivie** and Universitat de València)

Laura Hernández (**Ivie**)

Consuelo Mínguez (**Ivie**)

Fernando Pascual (**Ivie**)

Juan Carlos Robledo (**Ivie**)

Jimena Salamanca (**Ivie** and Universitat de València)

Marta Solaz (**Ivie**, hasta el 31 de agosto de 2021 y Universitat de València)

Héctor García (**Ivie**)

Rosa Buitrago (**Ivie**)

Belén Miravalles (**Ivie**)

Alicia Raya (**Ivie**)

Susana Sabater (**Ivie**)

## VALENCIAN ECONOMY

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### How to boost R&D&I in the Region of Valencia? (2021)

The aim of this project is to analyze, from the regional perspective of Valencia, the different policies to support business investment in knowledge-based assets and their importance for the growth of the regions, carefully evaluating the characteristics of the strategies and actions deployed by those regions that are highly successful.

*Institution:* Fundación LAB Mediterráneo

*Research team:*

Matilde Mas (dir.) (Ivie and Universitat de València)

Javier Quesada (dir.) (Ivie, Universitat de València y Fundación Premios Rei Jaume I)

Consuelo Mínguez (Ivie)

Alicia Raya (Ivie)

Belén Miravalles (Ivie)

### System of indicators on the Valencian economy (2021)

The objective of this project is to establish a system of indicators that allows to regularly monitor the activity of the Valencian economy. In order to achieve this, the indicators are grouped into the following fields: production, labor market, foreign sector, economic sectors (primary, industry, construction, services, trade, tourism), productivity/competitiveness, prices, business demographics, public finances, technological indicators/digitization and other short-term indicators. The selection of the indicators is based on the availability of information on at least a quarterly basis (with some exceptions) that allows to compare the Valencian Region on a national level, with some indicators offering a European comparison. The system of indicators will be updated on a quarterly basis.

Two objectives are achieved by means of the proposed indicators. On the one hand, to offer information on the main fields that allow to monitor the Valencian Community in the national/European context; and, on the other hand, to build a table that summarizes the economic situation, by selecting from the total system those indicators that outline the evolution of the Valencian economy.

*Institution:* Asociación Valenciana de Empresarios (AVE)

*Research team:*

Joaquín Maudos (dir.) (Ivie, Universitat de València and CUNEF)

Ignacio Gordo (Ivie, hasta 31 de agosto de 2021)

Juan Carlos Robledo (Ivie)

Belén Miravalles (Ivie)



## **Comprehensive view of private investment in R&D&I in the Valencian Community. Weaknesses and proposed solutions (2021-)**

From a regional perspective, the objective of this project is to examine the specific case of the Valencian Community regarding its different policies to support business investment in knowledge-based assets and their role in helping regions grow. The analysis will be carried out by carefully evaluating the characteristics, strategies and actions carried out by benchmark regions.

The Valencian Community is not a region that stands out for its investments in R&D&I. According to the latest data available from the Spanish National Statistics Institute (INE), two-thirds of the total Spanish R&D investment in 2019 was concentrated mainly in five regions: Madrid, Catalonia, the Valencian Community, the Basque Country and Navarre. However, of these regions, the Valencian Community is the only one with a low R&D expenditure intensity in comparison to its economic size.

The Valencian Community's trajectory in the last decades regarding income and productivity reveals a gap with the most advanced regions. Thus, it is reasonable to study, both from a short- and long-term perspective, how a region and its businesses are affected when the R&D&I investment rate is below that of dynamic economies.

The Valencian region has been affected by various factors, such as, not only a limited impact of public actions within regional R&D&I plans, but also a general non-favorable evolution of the economy, along with the weak investment strategies deployed by its private sector. All of these issues have slowed down the process of reconciling its income per capita and productivity with the Spanish and EU average. The project will consist of examining benchmark regions, by considering closely their active R&D&I, technological development and entrepreneurship policies, in addition to other factors that may also be relevant in contributing to their success, such as, geographical location, productive specialization, internationalization, endogenous business growth problems, the role of family businesses, institutional development, the role of banking, and political and business leadership, among others.

*Institution:* Fundación LAB Mediterráneo

*Research team:*

Matilde Mas (dir.) (Ivie and Universitat de València)

Javier Quesada (dir.) (Ivie, Universitat de València and Fundación Premios Rei Jaume I)

Vicente Safón (Ivie and Universitat de València)

Consuelo Mínguez (Ivie)

Juan Carlos Robledo (Ivie)

## **SECTORAL STUDIES**

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### **The Spanish agri-food sector in the European context. 2020 Report (2021)**

The aim of this project is to build an observatory based on a system of indicators that will be used to develop a report on the Spanish agri-food sector. The analysis of the sector is enhanced by focusing on international comparisons. In addition, the report considers the entire value chain of

the sector, which includes primary sector, processing industry and distribution (both wholesale and retail distribution).

The study also included detailed information sheets for the most relevant agri-food goods producing sectors. The period covered for the international comparison will be 2008-2019, but includes the year 2020 for Spain. This is the 4th edition of the report, which jointly quantifies the different productive branches that define the agri-food sector and examines its characteristics from six points of view: size, growth and composition; employment; productivity and competitiveness; the shopping basket; inflation and prices; foreign trade, investment effort in R&D; and main subsectors. This year's report also includes an analysis of the progress made in the sustainability of the sector and its role in environmental protection.

*Institution:* Cajamar

*Research team:*

Joaquín Maudos (dir.) (Ivie, Universitat de València and CUNEF)

Jimena Salamanca (Ivie and Universitat de València)

Alicia Raya (Ivie)

Belén Miravalles (Ivie)

### **The Spanish agri-food sector in the context of the Spanish regions. 2020 Report (2021)**

The objective of this report is to build an observatory of the agri-food sector in the Spanish regions to offer a comparative view of the situation among regions and the national average. To this end, a broad system of indicators will be created to analyze the different economic aspects of the sector, i.e. production, employment, prices, foreign trade, productivity, competitiveness, etc. Subject to the statistical information available, the observatory will provide information on the entire value chain of the sector, which includes primary sector, processing industry and distribution.

The study will contain a detailed information sheet for each of the Spanish regions with their position in the ranking in various aspects. The period covered begins in 2008 until the last year with available data.

*Institution:* Cajamar

*Research team:*

Joaquín Maudos (dir.) (Ivie, Universitat de València and CUNEF)

Jimena Salamanca (Ivie and Universitat de València)

M.<sup>a</sup> Cruz Ballesteros (Ivie)

Belén Miravalles (Ivie)

### **Analysis of the representativeness of the main retail federations in the Valencian Region (2021)**

The aim of the project is to measure the representativeness of the two main retail trade federations in the Valencian Community, Unió Gremial and ConfeComerç, considering the number of

businesses and associations included in each, avoiding duplications, but also analyzing other variables that may be relevant for the sector and for the distribution of public funds among them.

Specifically, the study focuses on measuring the representativeness of each of the federations by counting the number of businesses and associations that each one has in the whole territory of the Valencian Region and their representativeness for each of the provinces. *Institution:* Conselleria de Economía Sostenible, Sectores Productivos, Comercio y Trabajo. Generalitat Valenciana

*Research team:*

Joaquín Maudos (dir.) (Ivie, Universitat de València and CUNEF)

Jimena Salamanca (Ivie and Universitat de València)

Belén Miravalles (Ivie)

Rosa Buitrago (Ivie)

M.<sup>a</sup> Cruz Ballesteros (Ivie)

## FIRM COMPETITIVENESS

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### Corporate Governance, Strategy and Competitiveness Observatory (GECE) (2017-)

The Corporate Governance, Strategy and Competitiveness Observatory in the Valencian Community (GECE) was created in 2017 with the objective of studying the levels of competitiveness of Valencian firms, as well as the factors and internal causes that contribute to making businesses more competitive. The agreement, initially signed with Bankia, has been renewed in 2021 with Caixabank and includes the development of quarterly reports which highlight aspects in three areas (corporate governance, strategy and competitiveness), as well as a collection of short informative notes (Keys to competitiveness) and specific success cases of Valencian firms that can serve as a benchmark for other companies.

The GECE Observatory will combine macroeconomic (sectoral breakdown) information with new available databases that provide detailed information on firms regarding financial statements, shareholders, capital and organizational structure, etc. The project has its own website [www.observatoriogece.es](http://www.observatoriogece.es). In addition, a group of participating firms, for which customized reports are prepared, collaborate by providing first-hand information that improves the analysis carried out by the observatory on business competitiveness and strategy.

*Institution:* CaixaBank

*Research team:*

Alejandro Escribá (dir.) (Ivie and Universitat de València)

Joaquín Maudos (Ivie, Universitat de València and CUNEF)

Carlos Albert (Ivie and Universitat de València)

Jimena Salamanca (Ivie and Universitat de València)

Rodrigo Aragón (Ivie)

Héctor García (Ivie)

M.<sup>a</sup> Cruz Ballesteros (Ivie)

Alicia Raya (Ivie)

Susana Sabater (**Ivie**)

Belén Miravalles (**Ivie**)

## **Design of the EActiVate Barometer for Economic Recovery and analysis of results (2021)**

The EActiVate initiative is born out of the movement #EstoNOtienequePARAR (#ThisDoesNOTHaveToSTOP) that started in response to the restrictions imposed to stop the spread of the COVID-19 pandemic. EActiVate is a meeting place for firms of all sizes and their employees, as well as, entrepreneurs, freelancers and professionals to give visibility to those who “activate with their actions” and prove that new jobs can be created by being creative and by inspiring others to reinvent themselves and to adapt to a changing market in order to keep up their economic level of activity.

In commemoration of the anniversary of this initiative (March 16), the EActiVate team wants to enhance the visibility of the project through the publication of objective figures and analyses that reflect the progress that has been made in multiple areas that show the positive/optimistic side of the pandemic and people’s ability to reinvent themselves. In this sense, the **Ivie** is called to collaborate in the development of a research proposal.

This project aims to develop a system of indicators (EActiVate Barometer) organized according to the five areas that shape the EActiVate project (employability, infrastructures, productivity, reinventing oneself and sustainability). Positive messages will also be disseminated based on the analysis of the selected indicators. In addition, the agreement includes the revision and data management of the results obtained in a survey on the economic business outlook directed to over 5,000 businesses, entrepreneurs and employees.

*Institution:* Mercadona

*Research team:*

Joaquín Maudos (**Ivie**, Universitat de València and CUNEF)

Jimena Salamanca (**Ivie** y Universitat de València)

Irene Zaera (**Ivie**)

## **NETWORKS**

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The **Ivie** participates in eight international networks, Competitiveness, ICTNET, World KLEMS, LA KLEMS, EU KLEMS, Wolpertinger, INDICSER and PREDICT, and two other national ones: REDEV and the network established University Carlos III of Madrid (UC3M), through the Research Institute for Higher Education and Science (INAECU).

In 2020, AFI, ISEAK, **Ivie** and KSNET formed the Network for Good Practices in Evaluation (REDEV), a joint project to promote public and private policy evaluation in Spain. This new alliance began in 2021 to work together with the award of the Evaluation Study on Active Employment Policies in Castilla y León. The institutions that make up REDEV, in this case under the leadership of Iseak, were chosen by AIREF to prepare this report for the Junta de Castilla y León.

RedEV promotes a comprehensive approach to evaluation that encompasses all the essential phases to contribute to informed and evidence-based decision making, starting from the soundness of the diagnosis and reaching the final phase of evaluation of results and impacts.

The second national collaboration network is the one established, since 2013, with the Carlos III University of Madrid (UC3M), Research Institute for Higher Education and Science (INAEU), for the study and evaluation of the production and use of information in science and technology by scientific communities. UC3M is a competent contact to provide bibliometric information on the scientific activity of Spanish universities that the **Ivie** uses in its projects on the Spanish university system such as U-Ranking.

### International networks

One of the networks, SPINTAN, is a project coordinated by **Ivie**, with support of 12 research institutes and European universities. Promoted and financed by the 7th Framework Programme of the European Commission, this project aims to analyze the impact of public sector intangibles on innovation, well-being and “smart” growth (including the role of education, R&D and innovation, and the construction of a digital society).

The **Ivie** participates in the European project in charge of conducting studies that lay the basis for the Annual European Report on Competitiveness. Promoting public debate on aspects related to competitiveness and making recommendations related to the Lisbon strategy and future business policies are some of the objectives of this report. Some of the projects developed by the **Ivie** along this line of collaboration are *Competitiveness of the European cement and lime sectors* and *Study on total factor productivity growth: drivers, components and frontiers firms*.

The **Ivie** is also one of the 31 European institutes that participated in the ICTNET project (European Network for the Research on the Economic Impact of ICTs), a research funded by the European Commission through DG CONNECT (Directorate General for Communications Networks, Content & Technology) which aim was to coordinate research in ICT economics in Europe increasing the relevance of the research on this topic.

The KLEMS (Kapital Labour Energy Material Services) international network aims to promote and facilitate the analysis of growth patterns and the evolution of productivity around the world, based on a growth accounting framework. At the heart of the initiative is the creation of new databases with the necessary variables to carry out these analyses. Through harmonizing concepts, common standards and classifications, the data is comparable across countries. **Ivie** has participated in this project since its beginning, with the setting up of EU KLEMS, which gathers information about the EU countries, the United States, Canada, South Korea, Australia and Japan. The **Ivie** has also supported the creation and development of LA KLEMS, which is the extension of this study of productivity to several Latin American countries and the launch of ASIA KLEMS, which includes Asian countries. The latest initiative of this global network is BALTIC KLEMS, whose objective is to develop a methodology adapted to the Baltic countries to analyze the growth patterns and evolution of their productivity. The **Ivie** has actively participated in this new project through a Marie Skłodowska-Curie grant, which has enabled the integration of a researcher to launch this new database. In the same

way, the **Ivie** participates actively in the development of World KLEMS that frames the rest of projects and regional KLEMS databases.

The Institute also participates in PREDICT (Prospective Insights on R&D in ICT), a project jointly funded by the European Commission's DG Communications Networks, Content and Technology (DG CONNECT) and the Joint Research Center (JRC). The objective of this project is to analyze the importance of ICT, its productivity and R&D spending in the European Union (EU) and 12 relevant countries within the global ICT market.

Finally, several **Ivie** Researchers are members of the 'Wolpertinger Club', an association of university academics with a common interest in the economics of financial systems and financial institutions. They meet once a year to discuss their research, exchange ideas and develop ways to cooperate in the research and teaching of banking, financial institutions and the economics of financial systems.

## 7.2. **Ivie Professors and Associate Researchers' competitive research projects**

### 7.2.1. **International projects**

José Enrique Devesa Carpio participates in the project *Economic violence: opening pathways across an unexplored gender-based violence issue for guaranteeing the women and children's fundamental rights*, funded by the European Commission Horizon 2020 - Research and Innovation Framework Programme (2019-2021). Main researcher: Inmaculada Domínguez Fabián.

### 7.2.2. **Spanish National R&D Plan**

**Ivie** Researchers are closely involved in the activities of the National Research, Technological Development and Innovation Program, in which they participate not only by carrying out projects, but also by taking part in their evaluation process. During 2021, the Researchers and Associate Researchers participated in the following projects:

GC2018-099415-B-I00: *Digitalización financiera en un contexto de revolución digital: competencia, regulación y adopción* (2019-2021) funded by the Spanish Ministry of Science, Innovation and Universities. Santiago Carbó (Main researcher).

ECO2017-84828-R: *Factores de competitividad en la economía digital y del conocimiento* (2018-2021) funded by the Spanish Ministry of Economy and Competitiveness. Joaquín Maudos (Main researcher), Juan Fernández de Guevara.

PGC2018-095821-B-I00: *Geografía, capacidad estatal y cambio económico. Una aproximación espacial al desarrollo y sus determinantes en las economías periféricas (siglos XIX-XXI)* (2019-2021), funded by Ministerio de Ciencia, Innovación y Universidades. Alfonso Herranz Loncán and Julio Martínez Galarraga (Main researchers), Alicia Gómez.

PID2019-107161GB-C33: *Investigación sobre Desarrollo y Desigualdad, Innovación y Medioambiente (i-DEINNOVE)* (2020-2022), funded by Ministerio de Ciencia e Innovación. Gustavo A. Marrero and Carlos G. Bethencourt (Universidad de La Laguna) (Main researchers), Jesús Rodríguez-López.

Francisco Alcalá is member of the research team of the project *Mercados globales, calidad, innovación, longevidad y bienestar*, funded by Secretaría de Estado de Investigación, Desarrollo e Innovación, Ministerio de Ciencia, innovación y universidades (2019-2021).

PID2019-107081GB-I00: *Desde la teoría a la política: un enfoque conductual*, funded by Spanish Ministry of Science, Innovation and Universities (2000-2023). Giovanni Ponti (Main researcher), Carmen Herrero.

PID2020-115457RB-I00 (HEMI): *Hacia un empleo inclusivo de las personas con discapacidad intelectual: retos e impacto*, funded by the Spanish Ministry of Science and Innovation. Proyectos de I+D+i Retos Investigación (2021-2024). Vicente Martínez, Carolina Moliner (Main researchers), José Ramos y José M<sup>a</sup> Peiró.

PID2020-116742RB-I00: *Desarrollo de las competencias de liderazgo para mejorar el bienestar y desempeño de los teletrabajadores: evaluación de un programa de formación a través de WEB y APP*, financiado por la Universitat de València (2021-2025). Nuria Tordera and Isabel Rodríguez (Main researchers), José María Peiró.

### 7.2.3. Other projects financed by public institutions

Antonio Villar is main researcher of the project *Bienestar Social y Políticas Públicas*, funded by Junta de Andalucía (2020-2022).

Carmen Herrero is main researcher of the project *Economía y género* (PROMETEO 2019/037) of the Departamento de Fundamentos del Análisis Económico of the Universidad de Alicante, funded by Generalitat Valenciana (2019-2022).

Also, Carmen Herrero is researcher of the project *Information transmisión in a polarized society* (PROMETEO 2021/073) of the Departamento de Fundamentos del Análisis Económico de la Universidad de Alicante, funded by the Generalitat Valenciana (2021). Giovanni Ponti (Main researcher).

José Manuel Pastor is main researcher of the Project *Gasto público y resultados educativos en España en el siglo XXI: Eficiencia e igualdad de oportunidades en un estado descentralizado* (CPI-19-398). Grants from the Conselleria d'Hisenda i Model Econòmic for the support of public economic research groups in the Valencian Community (2019-2023). Lorenzo Serrano and Joaquín Maudos are also members of the research team.

Project of the Consolidable Research Groups of the Conselleria d'Innovació, Universitats, Ciència i Societat Digital (Generalitat Valenciana) AICO/2020/217. *Factores de competitividad en la era del conocimiento y la economía digital* (2020-2021). Juan Fernández de Guevara (Main researcher), Joaquín Maudos, José Manuel Pastor, Lorenzo Serrano and Alicia Gómez.

AICO/2021/309. *Resiliencia de las Pymes: el papel de los equipos directivos, la propiedad en la creación de capacidades dinámicas*. (2021-2023), Vicente Safón and María Iborra (Main researchers), Alejandro Escribá.

Jesús Rodríguez is member of the research project on SARS-COV-2 and COVID-19. *Nuevas dinámicas del mercado laboral tras el confinamiento en Andalucía: el empleo del futuro post-COVID-*



19 y respuesta a nuevos confinamientos. Secretaría General de Universidades, Investigación y Tecnología de la Junta de Andalucía. (2021-2022).

Iván Arribas is researcher of the Prometeo project (PROMETEOII/2019/095) *Economía del Comportamiento Estratégico: privacidad y big data, estrategias de innovación e internacionalización, movilidad y redes de transporte, cambio climático, sistemas de incentivos y brecha de tiempo en el hogar entre hombres y mujeres*, funded by Generalitat Valenciana. Amparo Urbano (Main researcher) (09/2019-12/2022).

*La influencia de la robotización sobre las características de los puestos de trabajo y los resultados del trabajo* (PROMETEO 2021/048). Conselleria d'Innovació, Universitats, Ciència i Societat Digital de la Generalitat Valenciana. (2021-2024). Vicente González, José María Peiró (Main researchers), José Ramos is also member of the research team.

#### 7.2.4. Other projects financed by private institutions

Alicia Gómez is member of the research group of the BBVA Foundation's "Digital Humanities" project titled *Sociedad digital, uso del tiempo y valor de la producción doméstica* (2020-2022). Daniel Tirado (Main researcher).

José García-Montalvo is member of the research group of the project "Ayudas a Equipos de Investigación Científica sobre SARS-CoV-2 y COVID-19 en Economía y Ciencias Sociales", titled *The Impact of COVID-19 on Income and Consumption Inequality in Spain: Real-Time Evidence from Big Data* (2020-2022). Rubén Durante (Main researcher).

José García-Montalvo is also main researcher of the Project *The economic recovery after COVID-19: Inequality, consumption and the fate of the Spanish economy* (ERACOV19, SR20-00386), within the «Social Research Call 2020» of "La Caixa" Foundation.

## 8. DATABASES AND INDICATOR SYSTEMS<sup>2</sup>

Numerous **Ivie** projects have generated databases or indicator systems of interest to economic research that also facilitates decision making based on objective and up-to-date information. The **Ivie** website provides easy access to the Institute's 27 databases and indicator systems that are classified into eight areas: growth and capitalization, human capital and human development, socio-economic, globalization, international, public sector, universities, and knowledge economy.

### 8.1. Growth and capitalization

#### **Capital stock in housing in Spain and its territorial distribution (1990-2010)**

The database *Capital stock in housing in Spain and its territorial distribution (1990-2010)* offers data on the capital stock in housing series from 1990 until 2010, land value included. Information is also provided on the changes of total stock in housing and its prices.

Data is broken down by autonomous community, province and population status, distinguishing between municipalities according to the number of inhabitants and whether they are on the coast or inland.

Among the results provided are house prices and total land area of the housing stock, as well as their changes over time. Data are also included on the value of housing stock and land capital stock. The results are classified by industry and region, with the latest information published in 2015.

The database is available on the BBVA Foundation website: [www.fbbva.es/](http://www.fbbva.es/)

#### **Stock and capital services in Spain and its territorial distribution (1964-2019)**

Since 1995, the **Ivie** and the BBVA Foundation have been conducting a research program on capital stock which includes a database with information on capital accumulation in Spain over the last five decades. Specifically, this database examines the series at national level for the period 1964 to 2019 and until 2018 for the Spanish regions and provinces. In addition, the database updates the contribution of productive capital and offers information of the assets invested in, including R&D expenditure. For this purpose, net capital stock (wealth) and capital services (productive capital) are measured.

At national level, the 34 industries considered are disaggregated into 19 types of assets, according to the NACE Rev. 2 classification. The classification distinguishes between tangible and intangible assets, including R&D expenditure for the first time. In addition, this classification includes three

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<sup>2</sup> The maintenance and updating process of **Ivie's** databases is funded by the Valencian Regional Government's Ministry for Finance and the Economic Model, through a cooperation agreement signed between both institutions to promote and consolidate the **Ivie's** basic and applied economic research activities.

information and communication technology (ICT) assets (software, hardware and communications) and offers a great asset breakdown in public infrastructure which is a distinctive characteristic of the BBVA Foundation-**lvie** series. **Also, data by autonomous communities and provinces are disaggregated into 19 types of assets, and 25 and 15 industries, respectively. This classification by asset and industry became available for the first time in the 2012 update.**

The extensive database, that **lvie** and BBVA Foundation have made public, is accompanied by numerous dynamic graphs that facilitate the analysis of the evolution and composition of capital endowments in Spain and its regions. As of May 2021, over 900 published specialized works have been written based on this information.

The database is available on the BBVA Foundation website: [www.fbbva.es/](http://www.fbbva.es/)

### **Historical series on public capital in Spain and its territorial distribution (1900-2012)**

Since 1995, the **lvie** and BBVA Foundation have developed a broad research program on Spanish economic growth. One of the fundamental parts of the program is the development of databases on capital stock in Spain which are updated regularly. One of the main characteristics of this series is the importance given to public capital endowments. The continuous analysis of public sector investment carried out by the **lvie** and BBVA Foundation has enabled the development of this database covering more than a century.

The study measures investment in the public sector from a long-term perspective with a detailed look at distribution by autonomous communities and provinces, thus allowing the territorial evolution of public capital to be analyzed for more than a century. In addition, the study facilitates both a better evaluation of public policies, as well as an analysis of the impact of public capital on regional or provincial growth and convergence.

The database spans more than a century of Spain's history and is detailed according to autonomous community and province, thus facilitating the analysis of the impact of public capital on growth and convergence among regions. Detailed information is also provided on the public sector's investment strategy in areas key to growth and welfare, such as infrastructures, health, and education.

The database is available on the BBVA Foundation website: [www.fbbva.es/](http://www.fbbva.es/)

### **Intangible assets: national database (1995-2011)**

Given the growing importance of activities based on knowledge in the economic development of the most advanced countries, investment in intangibles assets (ICT), research and development (R&D), innovation, design, creativity, image and brand, organization and specific human capital training) are assets in which investment is needed to modernize and strengthen the productive structure of a country.

This project developed for the Telefonica Foundation follows the methodology accepted worldwide (Corrado, Hulten and Siches [2005] *Measuring Capital and Technology: An Expanded Framework*)

which is in line with the INTAN-Invest project ([www.intan-invest.net](http://www.intan-invest.net)) that measures intangible investments for a group of European countries.

The database offers the first annual database of the value of investment in intangible assets and its capitalization for the period 1995-2011 for the whole Spanish economy with a wide level of sectoral disaggregation (24 sectors, NACE Rev. 2 classification). The intangible assets used in the database are: computerized information, innovative property (R&D, mineral exploration and spending on the production of entertainment and artistic originals, new products/systems in financial services, design and other new products/systems) and economic competencies (advertising, market research, employer-provided training, organizational capital).

The database is available in Excel and PcAxis on **Ivie's** website: [www.ivie.es](http://www.ivie.es).

### **Intangible assets: database for Spain and its autonomous communities (1995-2016)**

The database *Inversión en activos intangibles más allá del PIB en España y sus regiones*, developed by the **Ivie** in collaboration with the Cotec Foundation for Innovation, offers information on the gross fixed capital formation (GFCF) in intangible assets in Spain and its autonomous communities by sectors. Data is available for the period 1995-2016, in both current and constant euros for 2010. The database offers a sectoral breakdown of 27 sectors according to the NACE 2009.

The intangible assets are organized into two main groups: those already included in GDP (considered investment by the European System of Accounts, ESA, 2010), referred to as AIPB, and those not yet included in the national accounts which are grouped under the name AIMAPIB (intangible assets "beyond GDP"). These two major groups are classified in nine individual intangible assets.

The database is available on the Cotec website: <http://informecotec.es/activos-intangibles>.

## **8.2. Human capital and human development**

### **Human capital in Spain and its regional distribution**

The results obtained from the Human Capital Project undertaken by the **Ivie** in collaboration with the Bancaja Foundation improve the statistical information already available on human capital and have enabled the **Ivie** to create a database that contains abundant information on the evolution of the Spanish population's educational levels.

The period covered in the database is from 1964 until 2013. The series are structured by educational levels, population groups, regions, provinces and sectors and can be accessed through **Ivie's** website: [www.ivie.es](http://www.ivie.es).

## Human development in Spain

The Human Development Index is an indicator that measures a country's degree of economic development and combines health, education and income measures. It was first published in 1990, as part of the United Nations Development Program, and quickly became more popular than the simple comparison by per capita income, it being a more informative indicator.

Within the Human Capital research framework developed by Bancaja and the **Ivie** since 2000, a data series on human development for Spain and its autonomous communities has been built according to the methodology proposed by the UN. Furthermore, an alternative methodology is proposed to correct the major deficiencies of the UN index. The data currently covers the period 1980-2010.

The database contains the Human Development Index and the New Human Development Index, which both have health, education and income components.

Data concerning all these indexes are available on **Ivie's** website: [www.ivie.es](http://www.ivie.es).

## Observatory of young people's transition to the labor market

The *Observatory of the Transition of Young People to the labor market* is a data bank developed through the Human Capital Project sponsored by the Bancaja Foundation, which was updated every three years. The data from the Observatory's six surveys, 1996, 1999, 2002, 2005, 2008 and 2011 have been homogenized and categorized, the following factors being taken into account:

- Basic data on survey participants: age, level of education, gender, work experience, employment situation, nationality; motive for job search, employment search methods; information on academic history.
- Data on family background (education level of parents, socio-professional position of parents, household income).
- Psychosocial data which include attitudes, behavior and experiences of young people in the labor market: initiative, passivity, self-effectiveness, different elements of employment stress, centrality, satisfaction with life, one's economic situation and employment, extrinsic, intrinsic and social aspects of employment, and "justice at work".
- Data on the educational background, work and life experience of those polled, time spent studying, at what age they begin looking for work, left the house, formed their first relationship and had their first child.
- Employment: duration, type of contract, commitment, salary, type of employer and sector, reasons for leaving the job and contractual flexibility.
- Aspects related to the health and the general well-being of the young people.

Further information is available at the **Ivie** website: [www.ivie.es](http://www.ivie.es)

## 8.3. Socio-economic regional differences

### Access to services

This new database substitutes the “Access to banking services” database, which only provided information on banking services, by expanding the data available to include access to health services (hospitals and primary care centers), educational services (primary, secondary and post-secondary) and banking services (offices). In order to obtain this information, the number of centers/offices available for each of these services, as well as the number of municipalities that do not have such services and the population residing in these localities are provided.

The analysis, with data from 2019, is performed for all the regions of Spain (disaggregated at municipal level), so as to obtain a comparative picture of the accessibility to these services in the provinces and regions. The database on access to banking services also includes information from 2008 showing the evolution with the current situation.

The contents of this database have been used to prepare the report on the distribution of the population and its access to services in Spain (*Distribución de la población y accesibilidad a los servicios en España*), developed by the **Ivie** for the Ramón Areces Foundation. The database can be accessed directly from **Ivie**'s website.

### Inequality in Spain, its regions and its provinces

Sponsored by Caixa Galicia Foundation, the aim of this study is to analyze the evolution of household consumption and income distribution in Spain from both a territorial and temporal perspective.

The database covers the period 1973/74-2005, with annual intervals from 1998 to 2005. Among the data provided is in-depth information on autonomous communities regarding their total expenditure per person and per household, according to the social class or studies of the main breadwinner. The expenditure is detailed in a total of twelve groups (education, housing, health, and leisure, among others).

Basic data were used from the Household Budget Surveys for the periods 1973/74, 1980/81 and 1990/91, and the Continuous Household Budget Surveys, published by the INE, for the period 1998 to 2005, with autonomous community disaggregation.

The data are available on **Ivie**'s website ([https://www.ivie.es/es\\_ES/bases-de-datos/diferencias-economicas-y-sociales-de-los-territorios/desigualdad/](https://www.ivie.es/es_ES/bases-de-datos/diferencias-economicas-y-sociales-de-los-territorios/desigualdad/)) and are also incorporated in the World Bank and United Nations University (WIDER) databases.

### Education accounts

The BBVA Foundation and the **Ivie**, within its cooperation framework program, have developed several studies on important topics such as educational training, employment and innovation. From this collaboration arises the database Spanish Education Accounts (*Cuentas de la Educación en*

*España*) which addresses several key issues related to the Spanish educational system: What is its size and how is it structured? How much is spent on education? Who are the producers of educational services and who are the beneficiaries?

The education accounts (EA) database 2000-2016 is structured into six large areas. The first (A.1) and second (A.2) areas are devoted to public and private education accounts, respectively. The third (A.3) offers information on total spending on education, while the fourth (A.4) and fifth (A.5) contain data on public and household expenditure on education. Finally, the sixth area (A.6) contains the student series.

The database is available for download in Excel format on the BBVA Foundation website: [www.fbbva.es/](http://www.fbbva.es/)

### Homogeneous population series

For over a decade already, the BBVA Foundation and the **Ivie**, under their cooperation framework agreement, have put the focus on demographic analysis, from a more aggregate level to municipal or lower scale. The information offered by the population censuses available and comparable since the end of the 19th century has made it possible to build the Homogenous population series.

The homogenization process of the de jure resident population, taking into account the changes in municipalities' borders for more than one century, has been very strenuous. The disappearance of municipalities, their creation, division, merging or changes of name have been tracked for each one of the more than 8,000 municipalities during the eleven censuses taken.

This Spanish population database is based on the municipal structure of the 2011 Census. Reference data is the de jure population and is dated for each one of the twelve censuses prepared by INE since the beginning of the 20th century, allowing a detailed analysis of the changes in location of population patterns during the period 1900-2011.

The database is accessible on the BBVA Foundation website, [www.fbbva.es](http://www.fbbva.es), and contains information for the 8,116 Spanish municipalities existing in 2011. The series are classified in accordance with the code associated with each municipal area and grouped by the 52 Spanish provinces, also offering the area in square miles of each municipality.

### Social capital

Social capital is a concept that for over a decade has attracted the attention of all social sciences and international institutions because of its outstanding potential in the processes of development. The term social capital highlights the role of cooperation and trust in achieving collective or economic results. The **Ivie** carries out a joint project with the BBVA Foundation for the study of social capital. During 2013, the social capital database, built within the framework of this project, was updated. The international database, which includes OECD countries, covers from 1970 until 2011, and the series for Spain (with territorial breakdown by regions and provinces) until the year 2013.

The database was published by the BBVA Foundation on 11 November 2015. Information and/or data series to date can be requested to [publicaciones@ivie.es](mailto:publicaciones@ivie.es).

## Life tables for Spain and its regions

Life tables are fundamental in providing a numerical representation of the status changes occurring within a population over time. **Ivie** Researcher Francisco J. Goerlich and Rafael Pinilla have calculated the classic biometric functions of the Life Tables for Spain and its regions, covering the period 1975-2018. The data bank also contains four demographic indicators for each year and geographic area: average age of population, average-age life expectancy, life potential and life potential per capita.

The database contains period life tables with annual periods for Spain (complete and abridged by five-year groups up to a final open interval of 110 and over), its autonomous communities (abridged to a final open interval of 100 and over), and provinces (abridged to a final open interval of 85 years and older).

For the population data tables, information from the Spanish National Statistics Institute is used. Data on deaths are from the Vital Statistics on the natural movement of population (MNP). The microdata can be downloaded from INE's website, and is classified by age, period, generation (Lexis triangles) and groups of cause-of-death. The latest available figures correspond to 2018.

Three aspects distinguish **Ivie's** Life Table database from INE's: data is homogenous since 1975; it is disaggregated by large groups of cause-of-death; and includes an additional demographic indicator: life potential.

The data is available to researchers and interested public via the **Ivie** website ([www.ivie.es](http://www.ivie.es)), with the possibility of obtaining the information in map format.

## Migration in the Valencia region

The Examination of Migration in the Valencia Region, is undertaken by the **Ivie** for the Bancaja Foundation (previously included in the Observatory on Immigration in the Valencian Region of the CeiMigra Foundation, sponsored by Bancaja). Its objective is two-fold: first, to provide a comprehensive view of the immigration phenomenon with its many social and economic profiles, through the compilation and systematization of available information, while also detecting gaps in this information. Second, to provide access to adequate statistical material for subsequent detailed analysis of the various aspects of immigration.

The last edition, dated December 2011, includes comparative data on the situation of emigration and immigration in OECD countries, and also information on the remittances sent and received from the immigrants of nationalities most represented in Spain, the employment situation of immigrants in their country of origin or the reason for their moving to Spain.

The data of Migration in the Valencia Region are available on **Ivie's** website: [www.ivie.es](http://www.ivie.es).



## 8.4. Globalization

### INTEGRA

The INTEGRA data bank is framed within **lvie**'s research program with the BBVA Foundation and under the International economic integration research area, and consists of a wide range of indicators to measure the evolution of economies' integration on a worldwide scale.

The INTEGRA database has three different indicators (degree of openness, connection and integration) which have been developed with a broad level of geographical and temporal disaggregation. A total of eighty-five countries are covered (representing 97% of world GDP in 2007), spanning the period 1985-2007. It also provides indicators of total trade in goods, indicators corrected by the distance between countries and indicators disaggregated by industries according to the ISIC-3 classification (Revision 2), with a distinction between the two directions of trade flows: exports and imports.

## 8.5. International

### EU KLEMS

KLEMS (Kapital Labour Energy Material Services) international network aims to promote and facilitate the analysis of growth patterns and the evolution of productivity around the world, based on a growth accounting framework. At the heart of the initiative is the creation of new databases with the necessary variables to carry out these analyses. Through harmonizing concepts, common standards and classifications, the data is comparable across countries. Some of the variables included are value added, capital stock, employment and human capital.

The **lvie** has participated in this project since its beginning, with the setting up of EU KLEMS, which gathers information about the EU countries, the United States, Canada, South Korea, Australia and Japan. The Conference Board is responsible for coordinating the work of the consortium and updating the database.

The **lvie** has also supported the creation and development of LA KLEMS, which is the extension of this study of productivity to several Latin American countries. The latest initiative of this global network is ASIA KLEMS, which includes the Asian countries. In the same way, the **lvie** participates actively in the development of World KLEMS that frames the rest of projects and regional KLEMS databases.

In addition to the **lvie**, more than 40 research centers and institutions from around the world participate in the KLEMS consortium. Information is available at [www.euklems.net](http://www.euklems.net) and can be accessed through **lvie**'s website.

## SPINTAN

The SPINTAN Project (Smart Public Intangibles), directed by the **Ivie** for the European Commission, aims to define the theoretical and empirical characteristics of public intangible policies. The project is carried out by academic researchers from diverse European institutes and universities.

The database contains information on public intangible assets for 22 EU countries, United States, China and Brazil covering the period 1995-2015. It provides information on the investment and the capital stock in intangible assets such as brands, design, entertainment and artistic originals, organizational capital, employer-provided training, as well as expenditure on R&D and software which are now included in the national accounts of each country.

The database, which is available on the SPINTAN website ([www.spintan.net](http://www.spintan.net)), includes information on the following industries: scientific research and development; public administration and defense; compulsory social security; education; human health and social work activities; and arts, entertainment and recreation.

This information allows us to analyze the impact of public sector intangibles on innovation, well-being and smart growth (including education, R&D and the construction of a digital society).

## ICT sector and its R&D (PREDICT)

The **Ivie** has developed for the European Commission a wide database on the Information and Communication Technologies (ICT) and Audiovisual Content sectors, within the framework of the Prospective Insights on (R&D) in ICT (PREDICT) Project. The PREDICT project, jointly funded by the European Commission's DG Communications Networks, Content and Technology (DG CONNECT) and the Joint Research Center (JRC-UnitB6), analyzes the importance of ICT, its productivity and R&D spending in the European Union (EU) and 12 relevant countries within the global ICT market. This database is one of the tools used by the European Commission to monitor the progress of the Digital Single Market, one of its key strategic areas.

The databank offers information for 12 variables; value added, employment (hours worked and number of employed persons), productivity, labor productivity, Business Enterprise R&D expenditures (BERD), number of personnel and of researchers, ICT R&D public funding, as well as its deflators, PPP and currency exchange rates. The data is available for the ICT sector, following the OECD classification (2007) of ICT industries, which comprises 12 ICT manufacturing and services subsectors and some selected non-ICT producing high-tech sectors.

The data is available for the EU and all its member states, Australia, Brazil, Canada, China, India, United States, South Korea, Japan, Norway, Russia, Switzerland and Taiwan. Data on ICT R&D public funding is offered at the aggregate level, by NABS (NABS – Nomenclature for the Analysis and Comparison of Scientific Programmes and Budgets) and by industry sector (NACE Rev. 2) for the EU, United States and Japan. In addition to ICT sector data, the PREDICT 2017 database includes information from official sources (Eurostat, OECD, and National Statistics Institutes, among others) on the following sectors: Media and content (publishing of books and journals, audiovisual and

broadcasting activities and news agency activities) and Retail sale via mail order houses or via internet.

Currently, the database, regularly updated by the **Ivie**, covers the period 1995 to 2017 (last year with official data). Provisional estimates on the evolution of the main ICT sectors and the Media and content and Retail sale via mail order houses or via internet sectors are available for 2018 and 2019. The PREDICT initiative aims to compare the evolution of the EU ICT sector with its R&D and its major competitors. To this end, in addition to the database, annual reports are drawn up that analyze the available information and synthesize the main trends in the ICT sector of the countries included in the database.

The database is available on **Ivie**'s website: [www.ivie.es](http://www.ivie.es).

## 8.6. Public sector

### COVID-19 Severity and Impact Indicators (ISIC-19)

The COVID-19 pandemic has put every country in the world on high alert. The rapid spread of the pandemic, its consequences on the health system and the strict confinement measures that have disrupted economic activities have put at risk the globalized world as we know it. To assess the effects of the pandemic on population health and to try to control the negative economic effects associated with it, tools are needed to monitor its evolution in different territories. To accomplish this, the **Ivie** has developed three synthetic indicators, known as COVID-19 Severity and Impact Indicators (ISIC-19), that focus on the severe cases and allow to assess the severity and impact of the pandemic and to study its evolution, giving a regional comparison of the situation.

The *scope* index measures the amount of severely affected people over total population, which can be expressed as a gross index (ratio between the cumulative number of severely affected people and the total population) and as a net index (ratio between the number of severely affected people minus recovered patients and total population). The *severity* index measures to what degree this part of the population is seriously affected based on the Balanced Worth methodology developed by Herrero and Villar (2013, 2018). The *impact* index is the result of these two components, scope and severity, which measures how many people are severely affected and to what degree, in relation to the total population.

The methodology used to construct the indicators is detailed on the **Ivie** website, along with the algorithm developed by Rodrigo Aragón and Héctor García (**Ivie**) that facilitates the calculation of the Balanced Worth.

This index is based on data provided daily by the Spanish Ministry of Health on the number of deaths, and hospitalized and recovered patients, for Spain as a whole and for each of the Spanish regions. The data is available from 19 March 2020 onwards.

## Basic public services expenditure in Spain and its regions

Education, health and social protection, known as basic public services (BPS), are particularly relevant activities of the public sector: due to the importance of the resources allocated to them and the activities carried out. In fact, they represent more than half of public spending and are needed to reach the equity goals pursued by public interventions, especially the principle of equal opportunities.

This database includes information on public sector activities related to the provision and management of services: health (primary, specialist and hospital care, public health, clinical research); education (pre-school, primary, secondary, post-secondary and higher, scholarships, education services); and social services (retirements, disease and disability, advanced age, family protection, unemployment, housing, social exclusion).

The study examines the trajectory of BPS expenditure in Spain and its autonomous communities over the course of the 21st century in order to provide objective data which can be referred to in assessments and decision making. The period covered allows to distinguish differences across regions before and during the crisis.

## Regional differences in the Spanish public sector

The database *Regional differences in the Spanish public sector* is part of a research project carried out by the BBVA Foundation and the **Ivie** with a double objective. First, to generate new fresh information on public-sector performance in Spain and its regions. Second, to analyze the data obtained to gain a more detailed picture of the extent of its performance, the reasons underlying regional differences and their effect on inter-territorial solidarity and economic efficiency.

The database, available at the BBVA Foundation website ([www.fbbva.es](http://www.fbbva.es)), contains regionalized data for the period 2000-2008 and covers information on the size of the public sector in each region and its territorial distribution by levels of government, by functions and by revenue and expenditure items.

## Public health expenditure in Spain

The *Public Health Expenditure in Spain* database contains statistical information on public health spending in Spain by regions for the 1991-2010 period.

It is a homogeneous territorial database that supplements those offered by the Public Healthcare Expenditure Statistics (EGSP), which are produced by the Spanish Ministry of Health in collaboration with the autonomous communities. In addition to starting in 1991, this database offers more detailed regional information than the EGSP, reaches 94% of total public health spending and provides information by public stakeholders. Also, a homogeneous series for the whole period has been constructed.

The databank, which is available on the BBVA Foundation website, [www.fbbva.es](http://www.fbbva.es), contains information on public health expenditure by region covering the period 1991-2010 in Spain, with

specific data on the autonomous communities. Supplementary tables are also provided on GDP deflators and prices, population projections by region and age, health expenditure profiles and health expenditure evolution.

## 8.7. Universities

### U-Ranking

U-Ranking is a set of Synthetic Indicators of the Spanish University System (ISSUE), available at [www.u-ranking.es](http://www.u-ranking.es), which offers the user two products. First, it provides a set of synthetic indicators on public and private universities in Spain, allowing them to be ranked according to their performance (U-Ranking) and their volume of results (U-Ranking Volume). U-Ranking takes into account the three missions of university activity (teaching, research, and innovation and technological development). The website offers the global synthetic indicators obtained by each university, as well as the indicators in each activity and area, thus allowing each institution to be compared from different points of view.

Furthermore, the U-Ranking website provides an accurate and easy-to-use tool, allowing the user to build their own personalized ranking with their chosen degree and make a comparison of what each university has to offer, expressing their preferences about what to study and where, as well as the importance given to different university activities. Along with the personalized listing, other information of interest is provided, such as the last cut-off mark, the price of credits and details about the university surroundings.

The 9th edition of U-Ranking, developed by the BBVA Foundation and the **lvie** analyzes a total of 72 Spanish universities, 48 public and 24 private, by monitoring 20 different indicators and constructing various synthetic indexes. U-Ranking 2021 also includes a specific analysis of the evolution of degree offerings at Spanish universities over the last decade.

This information is available on the U-Ranking project's website: [www.u-ranking.es/](http://www.u-ranking.es/).

### SIUVP

SIUVP (Valencian Public University System of Information) is a project born in 2012 from the collaboration of the five Valencian public universities – University of Valencia, Alicante University, Polytechnic University of Valencia, Jaume I University and Miguel Hernández University at Elche– with the aim of offering a complete set of indicators on their activity and results.

SIUVP is a window to the Valencian university activity, a tool by which universities account in a transparent manner to society, for the effectiveness and efficiency achieved in their performance. Through the website, users have access to a comprehensive information system that consists of more than 60 indicators.

The information in this platform allows the user to know the situation and development of the five universities in areas related to the supply and demand of degrees, the academic performance of

their students, internationalization, research activity, knowledge transfer to society and economic results of its activity.

The SIUVP database provides information on 60 indicators that are structured in seven different areas: Admission, Students, Academic results, Internationalization, Human resources, Research and tech transfer and Economic data.

The SIUVP website ([www.siuvp.es](http://www.siuvp.es)) is updated twice a year to offer the latest data available.

## 8.8. Knowledge economy

### ABACO

ABACO (Observatory of Knowledge-Based Activities) rises as a joint project of the **Ivie**, the Universitat de València and the Universitat Politècnica de València with the aim of measuring and analyzing the knowledge-based activities.

One of the pillars of ABACO is the generation of its own information system, available on the ABACO website, which facilitates the analysis and diagnosis of the current situation and recent evolution of knowledge-based activities in Spain, as well as comparison with other countries.

ABACO offers the user a powerful database which is regularly updated with over 200 indicators structured in five areas: New technologies, Human capital, Innovation system, Business environment, and Socio-economic impact.

ABACO also offers extensive detailed information on knowledge intensive GDP. The database contains information about the weight that knowledge-based factors have in the gross value added (GVA) of each of the eighteen countries studied (Australia, Austria, Czech Republic, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Netherlands, Portugal, Slovenia, Spain, South Korea, Sweden, United Kingdom, and USA). The results are also presented by sector of activity (according to the NACE Rev. 1 classification).

This information is available on the project's website: [www.observatorioabaco.es](http://www.observatorioabaco.es).

### Value of knowledge-based economic activities

The aim of this database, developed by the **Ivie** in collaboration with the Ramon Areces Foundation, is to quantify the value of knowledge-based economic activities in Spain and its autonomous communities. With this purpose, the database assesses the market value of the contributions of productive factors that add more knowledge to the production system (skilled work, ICT, intangible assets and machinery and equipment), an exercise based on the methodology of growth accounting. The database follows the methodology found in the report and provides information on the total and regional GVA in Spain, as well as its disaggregation into two parts: GVA based on knowledge (knowledge-based activities) and GVA with no knowledge-based activities or based on productivity factors with low knowledge content.

The database, which covers the period 2000-2014 (2013 for regional data), presents a high industry-level breakdown: 27 sectors at national level and 21 at regional level, defined according to the CNAE 2009/NACE Rev. 2 classification.

The database is available since 2017 on **lvie**'s website.

## 9. SCIENTIFIC MEETINGS<sup>3</sup>

The Institute has taken an active part in promoting and supporting the participation of its associates in national and international meetings, and also by organizing seminars, workshops and courses in different places. Through these activities, the **Ivie** hopes to make its head office, and the university departments and institutions with which it collaborates, a regular meeting point for researchers, other specialists and social institutions. As a result of the pandemic, the **Ivie** reinforced the remote organization and participation in activities through digital connection platforms and live broadcasting, making it possible to reach more people by eliminating the geographic barrier.

### 9.1. Organized by the **Ivie**

The pandemic affected and transformed **Ivie's** agenda both in 2020 and 2021. The limitations imposed by the pandemic and the important advancements in digitalization and the use of new technologies have changed the way these types of activities are organized and promoted.

The experience acquired during 2020 allowed the **Ivie** to adapt its calendar of events to the circumstances by making use of these technologies, allowing the **Ivie** to organize seminars, dialogues, workshops and conferences in collaboration with other entities and also individually that enabled in-person as well as online participation.

#### **Ernest Lluch Foundation-Ivie Dialogues: Sports, Economy and Health: Changing the Rules of the Game**

The Ernest Lluch Foundation and the **Ivie** began their collaboration in 2018 with the organization of the series of dialogues on INEQUALITY AND DEMOCRACY, which continued in 2019 with another series of dialogues entitled THE QUEST FOR PROSPERITY: CHALLENGES OF MIGRATION. Despite the restrictions imposed by the pandemic, the dialogues continued in 2020 with the title SPORTS, ECONOMY AND HEALTH: CHANGING THE RULES OF THE GAME, in which five dialogues were held with the participation of ten experts, although some had to participate remotely, via video conference, while the in-person audience capacity was reduced to one-third. All the dialogues were streamed live on the **Ivie's** YouTube channel.

In 2021, a new series of dialogues entitled "CRISIS Y CATARSIS: LECCIONES DEL COVID-19" (CRISIS AND CATHARSIS: LESSONS LEARNED FROM COVID-19) were organized with a dual format (in-person and online). Although all the speakers were able to attend in-person, interested ones had the option to follow via **Ivie's** YouTube channel, thus, allowing the audience access to **Ivie's** activities regardless of their location.

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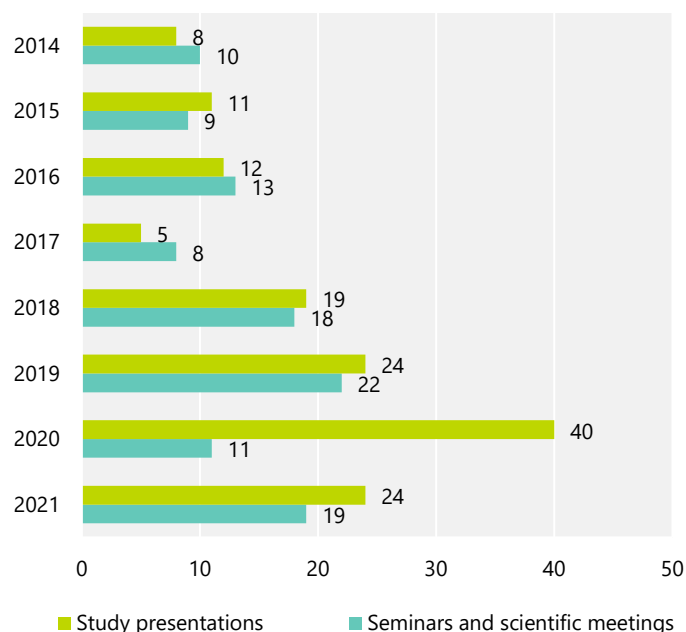
<sup>3</sup> Support given to **Ivie** Researchers in activities related with presenting and disseminating their research results is funded by the Valencian Regional Government's Ministry for Finance and the Economic Model, through a cooperation agreement signed between both institutions to promote and consolidate the **Ivie's** basic and applied economic research activities.



The following six dialogues were held in 2021:

- Dialogue 1. **La economía y la política económica, durante y después del COVID-19 (The economy and economic policy, during and after COVID-19)**. 27 September. Pablo Hernández de Cos, Governor of the Bank of Spain, and Cristina Herrero, President of AIREF.
- Dialogue 2. **¿El mundo y Europa, en crisis permanente? Lecciones de la historia (The world and Europe, in a permanent crisis? Lessons learned from history)**. 1 October. Enrique Feás, Senior Analyst at the Elcano Royal Institute, Adjunct Professor at IE University and IE School of Global and Public Affairs, and Susana Malcorra, Dean of IE School of Global and Public Affairs.
- Dialogue 3. **¿Es todavía evitable una crisis climática? (Is it too late to prevent a climate crisis?)**. 15 October. Xavier Labandeira, Professor of Economics at the University of Vigo and Director of Economics for Energy, and Lara Lázaro, Senior Analyst at the Elcano Real Instituto and Lecturer Professor at Cardenal Cisneros University College in Madrid.
- Dialogue 4. **¿Qué sistema de salud para después del COVID-19? (Spanish healthcare system after COVID-19)**. 29 October. Beatriz González, Full Professor of Quantitative Methods in Economics and Management at the University of Las Palmas de Gran Canaria, and Salvador Peiró, PhD in Medicine, Researcher at FISABIO and collaborating researcher at the Pompeu Fabra University's Centre for Research in Health and Economics (CRES).
- Dialogue 5. **Las crisis asociadas a la disrupción digital (Crises related to digital disruptions)**. 5 November. Nuria Oliver, PhD in Artificial Intelligence from MIT, co-founder and vice-president of ELLIS, Commissioner for the President of the Valencian Region on AI Strategy and Data Science to fight COVID-19, and Andrés Pedreño, Professor of Applied Economics, co-founder of IT&IS, 1Millonbot and Torre Juana OST, and promoter of AlicanTEC.
- Dialogue 6. **COVID-19, cultura y economía: efectos y transformaciones (COVID-19, culture and economy: effects and transformations)**. 25 November. Lourdes Moreno, Artistic Director of the Museo Carmen Thyssen Málaga, and Evelio Acevedo, Managing Director of the Thyssen-Bornemisza Collection Foundation.

**Figure 6.**  
Seminars,  
scientific  
meetings  
and study  
presentations



## IvieLAB Conferences and Seminars

The IvieLAB (Laboratory for the Analysis and Evaluation of Public Policy) is an initiative of the **Ivie**, in collaboration with the Valencian Regional Government, with the objective to promote ideas, design methodologies and elaborate information to analyze, evaluate and improve public policies.

In addition, it contributes to the dissemination of knowledge through public outreach activities. In this regard, several workshops and conferences were organized in 2021.

Specifically, the **Ivie** held the following two online workshops, mainly aimed at public policy decision makers, academics and other specialists interested in education and employment.

- 5 October. **Eficacia del sistema educativo español ante los nuevos retos del siglo XXI (Effectiveness of the Spanish education system in the face of the new challenges of the 21st century).**
- 16 November. **Determinantes de las trayectorias laborales y la calidad del empleo (Determinants of work experiences and job quality).**

Also, two conferences were organized with two experts on tourism and transport. The conferences were held at the Bancaja Cultural Center in Valencia with both in-person and online access through **Ivie's** YouTube channel. The two conferences were:

- 29 November. **Una visión constructiva sobre los escenarios post COVID para el turismo español (A constructive view on the different post-COVID-19 scenarios for the Spanish tourism sector).** Óscar Perelli, Exceltur's Director of Studies and Research.
- 1 December. **Transformaciones y retos del sector del transporte y logística (Transformations and main challenges facing the transport and logistics sector).** Isabel Pardo de Vera, Secretary of State for Transport, Mobility and Urban Agenda.

## Ivie Webinars

Upon verifying the success of virtual events, the **Ivie** launched in 2021 the series of webinars "**2030 Challenges for the Spanish economy and society**". With the participation of some of the best experts in the country, the Webinars seek to reflect and debate on current issues, while providing possible solutions on how to face these challenges individually and collectively. Based on rigorous information and arguments supported by the research and reports developed by the **Ivie**, this new activity aims to reflect on key issues for the future of our economy and our society.

The Webinars began in May with a first meeting that addressed the future of international trade, since it is at the core of the economic transformations experienced in recent decades, the disruptions created by the pandemic and the questions we are asking ourselves about the future. Subsequently, five other meetings were held in which two experts, accompanied by a moderator, debated on aspects such as depopulation, universities, employment, pension system and housing. Specifically, the six webinars that were held in 2021 and that could be followed by the public, both through Zoom and YouTube, were:

- 13 May. **Dinámica reciente y futuro del comercio internacional y sus consecuencias sobre el bienestar y la desigualdad (Recent trends and future outlook of international trade and its effect on welfare and inequality).** Speakers: Mariam Camarero, Professor of Applied Economics at the Universitat Jaume I,

and Francisco Alcalá, **Ivie** researcher and research fellow at the Center for Economic Policy Research. Moderator: Francisco Pérez, **Ivie** Research Director.

- 3 June. **Metrópolis, despoblación y crecimiento económico en el siglo XXI: la visión desde España (Large cities, depopulation and economic growth in the 21st century: The case of Spain)**. Speakers; Diego Puga, Professor at CEMFI and 2020 King Jaime I Prize in Economics, and Francisco Goerlich, **Ivie** Researcher and Professor at the Universitat de València. Moderator: Francisco Alcalá, **Ivie** researcher and research fellow at the Center for Economic Policy Research.
- 8 July. **Necesidades formativas y empleabilidad ante un entorno cambiante: ¿Qué respuestas se esperan de la Universidad Española? (Training needs and employability in a changing environment: What is expected from Spanish universities?)** Speakers: Antonio Cabrales, Professor at the Universidad Carlos III de Madrid and Professor at University College London (2013-2020), and Joaquín Aldás, **Ivie** Researcher and Professor at the Universitat de València, were the speakers. Moderator: Francisco Alcalá, **Ivie** researcher and research fellow at the Center for Economic Policy Research.
- 9 September. **La sostenibilidad del sistema público de pensiones: ¿Quo vadis? (The sustainability of the public pension system: Quo vadis?)** Speakers: Elisa Chuliá, Professor of Sociology at UNED, Researcher at FUNCAS and Expert Forum of the BBVA Pensions Institute, and José Enrique Devesa, Professor at the University of Valencia, **Ivie** Researcher and Technical Coordinator of the Research Group on Public Pensions of the Spanish Institute of Actuaries. Moderator: A session moderated by Joaquín Maudos, **Ivie** Deputy Director of Research.
- 6 October. **Cambio tecnológico y futuro del empleo (Technological change and the future of employment)**. Speakers: Javier Andrés, Professor of Economic Analysis at the Universitat de València and José María Peiró, Professor Emeritus of the Universitat de València and **Ivie** Researcher. Moderator: Francisco Alcalá, **Ivie** researcher and research fellow at the Center for Economic Policy Research.
- 11 November. **Acceso a la vivienda y políticas públicas (Access to housing and public policies)**. Speakers: Helena Beunza Ibañez, representative of Spain in the United Nations UNECE housing and land management bureau, and José García-Montalvo, Professor at the Universitat Pompeu Fabra and **Ivie** Researcher. Moderator: Francisco Alcalá, **Ivie** researcher and research fellow at the Center for Economic Policy Research.

## 9.2. Organized in collaboration with other institutions

In addition to the activities organized directly by the **Ivie**, the Institute has also collaborated in other events with other institutions. This is the case of the webinar **Digitalización y Next Generation: amenazas y oportunidades para España (Digitalization and Next Generation: threats and opportunities for Spain)**, held by the Fundació Universitat Empresa (ADEIT) with participation by Francisco Pérez, **Ivie** Research Director; and José María Peiró, **Ivie** researcher. The session took place on Thursday, 4 March.

Also in March, but on 30 March, the Generalitat Valenciana organized an event to present the report **Análisis de la economía valenciana y el sistema valenciano de la innovación. Diagnosis in the current**

context (Revision of the indicators and SWOT analysis of the socio-economic context and the context of R&D in the Valencian Community), which was explained by Ivie researcher Ernest Reig.

An 18-hour virtual training course in **basic descriptive statistics** was given in collaboration with the Audit Office of Valencia between 1-25 March.

On 30 April, Ivie researchers Matilde Mas and Javier Quesada presented the report **Mapa del talento autonómico (Talent Positioning Map for Spanish Regions)**, prepared for the Cotec Foundation, at an event organized in Pamplona (Navarra).

The Cotec Foundation also organized a public event to disseminate the Ivie report **Competencias digitales y colectivos en riesgo de exclusión en España: determinantes en el contexto del COVID-19 (Digital skills and groups at risk of exclusion in Spain: determinants in the context of COVID-19)**. On this occasion, the event was held in Barcelona, within the framework of the MWC (Mobile World Congress), and was attended by Ivie's Deputy Director of Research, Joaquín Maudos, and Ivie economist Laura Hernández, both co-authors of the study. The presentation took place on Tuesday, 29 June.

On 8 July, Grupo Cooperativo Cajamar held an event to present the latest report of the **Observatorio sobre el sector agroalimentario español en el contexto europeo (Observatory on the Spanish agri-food sector in the European context)**, prepared by the Ivie. The deputy director of the Ivie, Joaquín Maudos, was in charge of presenting the main conclusions of the document.

On 19-23 July, in collaboration with the Escuela Gallega de Administración Pública and REDEV, the 10-hour virtual course **Introducción a la evaluación de políticas públicas (Introduction to the Evaluation of Public Policies)** was held.

The Ivie also supported the **III Congreso MESVAL. Hacia un modelo económico de ciudad sostenible (III MESVAL Congress. Towards a sustainable city economic model)**, which was held in Valencia on 27 and 29 October. This is an initiative promoted by the Chair of Sustainable Economic Model of Valencia and its surroundings - MESVAL of the University of Valencia and the Valencia City Council.

Finally, another activity organized by the Cotec Foundation is worth mentioning: the XIV Cotec Europa Summit, which brought together the heads of state of Spain, Italy and Portugal. The event, held on 11 November, included the presentation of the report **Situación de los activos intangibles en España, Portugal e Italia (Situation of intangible assets in Spain, Portugal and Italy)**, which was presented by the Ivie's Director of International Projects, Matilde Mas.

### 9.3. Participation of Ivie Researchers and Technicians in other scientific meetings

#### December

- 20      **José García-Montalvo** took part in the discussion on «El retorno de la inflación, conversación con Oscar Arce (Banco de España) y Raymond Torres (FUNCAS)». Fundación Areces.

- 16 **José Manuel Pastor** and **Lorenzo Serrano** presented the document «La contribución socioeconómica de la Universidad de Castilla-La Mancha». Campus de Ciudad Real.
- Francisco Alcalá** presented the paper «Work Intensity and Welfare Across countries and Time». *Símposio de la Asociación Española de Economía*. Asociación Española de Economía and Universitat de Barcelona.
- 15 **Francisco Pérez** took part in «Qué sistema tributario necesita España». *Foro Futuro Observatorio de tendencias económicas*. Madrid: Santander, Cinco Días and El País.
- 2 **José García-Montalvo** took part in the round-table 1: «Recuperación económica, fondos europeos y seguridad jurídica». *XII Convención de Directivos y Entrega de Premios ADEA: Construyendo el futuro*. Gobierno de Aragón.
- 1 **José García-Montalvo** took part in the debate on the book «La Tiranía del Mérito» with Michael Sandel. Fundación Ramón Areces.
- Additionally, he presented the paper «Retos de la vivienda tras la pandemia». *Jornada sobre el Plan Director de la Vivienda (Etxebizitzaren Gida Plana)*. Bilbao.
- Ángel Soler** took part in the presentation of the book «Guía laboral de la Economía Social de la Comunitat Valenciana (Edició de 2021)». València: Universitat de València, Facultat d'Economia.

## November

- 30 **José Manuel Pastor** took part in «Encuentro Bienestar de las personas en el entorno urbano y transformación del modelo social». *III Encuentros por la Sostenibilidad* de la Universitat de València.
- Also, he took part in *III Encuentro por la sostenibilidad*. Fundació Universitat-Empresa (Adeit), Universitat de València.
- 29 **Francisco Alcalá** took part in the round-table discussion «Els costos de la corrupció». *Seminario 5º Aniversario de la Ley 11/2016, de creación de la Agencia de Prevención y Lucha contra el Fraude y la Corrupción de la Comunitat Valenciana*.
- Joaquín Maudos** took part in the presentation of the document «Previsiones económicas para el cuarto trimestre de 2021». Orfin, Thinking Heads y Universidad de Alcalá.
- 26 Paper by **José Ramos** «What is overqualification and why does it matter?». Webinar *Making Chocolate Teapots: Striving for 'Good' Youth Work Policy Briefs Launch*. EAWOP Impact Incubator.
- Papers by **Enrique Devesa** «Reflexiones y valoraciones de las principales medidas incluidas en el Proyecto de Ley de reforma de las pensiones» and «¿Por qué no vamos hacia un sistema de cuentas nocionales?». *Workshop on Pensions and Insurance*. Universidad de Barcelona.
- 25 Paper by **Alicia Gómez-Tello**, María José Murgui and M<sup>a</sup> Teresa Sanchis: «Are agglomeration forces shaping regional productivity disparities in Europe?». *XLVI Reunión de Estudios Regionales*. Madrid.

- 24 **Santiago Carbó** took part in the workshop «Nueva competencia, nuevos negocios y tecnología en el sector bancario». Funcas.
- Paper by **Francisco Pérez** «Qué nos espera en 2022. Perspectivas económicas y palancas para la recuperación». *RETAIL future 2021*. Oficina PATECO – Comercio y Territorio and Consejo de Cámaras Oficiales de Comercio, Industria, Servicios y Navegación de la Comunitat Valenciana.
- 19 **Javier Quesada** took part in the 2021 Rei Jaume I Awards Ceremony. València: Fundación Premios Rei Jaume I.
- 18 **Francisco Pérez** took part in the round-table discusión «Transición digital y cohesión territorial. Sus implicaciones en el modelo de desarrollo». *X Congreso Internacional de Ordenación del Territorio*. FUNDICOT and Conselleria de Política Territorial, Obras Públicas y Movilidad de la Generalitat Valenciana.
- Paper by **Enrique Devesa** «La inacabable reforma del sistema de pensiones español». *5a Jornada Internacional de Investigación de la Red Nacional Interdisciplinaria Administración y Gestión en las Organizaciones (RAGO)*. Universidad de Las Palmas de Gran Canaria, Universidad Autónoma de San Luis Potosí.
- José Manuel Pastor** presented the book «La sociedad de conocimiento en la Comunitat Valenciana», editado por la Institució Alfons el Magnànim-Centre Valencià d'Estudis i d'Investigació.
- Ángel Soler** took part in the sessió «Política Económica en el ámbito internacional y estudios de caso por países». *VI Encuentro de Política Económica*. Universitat de València.
- 16 Lecture by **Francisco Pérez** and **Ernest Reig** «Madrid: dinàmica econòmica i impacte de la capitalitat». Societat Catalana d'Economia. Barcelona: Institut d'Estudis Catalans.
- 15 **Francisco Pérez** took part in the round-table discussion «La financiación autonómica». *Encuentros Ser*. Radio Valencia.
- 11 **Francisco Pérez** took part in the round-table discussion «Las necesidades de gasto en el sistema de financiación autonómico: ¿Qué cambiar y qué mantener?». *Jornadas Finanzas autonómicas: los asuntos pendientes*, organizadas por RIFDE y la Cátedra de Finanzas Autónomas.
- 10 **Francisco Pérez** took part in «El papel de Europa en el mundo frente a la hegemonía tecnológica de USA y China». *Foro Futuro Observatorio de tendencias económicas*. Madrid: Santander, Cinco Días y El País.
- 5 Paper by **Ernest Reig** «Ciudades, calidad de vida y mundo rural». Forum sobre *Estrategias culturales para el desarrollo de las ciudades*. León: Fundación Sierra Pambley.
- Javier Quesada** took part in the workshop «Castelló ante el reto demográfico». Premios Rei Jaume I, Fundación Valenciana de Estudios Avanzados, Diputació de Castelló.
- 2 Lecture by **Santiago Carbó**: *La política monetaria del Banco Central Europeo: impacto de la Covid-19 y perspectivas futuras*. Escola Europea de Pensament Lluís Vives del Vicerectorat de

Cultura i Esport i el Centre de Documentació Europea de la Fundació General de la Universitat de València.

## October

29 Paper by **Lorenzo Serrano**, **José Manuel Pastor**, **Ángel Soler** and Iván Vicente *Dinamismo e innovación empresarial y sectorial en Valencia y su área urbana funcional*. «III Congreso MESVAL Hacia un modelo económico de territorio sostenible. MESVAL», Cátedra Modelo Económico Sostenible y Entorno.

Paper by Iván Vicente, **José Manuel Pastor** and **Ángel Soler** *Resiliencia, educación y sostenibilidad*. «III Congreso MESVAL Hacia un modelo económico de territorio sostenible. MESVAL», Cátedra Modelo Económico Sostenible y Entorno.

28 Paper by Rafael Chaves, **Ángel Soler**, Teresa Savall, Juan Ramón Gallego, Juan F. Albert and José L. Mónzón *La economía social y el cooperativismo en el centro del cambio de modelo productivo de la Comunitat Valenciana*. «III Congreso MESVAL Hacia un modelo económico de territorio sostenible. MESVAL», Cátedra Modelo Económico Sostenible y Entorno.

Paper by **Javier Quesada** «Factores políticos, económicos, sociales, tecnológicos, ambientales y legales que influyen en la innovación en la Comunitat Valenciana». Parc Científic de la Universitat de València.

**Francisco Pérez** took part in «Sesión 2: Financiación autonómica y fiscalidad: ¿la hora de la verdad?». *Jornadas 20º Aniversario IEB*. Institut d'Economia de Barcelona (IEB) and La Vanguardia.

21 **Francisco Pérez** took part in the dialogue «Sostener el estado del bienestar después del COVID». *Ciclo de Diálogos Desigualdad ampliada: salud y sociedad post-COVID*. Barcelona: Fundació Ernest Lluch and Fundació La Caixa.

14 Paper by **Juan Fernández de Guevara** «Panorama del sector de TIC en la Unión Europea». *Curso online Digitalização da Economia*. Universidad Federal de Parana and Asociación de las Empresas de Software del Estado de Parana. Brazil.

13 **Francisco Pérez** took part in «El tránsito a una economía y energía verdes: costes y beneficios». *Foro Futuro Observatorio de tendencias económicas*. Madrid: Santander, Cinco Días y El País.

8 **Francisco Alcalá** presenta el trabajo de investigación «Work Intensity and Welfare across Countries and Time». *Workshop of the Spanish Macroeconomic Network*. Universidad de Alicante.

7 **Carmen Herrero** took part in the round-table discussion «La seguridad industrial en la sociedad del bienestar». *I Congreso Seguridad Industrial Comunitat Valenciana 2021*, organizado por FEMEVAL.

**Enrique Devesa** took part in the webinar «Las pensiones después de la pandemia». BBVA, Expansión and Universitat de València.

## September

- 30 Paper by **Francisco Pérez** «Rendición de cuentas de la Universidad. Generación de valor de las universidades». *Seminario sobre Política y Gestión Universitarias*. Crue Universidades Españolas, Universidad de Jaén and Universidad Internacional de Andalucía.
- 29 Paper by Francisco J. Beltrán, Alfonso Díez, **Alicia Gómez-Tello**, Julio Martínez and Daniel A. Tirado: «Local institutions and human capital formation in pre-industrial economies: Evidence from the former Kingdom of Valencia». *Workshop on the general topic of depopulation and its dynamics*.
- 21 **Ernest Reig** presented and coordinated the webinar «Estrategia Valenciana de Recuperación: Análisis de la Actualidad», organized by the Fundación Universitat-Empresa de València, Adeit.
- 15 **José García-Montalvo** took part in the debate «Diagnóstico y situación actual del alquiler asequible en España». Sogeviso.
- Francisco Pérez** took part in «La nueva estrategia monetaria del BCE: qué herramientas le quedan para sostener el crecimiento». *Foro Futuro Observatorio de tendencias económicas*. Madrid: Santander, Cinco Días y El País.
- 9 Lecture by **Francisco Pérez** «Finanzas públicas y estado de bienestar durante y después de la pandemia». *I Foro Norte en Economía de la Salud. Encuentro de Expertos. Modelo de financiación territorial y de financiación y evaluación de innovaciones en el SNS*. Barcelona: Cátedra GSK and UPF-BSM en Economía de la Salud.
- 6 Paper by **Alicia Gómez-Tello** «Local institutions and human capital formation in pre-industrial economies: Evidence from the former Kingdom of Valencia». *I Seminario de Ayudantes Doctores del Departament d'Anàlisi Econòmica*. València: Universitat de València.

## August

- 24 **José García-Montalvo** took part in the invited session «Inequality Was Bad - Will the Pandemic Make it Worse?». Congreso de la *European Economic Association*.

## July

- 27 **Matilde Mas** and **José Manuel Pastor** took part in the presentation of the book «La Facultat d'Economia davant la pandèmia». Universitat de València, Facultat d'Economia.
- 15 **Francisco Pérez** took part in «El papel de las big-tech en la economía: productividad y competencia». *Foro Futuro Observatorio de tendencias económicas*. Madrid: Santander, Cinco Días and El País.
- 8 **José García-Montalvo** took part in the presentation of «Informe Económico y Financiero de EsadeEcPol #29: Big Data, análisis económico y políticas públicas».
- Joaquín Maudos** presented the «Informe 2020 del Observatorio del Sector Agroalimentario Español de Cajamar». Grupo Cooperativo Cajamar.



- 6 **Francisco Pérez** took part in the round-table discussion «Reivindicació de la perifèria» de la *I Cumbre Illes Balears-Comunitat Valenciana*. Palma de Mallorca: Govern Illes Balears - Generalitat Valenciana.
- Joaquín Maudos** took part in the round-table discussion of «Banking Lab Financiación de Activos Intangibles», promoted by the AEB Foundation through CUNEF.
- 5 **Enrique Devesa** took part in *VII Panel Sector Asegurador de IEAF-FEF*, with the presentation of the study «Necesidad del ahorro previsión tras una década de reformas en el sistema público de pensiones». IEAF-FEF.
- 1 **José García-Montalvo** presented a paper at «Debate sobre las perspectivas económicas de la recuperación y los fondos europeos para la transformación». 31 Fòrum de l'Auditor. Col·legi de Censurs Jurats de Comptes de Catalunya.

## June

- 30 Paper by **Ángel Soler** «Valoración del estudiantado del uso de los clickers en la docencia». *VII Jornadas sobre Sistemas de Votación Electrónica 2021. I Jornadas Internacionales sobre Sistemas de Votación Electrónica. Rediseñando el proceso de enseñanza-aprendizaje: digitalización y otras estrategias*. Universitat de València.
- 29 **Laura Hernández** and **Joaquín Maudos** presented the document «Competencias digitales y colectivos en riesgo de exclusión en España: determinantes en el contexto del COVID-19». The study, developed for Fundación COTEC, was presented in the framework of the MWC (*Mobile World Congress*) in Barcelona.
- Javier Quesada** took part in the Debate-Coloquio «Condiciones de ejecución de los Fondos Europeos de Recuperación». AVE, Premios Rei Jaume I and Fundación Valenciana de Estudios Avanzados.
- 27 Paper by Rafael Jordá, **Alejandro Escribá-Esteve** and **Vicente Safón** «Turnaround/retrenchment strategies in family firms». *XXX Congreso Online ACEDE: Organizaciones 4.0: Sostenibilidad y Conocimiento*. Cartagena: Asociación de Economía y Dirección de la Empresa (ACEDE).
- 17 **José García-Montalvo** took part in the *37th Symposium on Money, Banking and Finance*. Bank of France.
- 16 **Francisco Pérez** took part in «En qué gastar los fondos europeos para obtener la máxima eficiencia y crecimiento». *Foro Futuro Observatorio de tendencias económicas*. Madrid: Santander, Cinco Días and El País.
- Enrique Devesa** took part in *New Direction Summer University 2021* «Sistema de pensiones en España». Fundación Civismo.
- 14-25 Paper by Rafael Jordá, **Alejandro Escribá-Esteve** and **Vicente Safón** «Turnaround/retrenchment strategies in family firms». *IFERA 2021 (International Family Enterprise Research Academy Conference)*. Online.

- 2 **José García-Montalvo** took part in the debate «El papel del sector financiero en la crisis actual». Madrid: Fundación Ramón Areces.

## May

- 27 **José Manuel Pastor** and **Ángel Soler** took part in the round-table discussion «Educación e igualdad de oportunidades. Políticas económicas de apoyo a la resiliencia educativa». XV *Jornadas Internacionales de Política Económica*. Universitat de València.
- Joaquín Maudos** took part in the webinar «Presentación de Previsiones Económicas ORFIN - Primavera 2021», organized by Orfin, Thinking Heads and Universidad de Alcalá.
- Paper by Rafael Jordá, **Alejandro Escribá-Esteve** and **Vicente Safón** «Turnaround/retranchment strategies in family firms». *Academy of International Business Conference, Latin America and the Caribbean chapter*. Online.
- 26 **Ernest Reig** presented and coordinated the webinar «Estrategia Valenciana de Recuperación», organized by the Fundación Universitat-Empresa de València, Adeit.
- Enrique Devesa** took part in the special program presented in Ágora Especial on Canal 7 TeleValencia «El futuro de las pensiones».
- 24 Paper by Rafael Jordá, **Alejandro Escribá-Esteve** y **Vicente Safón** «Turnaround/retranchment strategies in family firms». *Family Enterprise Research Conference (FERC)*. Universidad de los Andes Colombia.

## April

- 30 **Matilde Mas** and **Javier Quesada** presented the document «Mapa del talento autonómico», developed by Cotec. Pamplona.
- 28 **Joaquín Aldás** took part in the round-table discussion «Valor de la Planificación Estratégica en las Universidades. Enfoques y Experiencias». Ciclo: *La UGR ante el Horizonte 2031. Reflexiones para la elaboración del Plan Estratégico*. Universidad de Granada.
- 22 **Francisco Pérez** took part in «La digitalización como herramienta de inclusión financiera». *Foro Futuro Observatorio de tendencias económicas*. Madrid: Santander, Cinco Días and El País.
- Además, comenta la conferencia «Las finanzas autonómicas ante el COVID-19: Situación actual y perspectivas de consolidación fiscal». RIFDE, Cátedra de Finanzas Autonómicas de la Universidad de Vigo y AIReF.
- 16 **José García-Montalvo** took part in «Real-Time Inequality and the Welfare State in Motion: Evidence from COVID-19 in Spain». *73rd Economic Policy Panel Symposium*. Revista Economic Policy.
- 15 Lecture by **Francisco Alcalá** «Trabajo, ocio y bienestar en países ricos y pobres». Universidad de Murcia, Facultad de Economía y Empresa.

## March

- 31 **José M. Peiró** and **Francisco Pérez** took part in «El nuevo paradigma laboral. La educación aplicada a las necesidades de la empresa y la gestión del talento». *Foro Futuro Observatorio de tendencias económicas*. Madrid: Santander, Cinco Días and El País. Madrid.
- 30 **Ernest Reig** presented the document «Análisis de la economía valenciana y el sistema valenciano de la innovación. Diagnóstico en el contexto actual». *Jornada RIS3CV*. Generalitat Valenciana.
- 24 **Ángel Soler** presented the document «Mapa del abandono educativo temprano en España». Fundación Europea Sociedad y Educación and Porticus Iberia.
- 23 Lecture by **Carmen Herrero** «Igualdad de oportunidades: principios y aplicaciones». *II Congrés d'Humanitats, Ciències Socials i Educació: les dones a les humanitats i les ciències socials*. CEFIRE, Subdirecció General de Formació del Professorat de la Conselleria d'Educació, Cultura i Esport.
- 18 Paper by **Francisco Pérez** and Santiago Lago «Fiscalidad, financiación autonómica, competencia fiscal y equilibrio territorial». Workshop: *Miradas sindicales al sistema fiscal y de financiación territorial en España*, organized by the Escuela de Trabajo de CC. OO.
- 15 **Carmen Herrero** and **Antonio Villar** took part in the workshop «Green Energy Progress Measurement Framework Expert Peer Review, on Footprint indicators», organized by United Nations. Zurich (Switzerland).
- 10 **Francisco Pérez** took part in «El salvamento del tejido empresarial». *Foro Futuro Observatorio de tendencias económicas*. Madrid: Santander, Cinco Días and El País.
- 9 **Enrique Devesa** took part in the presentation of the study «Un capital de resiliencia ante futuras pandemias», organized by Fundación de Estudios Financieros (FEF).
- Javier Quesada** presented and coordinated the webinar «Estrategia Valenciana de Recuperación», organized by the Fundación Universitat-Empresa de València, Adeit.
- 4 **Francisco Pérez** and **José M. Peiró** took part in the webinar «Digitalización y Next Generation: amenazas y oportunidades para España», organized by the Fundació Universitat Empresa (ADEIT) and Ivie.
- 3 Lecture by **Francisco Pérez** «La superación de la crisis del COVID - 19 en la Comunidad Valenciana», organized by the Club Comunidad Valenciana Esade Alumni.
- 2 **Francisco Pérez** took part in the webinar «Infraestructuras sociales en la Comunitat Valenciana. Una prioridad ante la crisis», organized by Acciona, Levante and Prensa Ibérica.

## February

- 16 **Francisco Pérez** took part in «El debate sobre el modelo territorial español: ineficiencias del sistema y dinámica centro/periferia». Ciclo *España en el contexto geopolítico de la post pandemia*. Cercle d'Economia.
- 11 **José García-Montalvo** took part in the digital debate «El sector inmobiliario tras la COVID-19», organized by Europa Press.

**Joaquín Maudos** took part in the presentation of «Informe Previsiones económicas. 1er trimestre 2021», organized by the Observatorio de la Realidad Financiera (ORFIN), an initiative of the Universidad de Alcalá de Henares and Thinking Heads.

- 4      **José García-Montalvo** took part in the digital debate «Nuevos instrumentos para medir la salud económica en tiempo real». Fundación Ramón Areces.

#### January

- 29      Article commented by **Alicia Gómez-Tello**, Domenica Panzera, Alfredo Cartone and Paolo Postiglioni «Regional inequality, spatial dependence and proximity structures». *RSPP Webinar*.
- 27      Paper by **Carmen Herrero** «Propuesta transversal: Un nuevo procedimiento para trabajar con variables categóricas: El Balanced Worth». Workshop *Nuevas Propuestas de Investigación: creando sinergias*. Universidad de Alicante, Facultad de Económicas.
- 20      **Lorenzo Serrano** presented the paper «Capital humano, digitalización y crecimiento económico en España», developed by Francisco Pérez and Laura Hernández. Jornada Virtual FUNCAS.
- 4      **Francisco Alcalá** presented online the paper «International Relocation of Production and Growth», developed jointly with Marta Solaz. *Annual Meeting de la American Economic Association-Econometric Society*.

## 10. DISSEMINATION

### 10.1. Presentation of studies

In 2021, the dissemination activities carried out by the **Ivie** and collaborating institutions have partially returned to normal after the health emergency crisis and restrictions on mobility imposed globally to protect people's health in 2020. However, the number of in-person activities to disseminate research results of reports, projects and other studies have been reduced and the **Ivie** has opted to disseminate the research results mainly through press releases and, in many cases, offering both in-person or online connection. Despite these limitations, 24 studies developed by **Ivie** Researchers and Technicians were presented during 2021:

- On 19 January 19, the GECE Observatory presented the 01/2021 report analyzing and comparing the capacity of Spanish regions to withstand the economic crisis generated by the coronavirus. The GECE Observatory is a joint initiative between **Ivie** and Bankia, which, has been taken over by CaixaBank after Bankia's merge. The report was disseminated through the media and **Ivie's** contact mailing list.
- On 8 February 8, a new press release was issued with updated data from the SIUVP website on the five Valencian public universities. The update analyzed the success rate of female university students, comparing them with their male peers.
- Grupo Cooperativo Cajamar presented the results of the *Observatorio del sector agroalimentario español en el contexto de las regiones españolas. Informe 2019* on 25 February, through several press releases with detailed information for each region. This document, coordinated by **Ivie's** Deputy Director, Joaquín Maudos, was not presented in 2020 because of the pandemic.
- On 16 March, the EActiVate platform for economic recovery published its first Barometer of economic indicators, a study prepared by the **Ivie** that gathers information related to employability, productivity, digital transformation, sustainability and infrastructure of the businesses in Spain. The EActiVate project stems from the #EstoNotienequePARAR (#ThisDoesNotHaveToStop) initiative, created on March 16, 2020 to give value and visibility to the work of entrepreneurs, workers and the self-employed during the crisis.
- On 30 March, **Ivie** Researcher Ernest Reig presented the report *Análisis de la economía valenciana y el sistema valenciano de innovación*, developed for RIS3CV.
- The supermarket chain Mercadona presented its annual results at a press conference held on 20 April, along with data from the 2020 economic impact report, prepared by the **Ivie**.
- Three days later, on 23 April, Feria Valencia also released the results of its 2019 impact report on the Valencian economy.
- The Cotec Foundation organized an event on 30 April in Pamplona (Navarra) to present the conclusions of the *Mapa del Talento en España 2020*. **Ivie** researchers Matilde Mas and Javier Quesada, co-authors of the report together with economist Fernando Pascual, were in charge of presenting the main conclusions derived from the study.

- On 13 May, the GECE Observatory published a new report, 02/2021, on the sectors with the greatest weight in the generation of value and employment in the economy of the Valencian Region.
- On 25 May, the **Ivie** and the Ramón Areces Foundation released the study *Distribución de la población y accesibilidad a los servicios en España*, on the difficulties in accessing health, education and financial services in Spain. The document, prepared by **Ivie** researchers and University of Valencia professors Francisco J. Goerlich and Joaquín Maudos, and **Ivie** economist Silvia Mollá, was released through a press release.
- U-Ranking 2021 was presented on 17 June at a press conference attended by the main Spanish media. As in 2020, the session could not be held in-person, but the same presentation format was maintained through Zoom. Francisco Pérez and Joaquín Aldás, directors of the project, explained the main results of U-Ranking 2021, in which Francisco Goerlich, Irene Zaera, Rodrigo Aragón and María Moraga also collaborated.
- On the same day, 17 June, Grupo Cooperativo Cajamar released the data from the report *Impacto económico del Grupo Cooperativo Cajamar 2020*, developed by the **Ivie**.
- On 29 June, the Cotec Foundation and the **Ivie** presented, at the Mobile World Congress in Barcelona, the report on *Competencias digitales de los colectivos en riesgo de exclusión en España*. The authors of the study, **Ivie** Deputy Director Joaquín Maudos, and **Ivie** economist Laura Hernández were present at the event.
- Cajamar presented the latest report of the Observatory on the Spanish agri-food sector in the European context on 8 July. The event combined in-person and live broadcasting. Joaquín Maudos was in charge of explaining the main conclusions of the document.
- The publication of the report and the update of the data on capital stock was again carried out this year through a press release and to corresponding contacts through a mailing list carried out by the **Ivie** and the BBVA Foundation on 23 July.
- On 1 September, a new press release was issued with updated data from the SIUVP website on the five Valencian public universities. The update analyzed in particular the economic resources obtained by the universities through R&D activities.
- On 17 September, Fundación LAB Mediterráneo, a project promoted by AVE, presented the report *Cómo impulsar la I+d+i en la Comunitat Valenciana*, prepared by **Ivie** researchers Javier Quesada and Matilde Mas, professors of Fundamentals of Economic Analysis at the Universitat de València, along with **Ivie** economist Consuelo Mínguez.
- On 3 November, CaixaBank and the **Ivie** confirmed the renewal of the agreement to promote the GECE Observatory on the competitiveness of Valencian companies, through a press release.
- The **Ivie** study *La economía intangible en Italia, Portugal y España* was presented by **Ivie**'s Director of International Projects, Matilde Mas, at the XIV Cotec Europe Summit, held on 18 November in Malaga.

- On 13 December, the report prepared by the **Ivie** *Las contribuciones económicas y sociales de Air Nostrum* was released through a press release to the media. A study that analyzes the contribution of the Valencian airline to Spain's economic activity.
- On 16 December, the Junta de Castilla y León presented the main conclusions of the report *Políticas Activas de Empleo en Castilla y León*, a project coordinated and directed by AIReF, with participation by the **Ivie** through Redev.
- Also on 16 December, the report developed by the **Ivie**, *La contribución socioeconómica de la Universidad de Castilla-La Mancha*, was presented at Ciudad Real Campus. Two of its authors, **Ivie** Researchers José Manuel Pastor and Lorenzo Serrano, were in charge of explaining the main results.
- On 20 December, a new Essentials document was released, following the temporary suspension of the series due to the pandemic. The new issue addressed the position of Spanish universities in international rankings.
- The last activity disseminated in 2021 took place on 27 December with the presentation of the *Observatorio sobre el sector agroalimentario de las regiones españolas 2020*. This new document, coordinated by **Ivie**'s Deputy Director, Joaquín Maudos, and economist Jimena Salamanca, focuses on the territorial dimension and the importance and characteristics of the sector in each region.

## 10.2. Brief dissemination documents

### 10.2.1. *Esenciales Series*

*Esenciales* [Essentials] is a series of periodicals designed to disseminate the main results of the Research Program carried out by the BBVA Foundation and the **Ivie**.

Brief, accessible and up-to-date, these periodicals examine the issues dealt with in the main areas of research conducted by the BBVA Foundation and the **Ivie**: growth and competitiveness; human capital and knowledge; the productive structure; welfare and social capital, and regional development and demographics. Up until 2020, the documents were released almost on a monthly basis, with approximately 10 to 11 documents published a year. However, upcoming issues were temporarily suspended in March 2020 due to the coronavirus situation. As a result, only two were published in 2020 prior to the lockdown. Finally, at the end of 2021 the following issue was published:

- *N.º 45/2021. Los menores recursos financieros, producción científica y colaboración empresarial limitan el desarrollo internacional de las universidades españolas*

### 10.2.2. GECE Analysis

The Corporate Governance, Strategy and Competitiveness Observatory (GECE Observatory) is a project launched by Bankia and the **Ivie** in 2017 with the goal of analyzing the competitiveness of Valencian firms over time and its relationship with internal competitiveness drivers.

Following Bankia's merge with CaixaBank, the commitment to the GECE Observatory has been extended, therefore, continuing during 2021 the work of analyzing the competitiveness of Valencian and Spanish companies. Specifically, the following two brief documents have been developed on the effects of COVID-19:

- *Análisis 01/2021. Motores de la recuperación: caracterización y rasgos de las empresas valencianas de alta competitividad y crecimiento*
- *Análisis 02/2021. Análisis de los sectores de mayor peso en la generación de valor y de sus niveles de competitividad*

### 10.3. Websites<sup>4</sup>

The **Ivie** website has continued to increase its content during 2021, as it contains information on all the news related to the publication and dissemination of the **Ivie's** research work and activities. This year, it has especially focused on reinforcing the video section, given the need to reach people during the pandemic with online activities. In this regard, the video section of the website was restructured to include the Webinars section, which is added to other sections with videos such as the Videoblog, **Ivie** Interviews, IvieLAB, COVID-19 and others.

This section includes the complete video recordings of the activities programmed in the **Ivie** series of Webinars **2030 Challenges for the Spanish economy and society**. In total, six online webinars were held, which could be followed on Zoom and YouTube, with the participation of **Ivie** researchers and external experts on topics such as housing, pensions and employment.

The "Research" section includes publications, books, reports, dissemination documents, research articles and working papers, as well as documents developed directly in the Institute, such as those generated by **Ivie's** team. This section also includes the series of informative documents titled *Essentials*, prepared for the BBVA Foundation and targeted at the media; *Regional Funding Papers*; *AVE Focus*, developed in collaboration with the Valencian Association of Entrepreneurs (AVE); and *Keys to Competitiveness*, which are informative documents produced by the Corporate Governance, Strategy and Competitiveness Observatory (GECE Observatory) and the COVID-19: IvieExpress documents developed in 2020.

The "Database" section of the website contains information and links to the 27 databases created by the **Ivie** that are available for consultation. This section provides access to a large amount of statistical information prepared by the Institute in the form of databases, namely, *Capital Stock*, *Human Capital*, *Regional Differences in the Public Sector*, *Basic Public Services*, *Public Health Expenditure*, *Intangible Assets: national databases (1995-2011)*, *EU KLEMS*, *ICT R&D Macro data*, *Access to services (which replaces Access to banking services, and now includes information on education and health services)*, *Social Capital*, *Human Development*, *Transition to the Labor Market*, *Inequality*, *Education Accounts in Spain*, *Homogenous Population Series*, *Life Tables*, *Trade Integration*

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<sup>4</sup> Activity funded by the Valencian Regional Government's Ministry for Finance and the Economic Model, through a cooperation agreement signed with the **Ivie** to promote and consolidate its basic and applied economic research activities.



*and Migrations, Intangible assets: national and regional database (1995-2014) and Economic value of knowledge.*

The "News" section, in "News & Events", includes 65 news items on information regarding new developments, publications, recognitions and activities carried out by the **Ivie**. Included in the section "Opinion Articles", are the links to 48 op-ed articles written by **Ivie** members in the national and regional media.

The **Ivie** website reached **117,479** visits in 2021, 12% more than in the previous year. Of these, 40.3% are users living in Spain, while the remaining 59.7% were from 167 countries (26 more than in the year), including Mexico, Colombia, Peru and United States. For the first time, the percentage of visitors to the website from outside Spain exceeds that of local visitors.

The **Ivie** also manages and maintains the following websites: ABACO (Observatory of Knowledge-Based Activities) at [www.observatorioabaco.es](http://www.observatorioabaco.es), U-Ranking at [www.u-ranking.es](http://www.u-ranking.es), and SIUVP (Valencian Public University System of Information) at [www.siuvp.es](http://www.siuvp.es), which offers a complete information system with more than 60 indicators for the five Valencian public universities. The **Ivie** has also collaborated in updating the GECE Observatory and the Network for Good Practices in Evaluation (REDEV) websites. The REDEV website was redesigned in June 2021 to make it more attractive with two new sections with the latest news on their activities and projects.

## 10.4. Circulation in press and online<sup>5</sup>

The **Ivie** maintains a regular presence in the media, as a result of the attention given to publicizing its work. This year, there have been 3,045 news items in the press on the research conducted at the Institute. This represents a decrease of 17% over the previous year, due in part to the increase of information published by the **Ivie** on COVID-19 during 2020 as a result of the COVID-19: IvieExpress reports which sought to provide an urgent response to the difficult situation created by the pandemic.

The number of articles published in the media by **Ivie** Researchers and Technicians has also decreased slightly from 60 in 2020 to 48 in 2021. Although, the figure is 14% higher than in 2019.

In 2021, the **Ivie** responded to 183 requests from the media, which rely on the Institute and its researchers and economists as a source of information to confirm or supplement their news stories for print, radio, television or digital media. This figure shows the growing interest in the journalists' trust in the data, reflections and opinions provided by the **Ivie**.

The research concluded in 2021 and its activities undertaken were publicized through 31 press releases, 1 *Essentials* and 2 GECE Observatory Analysis documents. In addition, during 2021, 65 activities and news events by the **Ivie** Researchers were reported in the agenda and news section of the Institute's website, including the publication of articles by researchers and technicians in scientific journals, and the presentation of papers at different congresses.

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<sup>5</sup> Activity funded by the Valencian Regional Government's Ministry for Finance and the Economic Model, through a cooperation agreement signed with the **Ivie** to promote and consolidate its basic and applied economic research activities.

Among the topics that have had the most impact in the media in 2021, U-Ranking once again stood out with 320 news items. Other studies, reports and documents carried out in collaboration with the BBVA Foundation add up to more than 100 news items in the media.

In addition, the number of media reports on **Ivie** studies for Cajamar Group stood out with a total of 237. In 2021, three reports were presented by the **Ivie** for Cajamar: the Observatory of the agri-food sector in the Spanish regions, the Spanish agri-food sector in the European context and a third report on the Economic impact of Cajamar Group.

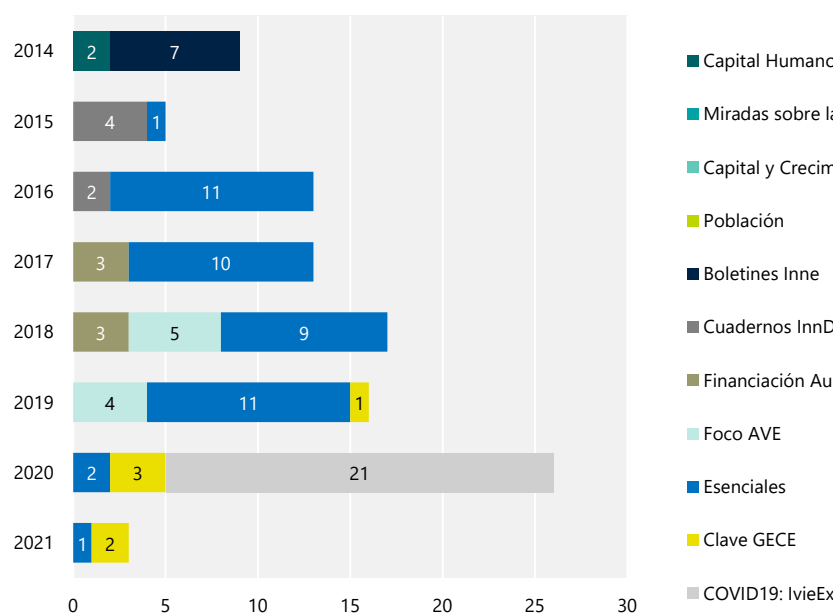
Also news items related to three documents developed for the Cotec Foundation appeared 196 times: Talent Positioning Map for Spanish regions, Digital skills and groups at risk of exclusion in Spain and The intangible economy in Italy, Portugal and Spain.

However, the two reports that have had the greatest impact in the media were IviELAB. Madrid: Capital city, knowledge economy and fiscal competition with 178 news items and Distribution of the population and access to public services developed for the Ramón Areces Foundation with 143 references in the media.

Meanwhile, news related to the collaboration between the **Ivie** and the Generalitat Valenciana, both in regional funding and innovation, through the RIS3, reached 181 press clippings. Other reports on economic impact, including those on Feria Valencia, Air Nostrum or the University of Castilla-La Mancha, accounted for 125 news items.

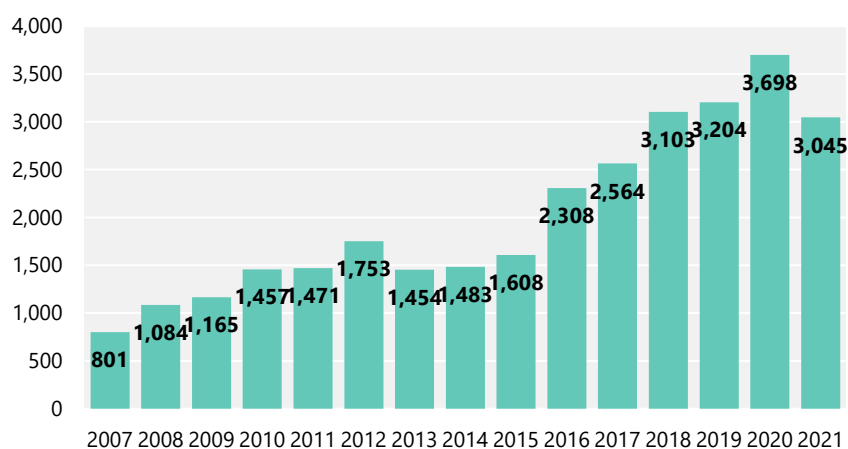
Over 36% of the news items issued by the **Ivie** in 2021 were published in the regional press (Valencian Community and other autonomous communities); 23.6% in the digital press, 15% in Internet, 9.3% in the national press, 6.6% in economy related newspapers and 2.6 in news agencies. The remaining 6% consists of news items broadcast on radio and television, sports press, international media, blogs and internet portals.

**Figure 7.**  
Dissemination  
documents



**Figure 8.**

News items published in the media



The newspaper *Levante*, with 163 entries, is the one that published most news items in which the **Ivie** is mentioned, followed by *Las Provincias*, with 111 reports, and *La Vanguardia*, which mentioned the **Ivie** on 101 occasions. The rest of the fifteen media outlets that mentioned the **Ivie** were the digital newspaper Valencia Plaza (71), Europa Press (63), Información (60), Cinco Días (57), El Economista (57), El País (56), 20 Minutos (52), Mediterráneo (49), Gente (47), El Periòdic (44), El Mundo (44) and, finally, ABC with 34 news items.

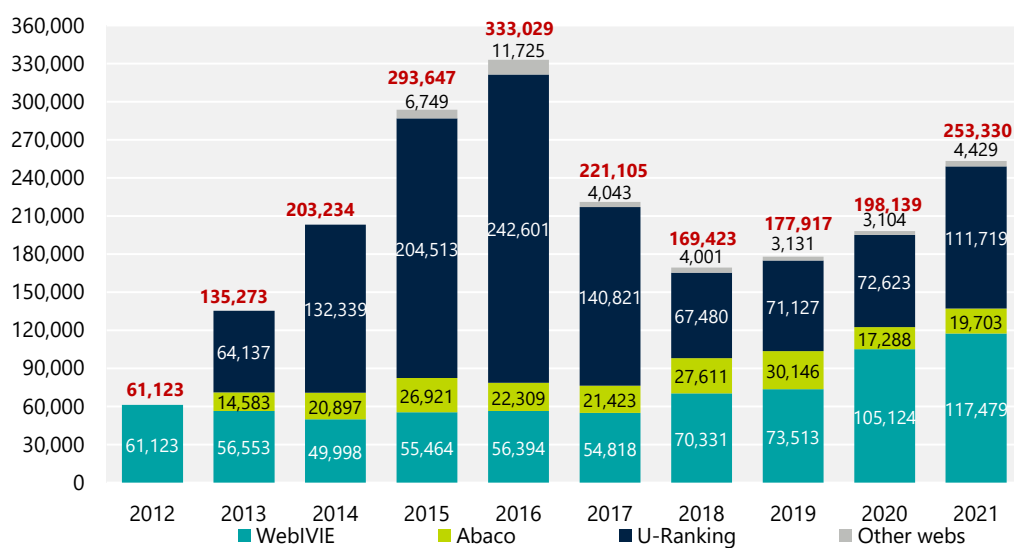
Social networks have also served as a platform to publicize **Ivie**'s activity. With almost 900 published tweets, the Institute's Twitter profile has nearly 4,000 followers, increasing 6% in 2021. The U-Ranking Twitter account increased its followers by 7%, while the ABACO account maintained its 1,200 followers. As for the most recently created profiles, the GECE Observatory, which is managed through the Chair of Family Business, has 140 followers, while REDEV, which the **Ivie** periodically monitors together with the other entities in the alliance, has 230 followers.

For its part, **Ivie**'s YouTube channel received 19,592 views in 2021, 3.3% less than the previous year, but still a very noticeable increase compared to the 11,400 views in 2020. The irruption of the pandemic and the limitation to physical meetings boosted remote activities, which were transmitted through the **Ivie**'s YouTube channel. This practice, initiated in 2020, has been maintained this year with the dissemination of 25 new videos, including the recording of activities related to IvieLAB, the Webinar series and the Dialogues of the Ernest Lluch Foundation and the **Ivie**. Also, the **Ivie** Interviews series, with brief interventions by renowned experts in areas of general interest.

Meanwhile, the presentations shared on Slide Share were viewed 19,062 times over the course of 2021, 5% more than in the previous year. The **Ivie**'s profile on the LinkedIn professional networking service, which is intended to strengthen relations with the academic and research world, continues increasing, with a total of 1,198 as of 31 December 2020, an increase of 30% over the last year.

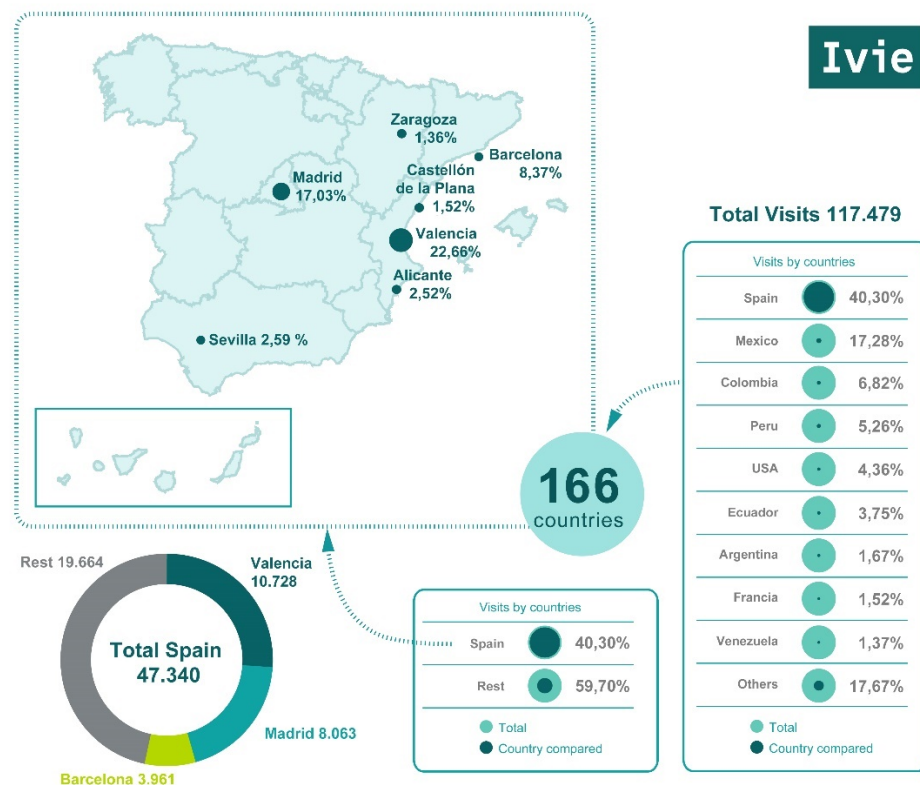
The **Ivie** Newsletter, each issue of which includes the Institute's main news, the latest research, researchers' opinion articles and the events calendar, continued to be issued at monthly intervals. During 2021 this monthly digital newsletter was emailed to **Ivie**'s 2,792 contacts, with almost 200 new subscribers.

**Figure 9.**  
Number of visits to Ivie's websites



Note: Other websites include: SPINTAN, SIUVP, GECE Observatory and REDEV. The GECE Observatory website has been operational since 2019 and the REDEV website since 2021.

**Figure 10.**  
Visits to Ivie's website by geographical region in 2020





# Ivie

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