

Annual Report
2019



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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 Bankia, Ford Spain, the BBVA Foundation, the Caja Mediterráneo Foundation, the Cañada Blanch Foundation and Funcas (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

Ford Spain: José Abargues Morán (until 2 December 2019)

Human Resources Director of Ford Spain

Cañada Blanch Foundation: Antonio Lleó García (since 2 December 2019)

Trustee of the Cañada Blanch Foundation

Members

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

Corporate Business Director for the Valencian, Murcia and Balearic Regions, Bankia

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

Communication and External Relations Manager for the Valencian, Murcia and Balearic Regions, Bankia

BBVA Foundation: Rafael Pardo Avellaneda (until 25 March 2019)

Director of the BBVA Foundation

BBVA Foundation: Vicente Gutiérrez Hernando (since 25 March 2019)

Deputy Director of the BBVA Foundation

Carlos Ocaña y Pérez de Tudela

General Manager of the Cajas de Ahorros Foundation

Luis Manuel Boyer Cantó

President of Caja 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 (*University of Murcia*)

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 Professor in the Economic Analysis Department at the University of Murcia and Research Fellow at the Centre for Economic Policy Research (London). He has been director of the said department, Member of the Executive Committee of the Spanish Economic Association and Visiting Lecturer at the CIDE (Mexico) and at the Pompeu Fabra University (Barcelona). He has also been Visiting Scholar at the Universities of California (Berkeley), Harvard, New York and Columbia. His specialist fields are economic growth, international trade and industrial organization, of which he has published numerous books, book chapters and articles in high-level national and international specialist journals, such as *The Quarterly Journal of Economics*, *Journal of International Economics*, *Journal of Economics and Management Strategy*, *International Journal of Industrial Organization*, *Information Economics and Policy*, *Economics Letters* and *SERIEs-Journal of the Spanish Economic Association*. He has directed many National R&D Plan projects and several competitive projects funded by the Seneca Foundation (Murcia) and he has been advisor on economic matters to social and governmental institutions. (Personal webpage: 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* or *Tourism Management*, among others. 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 (CUNEF)

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 Economics at CUNEF (University School for Financial Studies, Madrid) and Professor of Economics and Finance at Bangor University (UK). 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 Economic Analysis at the University of Granada (currently on leave). He is independent advisor for Cecabank and President of its Audit Committee. 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. 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*, *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, 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'. In 2019, he was granted the King Jaume I Award 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 the OECD, the World Bank and the 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 140 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).



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*, *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 is currently Associate Researcher of the Spanish R&D Plan Project ECO2015-70632-R, *El desarrollo en la era de la economía digital y sus condicionantes: aspectos metodológicos y análisis empírico*, and also 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).



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 equity issues related to health. She was awarded with the 2017 Rey 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, her recent ones have appeared in *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 graduated and took a PhD in Economics at the Universitat de València where she is Professor of Economic Analysis and Director of International Projects of the **Ivie**. Currently, she has obtained five research sexennials. Her specialized fields are the knowledge economy, analysis of public capital, regional economy, new technologies and intangible assets. She is currently Director of the DIGITES (Digital Technologies Segment data) Project commissioned by the European Commission's Joint Research Centre, Directorate B, and advisor to the LA KLEMS Project for Latin America. She has been coordinator of the SPINTAN (Smart Public Intangibles) Project funded by the 7th Framework Programme of the European Union and also has participated in other EU projects (EU KLEMS, INDICSER, ICTNET, DICTA and PREDICT). She is co-author of 78 books and book chapters, co-editor of *Industrial Productivity in Europe. Growth and Crisis* (Edward Elgar, 2011) and has published more than 80 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. She regularly discusses economic issues in the news media and is member of Cotec's Top 100 Experts. (Personal webpage: www.uv.es/masm).



Joaquín Maudos (*Universitat de València*)

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. 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 23 books and 130 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: 7,630 in Google Scholar and 1,327 in Web of Science. H-Index= 43, i10-Index=73 in Google Scholar and h-index=18 in Web of Science. He is listed as number 1,889/67,189 in the ranking of researchers in Spain and Spaniards abroad by Cybermetrics Lab-Scimago Group, IPP-CSIC. (Personal webpage: 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 Vice-Dean for Communication and Business Relations at the Universitat de València, where he is currently Dean of the Faculty of Economics. He is consultant for the Children and Youth Observatory (València Town 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. In addition he is Director of the Mesval Chair of the Universitat de València. He has participated in over 90 projects financed by public tenders and contracts with firms and institutions. He has been the main researcher of 40 competitive projects, as well as of projects with firms, government agencies and the National Research Plan of the Ministry of Science and Technology. He is also coordinator of an Educational Innovation Group and director of several others. He has published more than 190 publications, including 50 co-authored books and 80 articles in specialized journals. He is among Repec's "Top Economists in Spain, December 2019" and is at the top 5% in Webometrics' "Ranking of scientists in Spain". His research work has been quoted 6,265 times and he has an h-index of 36. He has also obtained five research sexennials recognized by the Spanish Ministry of Science, Innovation and Universities. (Personal webpage: 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 (2019), Miguel Hernández University (2017) and Universidade Metodista de São Paulo (2010). He is Professor of Organizational and Social Psychology at the Universitat de València, Past-President of the International Association of Applied Psychology and former Director of the Research Institute of Psychology of Human Resources of Organizational Development and Quality of Working Life. He was awarded by Psicofundación with the 2016 *José Luis Pinillos* Prize for Excellency and Innovation in Psychology "Psychologist of the Year". He has been winner of the Aristotle Prize 2015 given by 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 is 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).



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 is Professor of Economic Analysis at the Universitat de València (1986) 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, economics of education (mainly associated with universities and their results). For over 25 years he has directed the project on the estimates of the investment and public and private capital stock in Spain and its territorial distribution. He is author or co-author of 84 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 5,800 times, reaching an h-index of 36. 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 Wolpertinger Club, the European Economic Association as well as member of several scientific 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).



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 is currently a Professor of Economic Analysis at the Universitat de València. 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, and the economics of new technologies and growth. He has jointly published 13 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 a Visiting Scholar at Harvard University (1985-86). He is Associate Researcher of the National R&D Plan Project *El desarrollo en la era de la economía digital y sus condicionantes: aspectos metodológicos y análisis empírico* (ECO2015-70632-R). He is member of the European Academy of Science and Arts, and Executive President of the Rey Jaime I Prizes. (Personal webpage: 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 and Work and member of IDOCAL (Research Institute of Personnel Psychology, Organizational Development and Quality of Working Life). From 2006 to 2012, he was Dean of the Faculty of Psychology. 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 is coordinator of the National Referee Committee that awards the European Qualification for Psychologists (Europsy) of the European Federation of Psychologists Associations. Since May 2015, he is member of the Executive Committee of the European Association of Work and Organizational Psychologists (EAWOP). 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 9 PhD theses and he 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 is Professor of Applied Economics. He is specialized in regional and agricultural economics and in the analysis of efficiency and productivity. At present, he is studying the calculation of sustainability indexes and eco-efficiency. He has several published 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). He is author of over 40 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 (1986-1991) and Director General of the Economy of the Valencian regional government (1991-95). He has been main researcher of several projects of the National R&D Plan, 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).



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 fifty 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, Transport Policy*, among others). He is main researcher of the National R&D Plan Project *El desarrollo en la era de la economía digital y sus condicionantes: aspectos metodológicos y análisis empírico* (ECO2015-70632-R). (Personal webpage: www.uv.es/lherrano).



Ezequiel Uriel (*Universitat de València*)

Dr Uriel, Professor Emeritus at the Universitat de València, 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), among others—. Also he is author of twenty-six book chapters and over seventy 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 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).



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. 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 90 published articles can be found in journals such as *Econometrica*, *Review of Economics Studies*, *Science*, *Journal of Economic Theory*, *Games and Economic Behavior*, *International Economic Review*, *International Journal of Economic Theory*, *International Journal of Game Theory*, *Journal of Economic Dynamics and Control*, *Journal of Evolutionary Economics*, *Journal of Theoretical Biology*, *Physical Review Letters*, *Proceedings of the National Academy of Sciences USA*, *Social Choice and Welfare* and *Theory and Decision*. 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 a 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. In 2011 he received the FUE Research Diversity Prize awarded by the Urrutia Elejalde Foundation. (Personal webpage: 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 18 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, Cardiff and Florence, 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). Currently, he is Deputy Rector of the International University of Andalusia. 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). (Personal webpage: 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 an Associate Professor. His specialist fields 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 in 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) and competitive projects of the National R&D Plan and Eurostat. Currently, he is the main researcher of the Project *Public Procurement Initiative* financed by the European Commission and 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).



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, Fundación Edad&Vida. He has also participated in national and international workshops related to social protection, the sustainability of the pension system and the unemployment system.



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*, *International Small Business Journal* and *International Marketing Review*. He has been Associate Editor of the journals *Long Range Planning*, *Business Research Quarterly* and invited editor of *Journal of Management Studies*, *International Studies of Management and Organization* y *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 funded by the EU 7th Framework Programme, INDICSER and SPINTAN, and advisor to the European Investment Bank, the European Commission and the United Nations. Currently, he takes 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 the 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).



Belén Gill de Albornoz (*Universitat Jaume I*)

(until 2 December 2019)

Dr Gill de Albornoz graduated in Economics and Business Studies from the University of Zaragoza (1995) and obtained a PhD from the Universitat Jaume I (2002), where she is Associate Professor of Financial Economy and Accountancy. She has taken part in projects for the National R&D Plan, the AECA (Spanish Association for Accounting and Business Administration) and the European Commission. She is holder of the AECA Carlos Cubillo de Contabilidad y Auditoría (Spanish chapter) 2018-2019. Her specialist areas are financial economy and public finances, the quality of accounting data and corporate government. She stayed several years at the University of Lancaster (UK) and has participated in various national and international congresses. She has contributed to the collective works *La feminización de las profesiones sanitarias* (BBVA Foundation, 2010) and *Las empresas del sector de la construcción e inmobiliario en España* (Funcas, 2010), and has published numerous articles in national and international journals, such as *Abacus*, *Corporate Governance*, *Energy Economics*, *Investigaciones Económicas*, *Papeles de Economía Española*, *Revista Española de Financiación y Contabilidad*, *The European Accounting Review* and *Universia Business Review*. She has received several research awards: from the Spanish Stock Market Commission (2015), the AECA (2004, 2005, 2014), the Centro de Estudios Financieros (2003, 2004, 2007) and the Accounting and Auditing Institute & the Spanish Association of University Teachers of Accounting (2003). Furthermore, in 2012 she received a Prize from the Fundación de Estudios Financieros for her research work *Income smoothing and idiosyncratic volatility*.



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). She also holds a Master's Degree in Research in Economics by the Barcelona Graduate School of Economics and the Universitat Pompeu Fabra (2010). She is currently Assistant Professor in the Department of Economic Analysis at the Universitat de València. Her fields of research are international economics, regional economics and applied econometrics. She has published works in specialized journals such as *Cliometrica*, *Journal of Productivity Analysis* and *Economics of Transition*. She has taken part in the following research projects "Socio-economic and territorial challenges: a proposal for new empirical strategies and their applications" (ECO2014-52506-R), of the Ministry of Economy and Competitiveness, and "Grup de Recerca d'Economia Politics and Politics Públiques" (2014SGR327, 2017SGR-207) of the Generalitat de Catalunya. She is currently part of the research team of the project "Geografía, capacidad estatal y cambio económico. Una aproximación espacial al desarrollo y sus determinantes en las economías periféricas (siglos XIX-XX)" (PGC2018-095821-B-100) of the Ministry of Science, Innovation and Universities. She has also participated in 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 contributed to the collective work *Banca relacional y capital social en España: Competencia y confianza* (BBVA Foundation, 2006), and his articles have been published in national journals (*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). 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 (eduFIInet). 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 fields are economic growth, 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, Open Economies Review, Information Economics and Policy, Journal of Macroeconomics, Eastern European Economics, 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 *The role of information and communication technologies in the economic growth of the Andalusian region* funded by the European Commission. (Personal webpage: www.upo.es/econ/rodriguez).



Vicente Safón (*Universitat de València*)

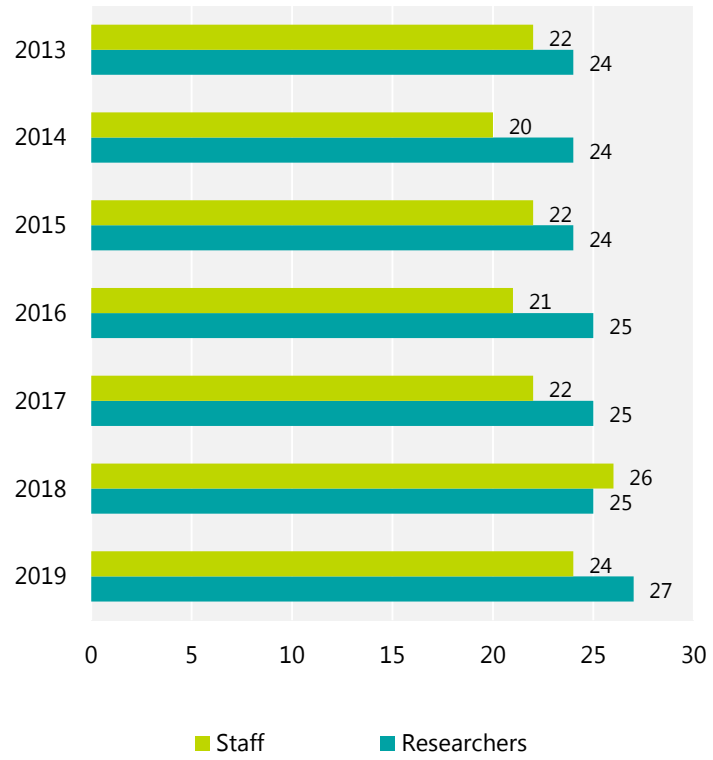
Dr Safón graduated in Economic and Business Sciences and holds a PhD in Business Management from the Universitat de València. Currently, he is Associate Professor at the Department of Business Administration "Juan José Renau Piqueras" of the Universitat de València. He has also been director of the former 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 project "Roots for growth and competitiveness in Family and Non-Family SMEs. Microfoundations in the governance, management and ownership bodies" (ECO-2016-80002R). He has also presented numerous papers at national and international congresses.



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 in and organized numerous national and international congresses and scientific meetings. (Personal webpage: www3.uji.es/~Tortosa).

Figure 1.
Staff and
researchers



Note: As of 31 December of each year.

2.6. Technical staff

Carlos Albert	Economist
Rodrigo Aragón	Computer engineer
Eva Benages	Economist
Alba Catalán	Economist
Héctor García	Computer engineer
Alicia Gómez	Economist (until 31 July 2019)
Laura Hernández	Economist
Consuelo Mínguez	Economist
Silvia Mollá	Economist
Fernando Pascual	Economist
Juan Pérez	Economist (until 23 July 2019)
Juan Carlos Robledo	Economist
Inés Rosell	Economist
Jimena Salamanca	Economist
Marta Solaz	Economist
Ángel Soler	Economist
Iván Vicente	Economist (from 26 September 2019 to 14 December 2019)
Irene Zaera	Economist

2.7. General services

M. ^a Cruz Ballesteros	Design and publications
Rosa Buitrago	Secretary
Yolanda Jover	Press
Leonor Marqués	Administration
Belén Miravalles	Documentation
Natalia Mora	Administration
Alicia Raya	Design and publications
Susana Sabater	Publications

2.8. 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 29 researchers from 11 institutions took part in different economic studies conducted by the **Ivie** in 2019:

José Antonio Álvarez (Universitat de València)
Óscar Álvarez (Universitat de València)
Isidro Antuñano (Universitat de València)
Javier Asensio (Universitat Autònoma de Barcelona)
Javier Campos (Universidad de Las Palmas de Gran Canaria)
Pedro Cantos-Sánchez (Universitat de València)
María Concepción Feo (Universitat de València)
Amadeo Fuenmayor Fernández (Universitat de València)
María Dolores Furió (Universitat de València)
Juan Carlos García (Universidad Complutense de Madrid)
Ramiro García (Universidad de Valladolid)
Lucía Gorjón (ISEAK and FEDEA)
Rafael Granell Pérez (Universitat de València)
Javier Gutiérrez Puebla (Universidad Complutense de Madrid)
María Iborra (Universitat de València)
Per-Olov Johansson (Stockholm School of Economics)
Guillermo López (Universitat de València)
Anna Matas (Universitat Autònoma de Barcelona)
Rafael Moner (Universitat de València)
Armando Ortuño (Universidad de Alicante)
Jordi Perdiguero (Universitat Autònoma de Barcelona)
Pedro Pérez (Universitat de València)
Sara de la Rica Goiricelaya (UPV/EHU and ISEAK)
Ginés de Rus (Universidad de Las Palmas de Gran Canaria and Fedea)
Jorge Sempere (Universitat de València)
María Pilar Socorro (Universidad de Las Palmas de Gran Canaria)
Adrián Todolí (Universitat de València)

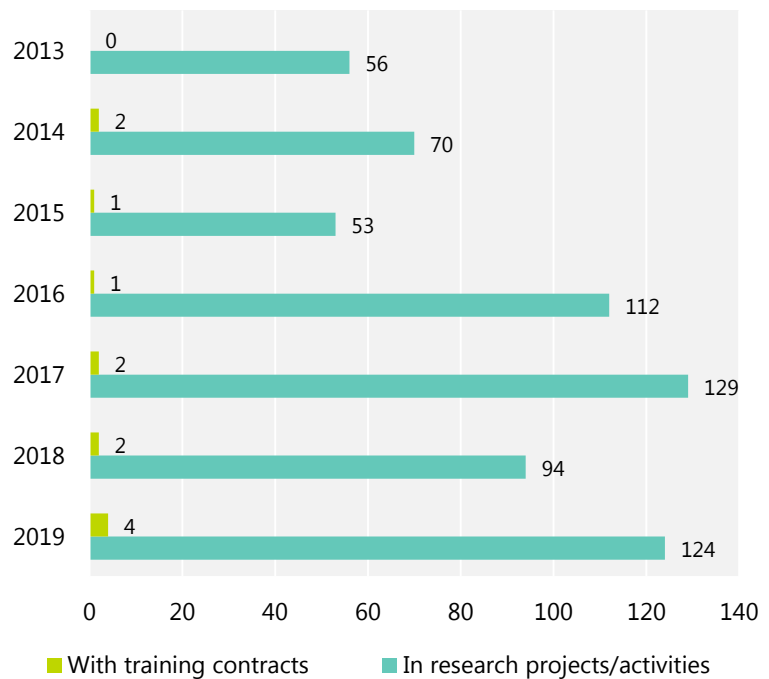
2.9. Collaborators with training contracts¹

Through an agreement signed with the Universitat de València, Iván Vicente Carrión did an internship at the **Ivie** while taking a Master's Degree in Economy at the said university (October 2018 – February 2019).

In addition, two other students from the Universitat de València did work placement training at the **Ivie**: Carlos Donoso Cabero for the Double Degree in Business Administration (ADE) + Law (May 2019 - August 2019) and Ana Lleó Bono for the Degree in Economics (September 2019 - February 2020).

Finally, Teresa Forner Carreras carried out an external curricular internship for the Degree of Economics at the Universitat Jaume I.

Figure 2.
Collaborators in
research projects
and other
activities carried
out by the **Ivie**



¹ 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 the **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 Agraria (AVFGA)
- Spanish Regional Science Association (AECR)
- Valencian Association of Entrepreneurs (AVE)
- Authority for Fiscal Responsibility (AIREF)
- Inter-American Development Bank (BID)
- Bankia
- Cajamar
- City of Arts and Sciences (CACSA)
- European Commission
- Economic and Social Council (CES)
- Conselleria d'Economia Sostenible, Sectors Productius, Comerç i Treball (Generalitat Valenciana)
- Conselleria d'Educació, Investigació, Cultura i Esport (Generalitat Valenciana)
- Conselleria d'Hisenda i Model Econòmic (Generalitat Valenciana)
- Feria Valencia (Valencia Trade Fair)
- Ernest Lluch Foundation
- Bancaja Foundation
- BBVA Foundation
- Conexus Foundation
- Cotec Foundation for Innovation
- Ramón Areces Foundation
- Trinidad Alfonso Foundation
- Valencia Basket 2000 Foundation
- Licampa 1617, SL
- Mercadona
- Ministerio de Educación y Formación Profesional
- Presidència (Generalitat Valenciana)
- Sociedad Deportiva Correcaminos (S. D. Correcaminos)
- Sogeti
- Universidad de Alicante
- 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 more than two decades of existence, the Institute and its researchers have received the following awards:

- On 30 January, **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, **Ivie** researcher, José García-Montalvo, was awarded the 2019 Rey Jaime I Prize in Economics for his valuable work closely linked to economic reality.
- The Spanish Regional Science Association (AECR) 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 Award in Economics, considered one of Spain’s most important scientific awards. The ceremony took place at the Lonja in Valencia on 30 October 2017 in an event presided by HM Queen Letizia.

- 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 17 presented, aims 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 the important role he plays 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 the academic, scientific and professional career of the psychologist 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 the 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, recognized his excellent track record as **Ivie** Researcher and Professor of the Universitat de València.
- On 25 November 2016, Francisco Pérez was made an 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 of Francisco Pérez (**Ivie** Research Director), 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 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, in Valencia, 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. The 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 throughout the period of 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** 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 the **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 recognized 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 long line of research 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) of the Spanish Ministry of Science, Innovation and Universities.

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INFORME DE AUDITORÍA DE CUENTAS ANUALES ABREVIADAS EMITIDO POR UN AUDITOR INDEPENDIENTE

A los accionistas de INSTITUTO VALENCIANO DE INVESTIGACIONES ECONÓMICAS, S.A. (IVIE)

Opinión

Hemos auditado las cuentas anuales abreviadas de INSTITUTO VALENCIANO DE INVESTIGACIONES ECONÓMICAS, S.A. (la Sociedad), que comprenden el balance abreviado a 31 de diciembre de 2019, 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 2019, así como de sus resultados correspondientes al ejercicio anual 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.

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, 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.

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 periodo 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 o expresamos una opinión por separado sobre estos riesgos.

Reconocimiento de ingresos por prestaciones de servicios

Los ingresos por prestaciones de servicios correspondientes a investigaciones y estudios económicos suponen la totalidad del importe neto de la cifra de negocios de la Sociedad correspondiente al ejercicio 2019. El reconocimiento de estos ingresos, si bien no resulta complejo, dando lugar a cuentas a cobrar convertibles en efectivo, implica una casuística específica conforme a las condiciones y términos establecidos en los contratos concertados por la Sociedad. Identificamos esta área como aspecto relevante a considerar en la auditoría de la Sociedad, de forma que identificamos como riesgo de incorrección material de nuestra auditoría el adecuado registro de los ingresos, conforme a la normativa aplicable.

Nuestros procedimientos de auditoría han consistido en evaluar los procedimientos y criterios empleados por la Sociedad en la determinación, cálculo, contabilización, facturación y cobro de estos servicios a sus clientes, en consonancia con los contratos correspondientes. Asimismo, hemos realizado confirmaciones de los saldos y operaciones sobre una muestra de clientes, y evaluado la adecuación de la información desglosada en la nota 10.f de la memoria abreviada a los requerimientos del marco normativo de información financiera aplicable a la Sociedad.

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 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 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 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 Sociedad.
- 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, hechos o condiciones futuros pueden ser 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 Sociedad 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 identificamos en el transcurso de la auditoría.

Entre los riesgos significativos que han sido objeto de comunicación a los administradores de la Sociedad, determinamos los que han sido de la mayor significatividad en la auditoría de las cuentas anuales abreviadas del periodo 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.

Grant Thornton, S.L.P. Sociedad Unipersonal

José Enrique Contell García

ROAC nº 2468

23 de marzo de 2020

6. PUBLICATIONS

One of the Institute's aims is to foster the dissemination of quality economic research. Since it was founded, the **Ivie** has been publishing two series of working papers which are first submitted to an evaluation process, where highly qualified anonymous referees evaluate the papers before they are accepted for publication. In 2019, 4 working papers were published.

The **Ivie** wishes to publicly thank all the referees for their collaboration. Their effort is decisive in achieving the Institute's objectives.

The publication as working papers is only the first stage in the diffusion of research activity, the final aim being the publication in scientific journals. For this reason, information about the articles published by the associates is also given. In 2019, the **Ivie's** researchers produced 29 books, published or forthcoming and 16 chapters in joint works. They also published 99 scientific articles, 75 of which were for international journals.

6.1. **Ivie** working papers²

6.1.1. AD Series

The AD Series, coordinated by Carmen Herrero, is a continuation of the work initiated by the Department of Economic Analysis of the University of Alicante in its collection 'A DISCUSIÓN'. This series provides and distributes papers marked by their theoretical content.

2019 issues:

WP-AD 2019-01 «Ability to Sustain Test Performance and Remedial Education: Good News for Girls», M. Battaglia and M. Hidalgo

WP-AD 2019-02. «Search frictions, housing prices and growth», G. Lisi

6.1.2. EC Series

Coordinated by Matilde Mas, the EC Series mainly includes applications of different analytical tools to the study of specific economic problems.

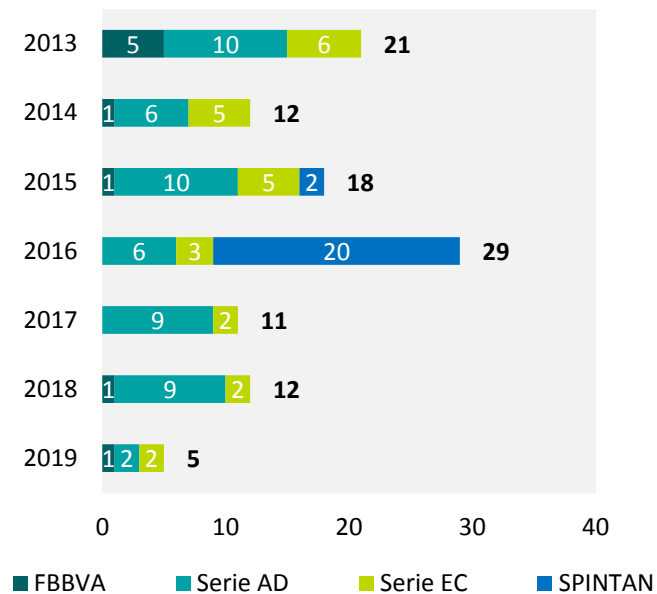
2019 issues:

WP-EC 2019-01 «Private benefits from control block trades in the Spanish stock exchange», I. Pérez-Soba, A.R. Martínez and E. Márquez.

WP-EC 2019-02 «Distributionally adjusted life expectancy as a life table function», F.J. Goerlich.

² The editing and dissemination process of **Ivie** working papers 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.

Figure 3.
Working papers

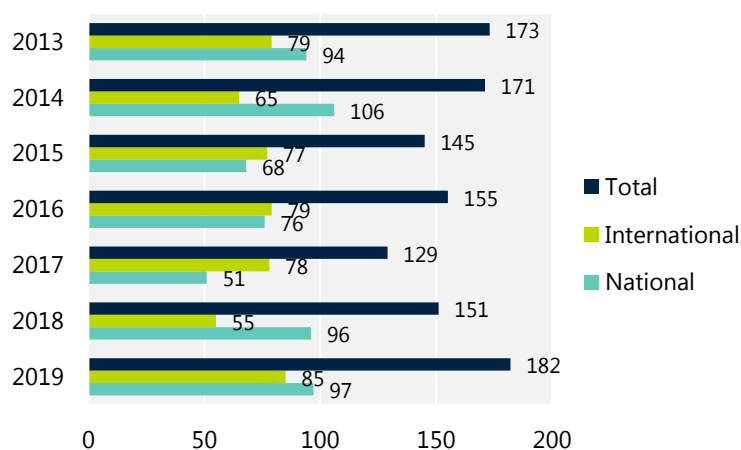


6.1.3. Referees

Pedro Albarrán Pérez (Universidad de Alicante)
 Emilio Albi Ibáñez (Universidad Complutense de Madrid)
 Joaquín Aldás (Universitat de València e Ivie)
 Dana Chandler (Facebook)
 Damian Clarke (Universidad de Santiago de Chile)
 Luis Franjo García (Universidad de Alicante)
 Nikolaos Georgantzis (Burgundy School of Business)
 José A. Gonzalo Angulo (Universidad de Alcalá)
 Laura Hospido Quintana (Banco de España)
 Santiago Lago Peñas (Universidade de Vigo)
 Andrés Picazo Tadeo (Universitat de València)
 Coral del Río Otero (Universidade de Vigo)
 Josep María Raya Vilchez (Parque Tecnológico TecnoCampus)
 Andrés Romeu Santana (Universidad de Murcia)
 José Carlos Rodríguez Alcantud (Universidad de Salamanca)
 Esther Ruiz Ortega (Universidad Carlos III de Madrid)
 Ramón Sala Garrido (Universitat de València)
 Vicente Salas Fumas (Universidad de Zaragoza)
 Francisco Javier Salinas Jiménez (Universidad Autónoma de Madrid)
 Lorenzo Serrano Martínez (Ivie and Universitat de València)

6.2. Publications by researchers and technicians

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



6.2.1. Books

Alcalá, F. (dir.) and **M. Solaz.** *Globalización, relocalización productiva y crecimiento.* Bilbao: BBVA Foundation, forthcoming.

Aldás-Manzano, J. and **M. Solaz.** *Patrones de consumo de los hogares españoles: Evolución histórica (1973-2017) e impacto de la crisis de 2007.* Madrid: Ramón Areces Foundation, 131 pp.

Año, J.H., J.E. Devesa, I. Domínguez and **R. Meneu.** *Estudio sobre los mediadores inscritos en el Registro Especial de Mediadores de Seguros.* Valencia: Conselleria d'Economia Sostenible, Sectors Productius, Comerç i Treball, 120 pp.

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.

Cervera, A. and **J.M. Pastor** (coords.). *Investigaciones clave en la transformación del modelo económico valenciano.* Valencia: Publicacions de la Universitat de València, 188 pp.

Devesa, J.E. (coord.), **M^a. M. Ayuso, I. de la Peña, R. Doménech, M.A. García, G. Gil de Rozas, J.A. Herce, J. Olaechea, L. M^a Sáez de Jáuregui** and **M.Á. Vázquez.** *Informe del Instituto de Actuarios Españoles sobre la Seguridad Social española: situación actual y perspectivas futura.* Madrid: Instituto de Actuarios Españoles. Colegio Profesional, 104 pp.

- Escribá-Esteve, A., M. Iborra and V. Safón.** *Modelos de dirección estratégica en universidades españolas de alto desempeño.* Bilbao: BBVA Foundation, 341 pp.
- Ferrer, J., F. Sòria and P. Chorén** (eds.). *5 diálogos sobre 'desigualdades y democracia' en València.* Barcelona: Fundació Ernest Lluch; Valencia: **Ivie**, 142 pp. (Ciclo de Diálogos **Ivie**-Fundació Ernest Lluch).
- Goerlich, F.J., E. Reig** (dirs.), **C. Albert** and **J.C. Robledo.** *Las áreas urbanas funcionales en España: Economía y calidad de vida.* Bilbao: BBVA Foundation, forthcoming. Preliminary version.
- Mas, M., J. Fernández de Guevara** and **J.C. Robledo.** *The 2019 PREDICT Key Facts Report: An Analysis of ICT R&D in the EU and Beyond.* Luxembourg: Publications Office of the European Union, 128 pp.
- Mas, M., J. Fernández de Guevara, L. Hernández, C. Mínguez** and **J.C. Robledo.** *Las actividades culturales y creativas y las nuevas tecnologías.* Bilbao: BBVA Foundation, forthcoming.
- Mas, M., J. Quesada** (dirs.), **M. Solaz, L. Hernández** and **E. Benages.** *La economía intangible en España: Evolución y distribución por territorios y sectores (1995-2016).* Madrid: Cotec Foundation for Innovation; Valencia: **Ivie**, 99 pp.
- Mas, M., J. Quesada** and **F. Pascual.** *Mapa del talento en España 2019: Cómo lo generan, atraen y retienen las comunidades autónomas.* Madrid: Cotec Foundation for Innovation; Valencia: **Ivie**, 73 pp.
- Maudos, J.** (dir.) and **J. Salamanca.** *Observatorio sobre el sector agroalimentario español en el contexto europeo: Informe 2018.* Almería: Cajamar Caja Rural, 138 pp. (Informes/Documentos Técnicos No. 60).
- Maudos, J.** (dir.), **F. Pascual** and **E. Reig.** *Impacte i valor econòmic del valencià.* Valencia: Generalitat Valenciana, Conselleria d'Educació, Investigació, Cultura i Esport, 184 pp.
- Maudos, J.** and **J. Fernández de Guevara.** *Condiciones financieras de las empresas españolas: Efectos sobre la inversión y la productividad.* Bilbao: BBVA Foundation, forthcoming. Preliminary version.
- Pastor, J.M. (dir.), J. Aldás-Manzano, F.J. Goerlich, P. J. Pérez, L. Serrano, A. Catalán, Á. Soler, I. Zaera** and **S. Mollá.** *La contribución socioeconómica del sistema universitario español: Informe SUE 2018.* Madrid: CRUE (Conferencia de Rectores de las Universidades Españolas): Conferencia de Consejos Sociales, 333 pp.
- Pastor, J.M., F. Pérez** (dirs.), **J. Aldás-Manzano, F.J. Goerlich, P. J. Pérez, L. Serrano, A. Catalán, Á. Soler** and **I. Zaera:** *La contribución socioeconómica de las Universidades Públicas Valencianas: Cuarto informe del SUPV 2018.* Valencia: Universitat de Valencia: Universitat Politècnica de Valencia: Universidad de Alicante: Universitat Jaume I: Universidad Miguel Hernández, 316 pp.
- Pérez, F. (dir.), B. Broseta, A. Escribá-Esteve, J.M^a Peiró, L. Serrano, A. Todolí, A. Gómez, L. Hernández, I. Narbón** and **Á. Soler.** *Cambios tecnológicos, trabajo y actividad empresarial: El impacto socioeconómico de la economía digital.* Madrid: Economic and Social Council (CES), forthcoming. XXI Premio de Investigación del CES.
- Pérez, F. (dir.), E. Benages, M. Solaz, J. Pla-Barber** and **C. Villar.** *La competitividad española en las cadenas de valor globales.* Bilbao: BBVA Foundation, forthcoming. Preliminary version.

Pérez, F., E. Uriel (dirs.), E. Benages, A. Gómez and L. Hernández. *Más allá del PIB. El valor de la producción doméstica y el ocio en España*. Bilbao: BBVA Foundation, forthcoming.

Pérez, F., E. Uriel (dirs.), E. Benages, L. Hernández and J.C. Robledo. *El equipamiento de los hogares y las dotaciones de capital de las familias en el siglo XXI*. Bilbao: BBVA Foundation, forthcoming.

Pérez, F., J. Aldás-Manzano (dirs.), R. Aragón and I. Zaera. *U-Ranking 2019: Indicadores sintéticos de las universidades españolas. 7ª edición*. Bilbao: BBVA Foundation; Valencia: Ivie, 151 pp.

Pérez, F., L. Serrano, E. Uriel (dirs.), L. Hernández, S. Mollá, J. Pérez and Á. Soler. *Diferencias educativas regionales 2000-2016: Condicionantes y resultados*. Bilbao: BBVA Foundation, 387 pp.

Rincón, A., J. Fernández de Guevara, J. Forth, J. Maudos, S. Mollá, F. Pérez, C. Llano and S. Pérez-Balsalobre. *Structural reforms in Spain*. Luxembourg: Publications Office of the European Union, 242 pp.

Safón, V. and M. Iborra. *El modelo Baleària*. Valencia: Víncl Editorial, 162 pp.

Serrano, L. (dir.), C. Albert and Á. Soler. *El valor económico del capital humano en España y sus regiones*. Bilbao: BBVA Foundation, forthcoming.

Serrano, L., J. Ramos (dirs.), Á. Soler and H. García. *El compromiso de los empresarios con la educación: Situación actual y retos de futuro*. Valencia: Valencian Association of Entrepreneurs (AVE), 130 pp.

6.2.2. Book chapters

Calvert-Gómez, R., D.V. Conesa, A.R. Gómez and E. Tortosa-Ausina. «Extending the Use of Superefficiency under Undesirable Outputs in Slacks-Based Measure Models». In Lovell, C.A.K., J.T. Pastor, J. Zhu and J. Aparicio (eds.). *Advances in Efficiency and Productivity II*. Springer, forthcoming.

Cervera, A. and J.M. Pastor. «Transformación del modelo económico valenciano en el marco de la Ciudad de València». In Cervera, A. and J.M. Pastor (coords.): *Investigaciones clave en la transformación del modelo económico valenciano*. Valencia: Publicacions de la Universitat de València, pp. 19-31.

Devesa, J.E. and G. Gil de Rozas. «Las pensiones requieren cambios e innovación para que podamos mantener nuestro actual estilo de vida después de la jubilación». In Orós, J.L. (coord.): *Planes de Pensiones por Consumo y el futuro de las Pensiones*. Zaragoza: Pensumo, pp. 11-14.

Devesa, J.E. and R. Doménech. «Pensions, Economic Growth and Welfare in Advanced Economies». In *Public pension systems: the greatest economic challenge of the 21st century*. Berlin: Springer Verlag, forthcoming.

—. «Sostenibilidad y suficiencia. Las Cuentas Nacionales como un mecanismo de disciplina». In Herce, J.A. (coord.): *Pensiones del futuro: El primer libro colaborativo en Europa sobre el futuro y la sostenibilidad de las pensiones*. Madrid, pp. 62-79.

Fernández de Guevara, J. and **J. Maudos**. «La unión financiera y bancaria en la UE». In Camarero, M.A. and C.R. Tamarit (coords.): *Economía de la Unión Europea, 8ª ed.*. Madrid: Thomson Reuters-Civitas, pp. 321-343.

García-Montalvo, J. and M. Reynal. «Religion and Conflict: A Quantitative Approach». In Carvalho, J. P., S. Iyer and J. Rubin (eds.): *Advances in the Economics of Religion*. Cham (Alemania): Palgrave Macmillan, pp. 249-263.

Herrero, C., J. Pineda, A. Villar and **E. Zambrano**. «Green Economy Measurements and Indicators». In Sheng, F. and D. Eaton (eds.). *Textbook on Green Economy*. PAGE, forthcoming.

Iborra, M., **V. Safón** and C. Dolz. «Strategic Responsiveness of Medium-sized Enterprises During an Economic and Financial Crisis: Antecedents of Resilience». In Andersen, T.M., S. Torp and S. Linder (eds.): *Strategic Responsiveness and Adaptive Organizations: New Research Frontiers in International Strategic Management*. Bradford (Reino Unido): Emerald Publishing Limited, pp. 81-95.

—. «The Role of Family Ownership in Survival and Bouncing Back: Good and Bad News?». In Camison, C. and T.F. González (eds.): *Competitiveness, Organizational Management, and Governance in Family Firms*. Hershey (Pensilvania), pp. cap. 11.

Mas, M., A.A. Hofman and **E. Benages**. «Economic valuation of knowledge-based capital: an International comparison». In Fraumeni, B. M. (ed.). *Measuring Economic Growth and Productivity*. San Diego: Academic Press (Elsevier), forthcoming.

Maudos, J. «Diferencias en la situación de los sectores bancarios europeos: Un freno para la Unión Bancaria». In *Anuario del Euro 2018: Completar la Unión Monetaria para un mundo diferente*. Madrid: Fundación de Estudios Financieros, pp. 143-164.

—. «Rentabilidad y márgenes: el sector bancario español en el contexto europeo». In Arce, O. and D. García (coords.): *Principales retos actuales y futuros del sector bancario español: 5º Panel de seguimiento financiero IEAF-FEF de la economía española*. Madrid: Fundación de Estudios Financieros, cap. 3, pp. 49-61.

Peraita, C., C. Salvador and **Á. Soler**: «Algunos indicadores de sostenibilidad económica, social y medioambiental de València». In Cervera, A. and J.M. Pastor (coords.): *Investigaciones clave en la transformación del modelo económico valenciano*. Valencia: Publicacions de la Universitat de València, pp. 35-69.

Serrano, L. and **Á. Soler**. «La empleabilidad de la población en la Ciudad de València». In Cervera, A. and J.M. Pastor (coords.): *Investigaciones clave en la transformación del modelo económico valenciano*. Valencia: Publicacions de la Universitat de València, pp. 73-93.

Vega-Redondo, F. «Social Networks from a Designer's Viewpoint». In Trockel, W. (ed.): *Social Design: Essays in Memory of Leonid Hurwicz*. Cham (Switzerland): Springer, pp. 63-81.

6.2.3. Articles

Abdi, T.A., **J.M^a Peiró**, Y. Ayala and S. Zappalà. «Four Wellbeing Patterns and their Antecedents in Millennials at Work». *International Journal of Environmental Research and Public Health* 16, No. 1.

Arribas, I., J. Peiró and **E. Tortosa-Ausina**. «Is full banking integration desirable?». *Journal of Banking & Finance*, forthcoming.

Arribas, I., K. Louhichi, A. Perni, J. Vila-Belda and S. Gómez. «Modelling Agricultural Risk in a Large Scale Positive Mathematical Programming Model». *International Journal of Computational Economics and Econometrics*, forthcoming.

Arribas, I., M^a D. Espinós-Vañó, F. García and P.B. Morales-Bañuelos. «The Inclusion of Socially Irresponsible Companies in Sustainable Stock Indices». *Sustainability* 11, No. 7.

Arribas, I., M^a D. Espinós-Vañó, F. García and R. Tamosiuniene. «Negative screening and sustainable portfolio diversification». *Entrepreneurship and Sustainability Issues* 6, No. 4 (June), pp. 1566-1586.

Arribas, I., M^a T. Balaguer, I. Narbón and **E. Tortosa-Ausina**. «Explaining local governments' cost efficiency: controllable and uncontrollable factors». *Cities*, forthcoming.

Arribas, I., S. Bensassi and **E. Tortosa-Ausina**. «Trade Integration in the European Union: Openness, Interconnectedness, and Distance». *North American Journal of Economics and Finance*, forthcoming.

Balaguer, M^a T., D. Prior, I. Narbón and **E. Tortosa-Ausina**. «Searching for the optimal territorial structure: The case of Spanish provincial councils». *Regional Studies*, forthcoming.

Blasco, M.F., N. Recuero, **J. Aldás-Manzano** and D. Cruz. «Facebook's power: Factors influencing followers' visit intentions». *Spanish Journal of Marketing - ESIC* 23, No. 1, pp. 95-117.

Blasco, M.F., N. Recuero, **J. Aldás-Manzano** and J. García de Madariaga. «Archaeological tourism: Looking for visitor loyalty drivers». *Journal of Heritage Tourism*, forthcoming.

Cantarino, I., M.Á. Carrión, **F.J. Goerlich** and V. Martínez. «A ROC analysis-based classification method for landslide susceptibility maps». *Landslides: Journal of the International Consortium on Landslides* 16, No. 2 (February), pp. 265-282.

Carbó, S. and F. Rodríguez. «Blockchain en la banca europea». *Cuadernos de Información Económica* No. 268 (January-February), pp. 55-63.

—. «Competencia tecnológica internacional e incidencia bancaria». *Cuadernos de Información Económica* No. 271 (July/August), pp. 11-18.

—. «Interest rates and bank margins under protracted, exceptional monetary policy». *SEFO - Spanish Economic and Financial Outlook* 8, No. 3 (May), pp. 47-53.

—. «The battle for global technological supremacy and the impact on banks». *SEFO - Spanish Economic and Financial Outlook* 8, No. 4 (July), pp. 23-31.

- . «The future of blockchain in the European banking system». *SEFO - Spanish Economic and Financial Outlook* 8, No.1 (January), pp. 21-29.
- . «Tipos de interés y márgenes bancarios: La anormalidad se prolonga». *Cuadernos de Información Económica* No. 270 (May /June), pp. 1-7.
- Carbó, S.**, P. J. Cuadros and F. Rodríguez. «Bank profitability in the new monetary paradigm». *SEFO - Spanish Economic and Financial Outlook* 8, No. 5 (May), pp. 21-28.
- . «Resultados bancarios en un nuevo ambiente monetario». *Cuadernos de Información Económica* No. 272 (September), pp. 9-16.
- . «Spain's current slowdown: Reduced real estate and financial risks». *SEFO - Spanish Economic and Financial Outlook* 8, No. 6 (November), pp. 15-22.
- . «The Effect of Banks' IT Investments on the Digitalization of their Customers». *Global Policy* 11, No. S1 (Special issue: Contemporary Issues in Banking), forthcoming.
- . «Una desaceleración con menores riesgos inmobiliarios y financieros». *Cuadernos de Información Económica* No. 273 (November-December), pp. 11-18.
- Carbó, S.**, T. Cobau and F. Rodríguez. «Análisis de las diferencias en la rentabilidad bancaria entre Europa y Estados Unidos». *Cuadernos de Información Económica* No. 269 (March/April), pp. 53-61.
- . «Analysing differences in bank profitability: Europe versus the US». *SEFO - Spanish Economic and Financial Outlook* 8, No. 2 (March), pp. 5-13.
- Cristiani, A. and **J.M^a Peiró**. «Calculative and collaborative HRM practices, turnover and performance: Evidence from Uruguay». *International Journal of Manpower* 40, No. 4, pp. 616-642.
- Cruz-García, P. and **J. Fernández de Guevara**. «Determinants of net interest margin: the effect of capital requirements and deposit insurance scheme». *The European Journal of Finance*, forthcoming.
- Cruz-García, P., **J. Fernández de Guevara** and **J. Maudos**. «Determinants of bank's interest margin in the aftermath of the crisis: the effect of interest rates and the yield curve slope». *Empirical Economics* 56, No. 1 (January), pp. 341-365.
- De Mingo, D.V., J.C. Matallín, A. Soler and **E. Tortosa-Ausina**. «Ethical strategy focus and mutual fund management: Performance and persistence». *Journal of Cleaner Production* 213 (March), pp. 618-633.
- Dessart, L., **J. Aldás-Manzano** and C. Veloutsou. «Unveiling heterogeneous engagement-based loyalty in brand communities». *European Journal of Marketing* 53, No. 9, pp. 1854-1881.
- Devesa, J.E.** and R. Doménech. «Eficiència dels sistemes de pensions, creixement econòmic i benestar». *Revista Econòmica de Catalunya* No. 79 (June), pp. 38-44.
- Díaz, A., G.A. Marrero, L.A. Puch and **J. Rodríguez-López**. «Economic Growth, Energy Intensity and the Energy Mix». *Energy Economics* 81 (June), pp. 1056-1077.

Dolz, C., M. Iborra and **V. Safón**. «Improving the likelihood of SME survival during financial and economic crises: The importance of TMTs and family ownership for ambidexterity». *BRQ Business Research Quarterly* 22, No. 2 (April-June), pp. 119-136.

Estreder, Y., I. Tomás, M.J. Chambel and **J. Ramos**. «Psychological contract and attitudinal outcomes: multilevel mediation model». *Personnel Review* 48, No. 7, pp. 1685-1700.

Estreder, Y., T. Rigotti, I. Tomás and **J. Ramos**. «Psychological contract and organizational justice: the role of normative contract». *Employee Relations*, forthcoming.

García de Madariaga, J., N. Recuero, M.F. Blasco and **J. Aldás-Manzano**. «Optimizing website quality: The case of two superstar museum websites». *International Journal of Culture, Tourism and Hospitality Research* 13, No. 1, pp. 16-36.

García, E., **J.M^a Peiró**, M^a I. Montañez, M.W. Kozusznik and S. Ortíz. «Happy-Productive Teams and Work Units: A Systematic Review of the 'Happy-Productive Worker Thesis'». *International Journal of Environmental Research and Public Health*, forthcoming.

García, M.P., D. Prior, **E. Tortosa-Ausina** and **M. Illueca**. «Risk-taking behavior, earnings quality, and bank performance: A profit frontier approach». *BRQ Business Research Quarterly*, forthcoming.

García-Arroyo, J. A., A. Osca and **J.M^a Peiró**. «Meta-analytical review of teacher burnout across 36 societies: the role of national learning assessments and gender egalitarianism». *Psychology & Health* 34, No. 6, pp. 733-753.

García-Montalvo, J. «Retos del mercado del alquiler en España». *Cuadernos de Información Económica* No. 269 (March/April), pp. 1-11.

__ «The rental market challenge in Spain». *SEFO - Spanish Economic and Financial Outlook* 8, No. 2 (March), pp. 23-33.

García-Montalvo, J. and M. Reynal. «Earthquakes and Terrorism: The Long Lasting Effect of Seismic Shocks». *Journal of Comparative Economics* 47, No. 3 (September), pp. 541-561.

__. «Ethnic Diversity and Growth: Revisiting the Evidence». *Review of Economics and Statistics*, forthcoming.

García-Montalvo, J., A. Piolatto and J. M. Raya. «Transaction-tax Evasion in the Housing Market». *Regional Science and Urban Economics*, forthcoming.

García-Montalvo, J., O. Papaspiliopoulos and T. Stumpf-Fétizon. «Bayesian forecasting of electoral outcomes with new parties' competition». *European Journal of Political Economy* 59 (September), pp. 52-70.

Giménez, V. M., C. Thieme, D. Prior and **E. Tortosa-Ausina**. «Comparing the Performance of National Educational Systems: Inequality Versus Achievement?». *Social Indicators Research* 141, No. 2 (January), pp. 581-609.

- Giménez, V. M., W. Prieto, D. Prior and **E. Tortosa-Ausina**. «Evaluation of efficiency in Colombian hospitals: An analysis for the post-reform period». *Socio-Economic Planning Sciences* 65 (March), pp. 20-35.
- Goerlich, F.J.** «A municipal database from the 2011 Spanish census». *Applied Economic Analysis* 27, No. 81, pp. 226-238.
- __. «Distributionally adjusted life expectancy as a life table function». Working Papers Serie EC No. 2019-02. **Ivie**.
- __. «La Encuesta de Condiciones de Vida: Evaluación de los cambios metodológicos en relación a la obtención de los ingresos». *Hacienda Pública Española = Review of Public Economics*, forthcoming.
- Gómez, A.**, A. Díez, J. Martínez and D.A. Tirado. «Regional prices in early twentieth-century Spain: A country-product-dummy approach». *Cliometrica* 13, No. 2 (May), pp. 245-276.
- González, R.M., G.A. Marrero, **J. Rodríguez-López** and Á.S. Marrero. «Analyzing CO₂ emissions from passenger cars in Europe: A dynamic panel data approach». *Energy Policy* 129 (June), pp. 1271-1281.
- Gorjón, L., S. De la Rica and **A. Villar**. «The social cost of unemployment: the Spanish labour market from a social welfare approach». *Social Indicators Research*, forthcoming.
- Gracia, F.J., I. Tomás, M. Martínez and **J.M^a Peiró**. «Empowering leadership, mindful organizing and safety performance in a nuclear power plant: A multilevel structural equation model». *Safety Science*, forthcoming.
- Herrero, C.**, R. Martínez and **A. Villar**. «Population structure and the human development index». *Social Indicators Research* 141, No. 2 (January), pp. 731-763.
- Iborra, M. and **V. Safón**. «What explains resilience of SMEs? Ambidexterity capability and strategic consistency». *Long Range Planning*, forthcoming.
- Korkmaz, G., C.J. Kuhlman, J. Goldstein and **F. Vega-Redondo**. «A computational study of homophily and diffusion of common knowledge on social networks based on a model of Facebook». *Social Network Analysis and Mining*, forthcoming.
- Kozusznik, M.W., **J.M^a Peiró** and A. Soriano. «Daily eudaimonic well-being as a predictor of daily performance: A dynamic lens». *PLoS ONE* 14, No. 4.
- Kozusznik, M.W., L.P. Maricutoiu, **J.M^a Peiró**, D.M. Virga, A. Soriano and C. Mateo-Cecilia. «Decoupling office energy efficiency from employees' well-being and performance: A systematic review». *Frontiers in Psychology* 10 (February).
- Latorre, M.F., **J. Ramos**, F.J. Gracia and I. Tomás. «How high-commitment HRM relates to PC violation and outcomes: The mediating role of supervisor support and PC fulfilment at individual and organizational levels». *European Management Journal*, forthcoming.

López, J.F. and **A. Escribá-Esteve**. «An interpretive study on the role of top managers in enterprise resource planning (ERP) business value creation». *International Journal of Information Systems and Project Management* 7, No. 4, pp. 5-29.

Lorente, L., N. Tordera and **J.Mª Peiró**. «Measurement of Hedonic and Eudaimonic Orientations to Happiness: The Spanish Orientations to Happiness Scale». *The Spanish Journal of Psychology* 22.

Marín, A. and **Á. Soler**. «Percepción del estudiantado del uso de los mandos interactivos en clase: una aplicación en la comunidad universitaria». *Revista de Investigación Educativa Universitaria*, forthcoming.

Marrero, G.A., **J. Rodríguez-López** and R.M. González. «Car usage, CO₂ emissions and fuel taxes in Europe». *SERIEs: Journal of the Spanish Economic Association*, forthcoming.

Martínez, V., Y. Estreder, I. Tomás, **J. Ramos** and O. Luque. «Interaction between functional and relational service quality: Hierarchy vs. compensation». *The Services Industries Journal*, forthcoming.

Mas, M. «¿Europa se queda en la cuneta en la carrera tecnológica?». *The Economy Journal* (Special issue: EE.UU.-China, la guerra fría del siglo XXI).

Mas, M., A.A. Hofman and **E. Benages**. «Knowledge Intensity in a Set of Latin American Countries: Implications for Productivity». *International Productivity Monitor* No. 36 (Spring), pp. 204-233.

Matallín, J.C., A. Soler and **E. Tortosa-Ausina**. «Does active management add value? New evidence from a quantile regression approach». *Journal of the Operational Research Society* 70, No. 10, pp. 1734-1751.

Matallín, J.C., A. Soler, D.V. De Mingo and **E. Tortosa-Ausina**. «Does socially responsible mutual fund performance vary over the business cycle? New insights on the effect of idiosyncratic SR features». *Business Ethics. A European Review* 28, No. 1 (January), pp. 71-98.

Mateu, J. M. and A. **Escribá-Esteve**. «Ex-Ante Business Model Evaluation Methods: A Proposal of Improvement and Applicability». *Journal of Business Models* 7, No. 5, pp. 25-47.

Maudos, J. «A snapshot of Spain's mortgage market». *SEFO - Spanish Economic and Financial Outlook* 8, No. 1 (January), pp. 39-47.

—. «How banked is Spain in the European context?». *SEFO - Spanish Economic and Financial Outlook* 8, No. 4 (July), pp. 33-42.

—. «La bancarización de la economía española en el contexto europeo». *Cuadernos de Información Económica* No. 271 (July/August), pp. 27-35.

—. «Radiografía del préstamo para la compra de vivienda en España». *Cuadernos de Información Económica* No. 268 (January-February), pp. 31-38.

—. «Spanish banks: Benefits of international exposure and geographic diversification». *SEFO - Spanish Economic and Financial Outlook* 8, No. 6 (November), pp. 43-53.

—. «Ventajas de la internacionalización y diversificación geográfica del negocio de la banca española». *Cuadernos de Información Económica* No. 273 (November-December), pp. 35-43.

Maudos, J. and X. Vives. «Competition policy in banking in the European Union». *Review of Industrial Organization* 55, No. 1 (August), pp. 27-46.

Meneu, R., **J.E. Devesa**, M.M. Devesa, I. Domínguez, F. B. Encinas and M.A. García. «La jubilación en España: edad óptima y equidad actuarial». *Anales del Instituto de Actuarios Españoles* No. 25 (4ª época), pp. 1-32.

Monzani, L., M.W. Kozusznik, P. Ripoll, R. Van Dick and **J.Mª Peiró**. «Coping in the final frontier: An intervention to reduce spaceflight-induced stress ». *Psychologica* 62, No. 1 (July), pp. 57-77.

Narbón, I., Mª T. Balaguer and **E. Tortosa-Ausina**. «Evaluating local government performance in times of crisis». *Local Government Studies* 45, No. 1, pp. 64-100.

Narbón, I., Mª T. Balaguer, M. Petrovic and **E. Tortosa-Ausina**. «Which estimator to measure local governments' cost efficiency? An application to Spanish municipalities». *SERIEs: Journal of the Spanish Economic Association*, forthcoming.

Odoardi, C., A. Battistelli, F. Montani and **J.Mª Peiró**. «Affective commitment, participative leadership, and employee innovation: a multilevel investigation = Compromiso afectivo, liderazgo participativo e innovación del empleado: una investigación multinivel». *Journal of Work and Organizational Psychology = Revista de Psicología del Trabajo y de las Organizaciones* 35, No. 2 (August), pp. 103-113.

Peiró, J.Mª, J.A. Bayona, A. Caballer and A. Di Fabio. «Importance of work characteristics affects job performance: The mediating role of individual dispositions on the work design-performance relationships». *Personality and Individual Differences*, forthcoming

Peiró, J.Mª, K. Nielsen, M.F. Latorre, R. Shepherd and M. Vignoli. «Safety Training for Migrant Workers in the Construction Industry: A Systematic Review and Future Research Agenda». *Journal of Occupational Health Psychology*, forthcoming.

Peiró, J.Mª, M.W. Kozusznik, I. Rodriguez and N. Tordera. «The Happy-Productive Worker Model and Beyond: Patterns of Wellbeing and Performance at Work». *International Journal of Environmental Research and Public Health* 16, No. 3.

Peiró, J.Mª, S.W.J. Kozlowski and A. Soriano. «From Happiness Orientations to Work Performance: The Mediating Role of Hedonic and Eudaimonic Experiences». *International Journal of Environmental Research and Public Health* 16, No. 24.

Pérez, F. and **J. Pérez**. «Necesidades de gasto en servicios públicos fundamentales». *Presupuesto y Gasto Público* No. 96, pp. 33-55.

Prior, D., **E. Tortosa-Ausina**, M.P. García and **M. Illueca**. «Profit efficiency and earnings quality: Evidence from the Spanish banking industry». *Journal of Productivity Analysis* 51, No. 2-3 (June), pp. 153-174.

Reneclé, M., I. Tomás, F.J. Gracia and **J.Mª Peiró**. «Spanish validation of the mindful organizing scale: A questionnaire for the assessment of collective mindfulness». *Accident Analysis & Prevention*, forthcoming.

Rodríguez, I., M.W. Kozusznik, **J.M^a Peiró** and N. Tordera. «Individual, Co-active and Collective Coping and Organizational Stress: A Longitudinal Study». *European Management Journal* 37, No. 1 (February), pp. 86-98.

Rodríguez-López, J., Y.F. Rebollo and D. Mesa. «Hidden figures behind two-vehicle crashes: An assessment of the risk and external costs of drunk driving in Spain». *Accident Analysis & Prevention* 127 (June), pp. 42-51.

Safón, V. «Inter-ranking reputational effects: an analysis of the Academic Ranking of World Universities (ARWU) and the Times Higher Education World University Rankings (THE) reputational relationship». *Scientometrics* 121, pp. 897-915.

Sánchez, A., J. Martí and **J. Aldás-Manzano**. «Teachers' intention to use educational video games: The moderating role of gender and age». *Innovations in Education and Teaching International* 56, No. 3, pp. 318-329.

Serrano, L. «Financiación de la educación y desigualdad regional». *Cuadernos de Pedagogía*, forthcoming.

Sora, B., T. Höge, A. Caballer and **J.M^a Peiró**. «Employment contract, job insecurity and employees' affective well-being: The role of self- and collective efficacy». *Economic and Industrial Democracy* 40, No. 2, pp. 193-214.

Soriano, A., M.W. Kozusznik, **J.M^a Peiró** and C. Mateo-Cecilia. «The Role of Employees' Work Patterns and Office Type Fit (and Misfit) in the Relationships Between Employee Well-Being and Performance». *Environment and Behavior*, forthcoming.

Tordera, N., **J.M^a Peiró**, Y. Ayala, E. Villajos and D. M. Truxillo. «The Interaction between HR Practices and Age for Sustainable Careers across the Lifespan». *Academy of Management Annual Meeting Proceedings* No. 1.

Villajos, E., N. Tordera and **J.M^a Peiró**. «Human Resource Practices, Eudaimonic Well-Being, and Creative Performance: The Mediating Role of Idiosyncratic Deals for Sustainable Human Resource Management». *Sustainability* 11, No. 24.

Villajos, E., N. Tordera, **J.M^a Peiró** and M. Van Veldhoven. «Refinement and validation of a comprehensive scale for measuring HR practices aimed at performance-enhancement and employee-support». *European Management Journal* 37, No. 3 (June), pp. 387-397.

Villar, A. «On the Wondrous Behaviour of Rats and Researchers». *Modern Economy*, forthcoming.

6.2.4. Other documents

Escribá-Esteve, A. (dir.), J. Maudos, C. Albert, J. Salamanca, H. García and R. Aragón. *Evolución de la competitividad de las empresas valencianas: tendencias y factores asociados*. Valencia: **Ivie**: Bankia. (Informe GECE No. 04/19).

- Escribá-Esteve, A., C. Albert and R. Aragón.** *Observatorio GECE: Estructura de propiedad y sistemas de gobierno de las empresas valencianas: Caracterización y relación con la competitividad.* Valencia: **Ivie**: Bankia, 41 pp. (Informe GECE No. 02/19).
- Escribá-Esteve, A., M. Iborra, V. Safón (dir.), C. Albert and R. Aragón.** *La actividad internacional de las empresas valencianas y su relación con la competitividad.* Valencia: **Ivie**: Bankia. (Informe GECE No. 03/19).
- Fernández de Guevara, J. (dir.) and C. Mínguez.** *La productividad de la empresa valenciana: la importancia del tamaño.* Valencia: Generalitat Valenciana, forthcoming.
- Fernández de Guevara, J., J. Maudos (dirs.), C. Mínguez and R. Aragón.** *La productividad de la economía valenciana: la importancia de las diferencias inter e intra sectoriales.* Valencia: Generalitat Valenciana, forthcoming.
- Fernández de Guevara, J., J. Maudos (dirs.), R. Aragón, H. García and C. Mínguez.** *Observatorio sobre la situación financiera de las empresas valencianas en el contexto nacional.* Valencia: Generalitat Valenciana: **Ivie**. (Informe entregable No. 7).
- Furió, M.D., V. Safón and J. Salamanca.** *La transformación energética de la Comunitat Valenciana. Lecciones de la experiencia internacional.* Valencia: Generalitat Valenciana, forthcoming.
- Goerlich, F.J.** *Las mil caras de la desigualdad y una más: La obtención de los ingresos en la Encuesta de Condiciones de Vida.* Valencia: **Ivie**.
- Maudos, J. (dir.) and C. Albert.** *Impacto económico del Programa de Apoyo a competiciones deportivas de la Comunitat Valenciana (PAC CV 2018-2019).* Valencia: Trinidad Alfonso Foundation.
- Maudos, J. (dir.) and F. Pascual.** *Impacto económico y social de la Ciutat de les Arts i les Ciències en la Comunitat Valenciana 2018.* Valencia: CACSA: **Ivie**.
- Maudos, J. (dir.) and M. Solaz.** *La productividad de la Comunitat Valenciana en el contexto regional: determinantes.* Valencia: Generalitat Valenciana, forthcoming.
- Maudos, J. (dir.), C. Albert and E. Benages.** *El impacto de Feria Valencia en la economía valenciana.* Valencia: Feria Valencia.
- Maudos, J., E. Benages, A. Fuenmayor, R. Granell and M. Solaz.** *El impacto económico de Mercadona 2018. Resumen ejecutivo.* Valencia: Mercadona.
- Maudos, J., J. Aldás-Manzano, E. Benages and I. Zaera.** *38 Maratón Trinidad Alfonso EDP 2018: Impacto económico y valoración de los corredores.* Valencia: S. D. Correcaminos.
- Maudos, J., J. Quesada (dirs.) and C. Mínguez.** *Las infraestructuras y la accesibilidad a los servicios digitales por las empresas en la Comunitat Valenciana.* Valencia: Generalitat Valenciana, forthcoming.
- Pérez, F. (dir.) and A. Catalán.** *La economía del envejecimiento en la Comunitat Valenciana.* Valencia: Generalitat Valenciana, forthcoming.

Pérez, F. (dir.), I. Antuñano, **I. Rosell** and **J. Salamanca**. *Evolución reciente, situación actual e impacto socioeconómico de la inmigración en la Comunitat Valenciana*. Valencia: Generalitat Valenciana, forthcoming.

Pérez, F. (dir.), J.A. Álvarez, P. J. Pérez, **S. Mollá** and **R. Aragón**. *Evaluación de la contratación pública de la Generalitat Valenciana (2). Análisis de la competencia en los procedimientos de contratación*. Valencia: Generalitat Valenciana, forthcoming.

Pérez, F., E. Reig (dirs.), **S. Mollá, J. Pérez** and **I. Vicente**. *Los costes de la no autonomía*. Valencia: Generalitat Valenciana, forthcoming.

6.2.5. Working papers

Batiz, B., **S. Carbó** and S. Castellanos. «The Consumer Credit Act 1974 and the emergence of the APR as a consumer protection policy tool». Bangor Business School Working Paper No. 19/006. Bangor Business School, February.

Catalán, A. «Docentes en la enseñanza media técnico-profesional en Chile: una pieza clave para lograr una educación de calidad». Working Papers. Inter-American Development Bank, forthcoming.

__. «Millennials, X-Gen and Baby-Boomers: Who wins over the life-cycle? Evidence from Spain». Documentos de Trabajo. Banco de España, forthcoming.

Díaz, A., G.A. Marrero, L.A. Puch and **J. Rodríguez-López**. «Economic Growth, Energy Intensity and the Energy Mix». Working paper. Economics No. 2019-10. Universidad Carlos III de Madrid.

Escribá, F.J., **A. Gómez**, M.J. Murgui and M.T. Sanchis. «BD.EURS (NACE Rev.2) Database: New estimations». Documentos de Trabajo No. D-2019-01. Secretaria de Estado de Presupuestos y Gastos (November).

García, J.I. and **A. Villar**. «On the three i's of employment and the Spanish Labour market». Estudios sobre la Economía Española 2019/03. Fundación de Estudios de Economía Aplicada - FEDEA.

__. «On the three i's of employment and the Spanish labour market». Working Papers No. 19.04. Department of Economics, Universidad Pablo de Olavide.

García-Montalvo, J. and M. Reynal. «Gender and credit risk: A view from the loan officer's desk». Barcelona GSE Working Paper No. 1076. Barcelona Graduate School of Economics - GSE, March.

García-Montalvo, J., A. Piolatto and J. M. Raya. «Transaction-tax Evasion in the Housing Market». Barcelona GSE Working Paper nº 1080. Barcelona Graduate School of Economics - GSE, March.

Goerlich, F.J. «A simple non-parametric catching-up and convergence index». Working Papers Serie EC. Valencia: **Ivie** (Instituto Valenciano de Investigaciones Económicas), forthcoming.

Gorjón, L. and **A. Villar**. «The Minimum Income Scheme as a poverty reduction mechanism: The case of the Basque Country». Working Papers 19.06. Department of Economics, Universidad Pablo de Olavide.

Gorjón, L., S. De la Rica and **A. Villar**. «The social cost of unemployment in Spain: Who are the losers». Working Paper. Fundación ISEAK, March.

—. «The social cost of unemployment in Spain: Who are the losers». Estudios sobre Economía Española No. 2019/12. Fundación de Estudios de Economía Aplicada - FEDEA.

Herrero, C. and **A. Villar**. «The Borda-Condorcet Social Evaluation Function». Working Papers 19.02. Department of Economics, Universidad Pablo de Olavide.

—. «The Impact of the Crisis on the Labour Market: A new Appraisal». Working Paper 27/2019. DISEI, Università degli Studi di Firenze.

Martínez, R. and **A. Villar**. «Multilevel proficiency comparisons with an application to educational outcomes in PISA». The Papers 19/02. Dpto. Teoría e Historia Económica.

Narbón, I., M^a T. Balaguer, D. Prior and **E. Tortosa-Ausina**. «Searching for the optimal territorial structure: The case of Spanish provincial councils». Working Papers No. 2019/03. Dpto. Economía, Universitat Jaume I.

Pérez, F., M. Mas (dirs.), E. Benages, J.C. Robledo and **I. Vicente**. «El stock de capital en España y sus comunidades autónomas. Ajuste de la inversión pública y reducción del déficit». Documento de Trabajo. BBVA Foundation.

Pérez, F., M. Mas, L. Serrano, E. Uriel (dirs.), E. Benages, J.C. Robledo, C. Mínguez and **I. Vicente**. «El stock de capital en España y sus comunidades autónomas: Evolución de la edad media de las inversiones y envejecimiento del capital». Documentos de Trabajo No. 1/2019. BBVA Foundation.

Vega-Redondo, F., P. Pin, D. Ubfal, C. Benedetti-Fasil, C.D. Brummitt, G. Rubera, H. Hovy and **T. Fornaciari**. «Peer Networks and Entrepreneurship: A Pan-African RCT». Working Paper No. 648. IGIER - Università Bocconi.

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 2019 (the financial year during which the project was developed is in brackets next to the title):

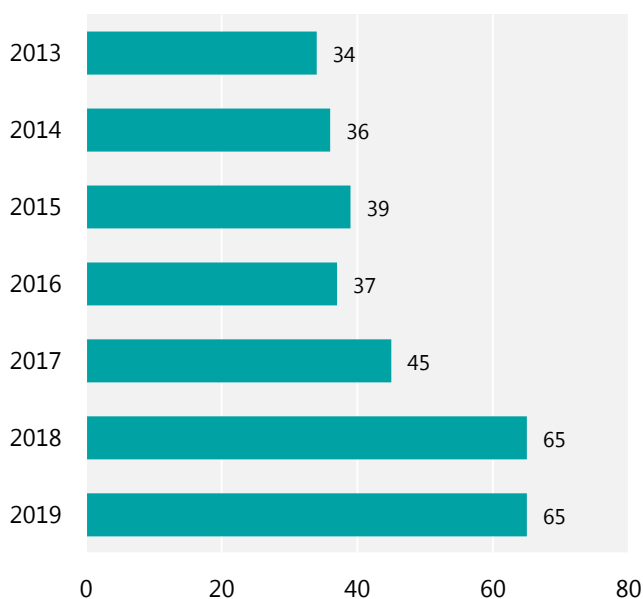
7.1. Contracts with other institutions

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. Its core lines during 2019-2021 are *Digital transformations and productive activities in the 21st century*, *Capitalization, productivity and competitiveness*, *Education, employment and knowledge society* and *Quality of the institutions of the 21st century*.

Figure 5 .
Studies and reports
carried out or in course



During 2019 the following studies were carried out under this Program:

Capital stock in Spain and its autonomous communities. Adjustments in public investment and deficit reduction (1964-2017) (2018-2019)

New update of the capital stock and investment series for Spain that is revised annually. This database, developed jointly with the BBVA Foundation, includes data up to 2017. This edition analyzes the evolution of public investment and capital stock at national level since the onset of the crisis. Although the sharp decline in public investment has significantly reduced public deficit, it has also reduced infrastructure stock and increased its aging. The study analyzes to which extent public infrastructure services have been adequately provided according to the evolution of their demand, as well as the consequences that a long-continued severe adjustment of investments would have during the next decade. Based on this information, the project carries out an in-depth analysis of public capital stock and investment in Spain and its effect on deficit reduction.

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Household equipment and capital stock in the 21st century (2019)

This project aims to construct an investment and capital stock database of Spanish household equipment for the 21st century for each of the autonomous regions of Spain. Once the database is built, the monograph will analyze the following aspects of household equipment:

- Historical evolution in household equipment (based on indicators available since the mid-20th century) in terms of penetration of major household appliances and transport goods.
- Evolution in household digital equipment, differentiating between main goods and comparing their penetration rates with non-digital goods.
- Breakdown and valuation of household equipment assets for the period 2000-2017.
- Equipment differences according to household socio-economic status.
- Determinants of household equipment by autonomous region.

Research team:

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Consumption and social well-being: Lessons from the crisis (2018-2019)

The objective of this project is threefold: to create a database consisting of recent household consumption survey data for Spain and its regions and to link this data to previously available data on consumption; to analyze recent trends in household consumption levels and distributions; and to measure social well-being from consumer behavior, examine its evolution and analyze the effects of the crisis.

The study analyzes consumption through the spending patterns of Spanish households in recent years and the level of well-being from this same perspective from 2006 to 2016. Based on an internationally available methodology that uses consumption as a measure of well-being (Jorgenson and Slesnick, 2016), a new household spending database will be built based on data from Spain's long-standing Household Budget Surveys (EPF) from before the last methodological update in 2006.

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The social cost of unemployment in Spain (2018-2019)

Unemployment is a persistent problem in Spanish society and one that unquestionably has social costs, because it means that part of the available resources are not used, which affects unemployed people's income and their participation in economic and social life. The problem worsened during the economic crisis and affects different social groups and regions very unequally. These asymmetries entail not only differences in the rate of unemployment (impact) but also in its duration and seriousness (severity) and the chances that it can be remedied or is likely to persist (hysteresis).

An important question is how to identify the social costs of unemployment, especially when it is very high, and how to measure them properly. Answering this question requires considering the three abovementioned aspects of the problem (impact, severity and hysteresis), paying attention to the diversity with which different groups of workers are affected, and building a well-founded metric that can be applied using the available information. That is the goal of this project, which exploits conceptual contributions developed for the purpose of analyzing other issues (such as inequality and poverty) to build indices that combine measures of impact and intensity (Villar, 2017).

The proposed approximation will assess the social cost of unemployment based on a stylized model of the disutility for an individual of being unemployed, as a function of lost income, unemployment duration and probability of remaining unemployed, as well as the social coverage available while unemployed.

Research team:

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The digital society, time use and household production and productivity (2018-2019)

This project has a two linked objective. First, it will explore changes in time use in the past two decades, drawing on data from national and international surveys, and focusing in particular on new technologies (their impact and their associated dimensions and activities), their importance for different household members and their influence on family socio-economic characteristics. Secondly, the project will analyze the impact of technological change and time use on household production and productivity.

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The economic value of human capital in Spain and its regions (2018-2019)

The purpose of this project is to estimate the value of human capital in Spain and its regions by using three basic approaches:

- a) methodological procedures consistent with the latest international practice.
- b) results broken down by region.
- c) valuing human capital in monetary terms.

An approach such as the one proposed is of interest also because it would make it possible to integrate estimates of physical capital stock and human capital stock, once both have been valued in monetary terms. It would then be possible to produce a comprehensive view of investment in physical and human capital, and of the capital accumulation process in a broad sense, in Spain, assessing each type of capital's contribution to overall wealth.

The research proposes to analyze the value of human capital in Spain and its regions from the year 2000 and construct a database to support it. With its results it aims to fill an important gap, as there are, at present, no estimates of the value of human capital for Spain beyond those provided by the World Bank at an aggregate level for the country as a whole.

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U-Ranking Project: Performance indicators of Spanish universities (2018-2019)

The purpose of this project financed by the BBVA Foundation is to build a system of performance indicators of Spanish universities of wide coverage, rigorous in its approach and properly framed in the international initiatives in this area: the Programme on Institutional Management in Higher Education (IMHE) led by the OECD, the International Ranking Expert Group (IREG) founded by the UNESCO European Centre for Higher Education (UNESCO-CEPES) and the EUA Rankings Review Report.

The research is approached from the careful analysis of the information provided by the simple and synthetic indices used, assessing the criteria for aggregation of simple indicators, the sensitivity of the synthetic indices and the rankings resulting from changes in the aggregation procedures. The project focuses on four types of university rankings based on different approaches and levels of

aggregation. The first is U-Ranking, which analyzes the performance of the university system and sums up in a single index its achievements in teaching, research, and innovation and technological development. The second general ranking, U-Ranking Volume, takes into account the combined effect of outcomes and size, ordering universities according to their overall contribution to the mission entrusted to the university system. In addition to these general rankings, two more specific ones are considered. U-Ranking Dimensions focuses on ranking universities in each specific dimension of their mission—teaching, research, and innovation and technological development—while U-Ranking Degrees ranks the bachelor's degrees offered by universities, providing information that is highly relevant for students in the process of deciding what university to study at.

In April 2019, the results of the 7th edition of this project were presented with update information for 62 universities (48 public and 14 private). This edition analyzes the elevated dropout rates of university students that lead to a significant waste of private and public resources dedicated to university training which causes every year the loss of millions of euros. U-Ranking results are published on the website www.u-ranking.es, which is organized into two main sections. The section U-Ranking of Spanish Universities presents the results for general rankings. The site also offers partial indexes for the 2014-2019 editions and a summary of the methodological approach used. The second main section, Select a University, offers an interactive tool that allows students and other interested parties to construct their own customized ranking of bachelor's degree courses based on their preferred area(s) of study, geographical preferences and academic orientation.

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Esenciales Series (2019)

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 carried out by the two institutions over the last twenty years. Brief, accessible and with the latest data available, the different issues in this series will examine questions dealt with in recent research, always in connection with the present.

During 2019, a total of 11 periodicals were published analyzing the Spanish economy in relation to questions as diverse as the evolution of population and birth rates, productivity, employment, socio-economic differences in education, rental market and gender gap in university graduates.

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The future of university leadership in advanced societies (2019)

This project on the future of university leadership, with special reference to Spain, will study the following topics:

- Performance profiles of their functions by the most outstanding universities in Spain and worldwide.
- Leading university profiles and synergies with their settings.
- Evaluation criteria for university teaching, research and knowledge transfer performance that identify leaders.
- The transformation of the mission of universities resulting from the impact of digitalization on teaching, research and knowledge transfer activities.
- Impact of digitalization on the tasks and employment of university students.
- Impact of digitalization on university careers and career transformation consequences for expert accreditation and training criteria.
- Digital scenario horizons for linkages between leading universities and their economic and social settings.

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Media social and economic contributions in the digital era (2019)

One of the areas that has been most disrupted by digitalization is that of the communications media. The technological transformations of recent decades have had an impact on both production processes and the characteristics of the resulting products. In addition, however, there have been profound changes in the business models of media companies and in relationships with readers and audiences.

In parallel, digitalization has led to the elimination of jobs and to a profound transformation of occupational profiles in the media and, likewise, has had an extraordinary impact on the financial structures of media companies, their marketing channels and their relationships, synergies and alliances with other companies, in particular with publishing and audiovisual companies.

This study aims to analyze the role and socio-economic contributions of the communications media today.

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Activities related to the economic impact of aging (2019)

The term “ageingonomics” refers to the economic impact of longevity. An aging population poses challenges for the welfare state in its current form, but also offers opportunities for the development of specific economic activities and also for the growth of regions featured by a greater incidence of aging or especially attractive to the elderly.

This monograph will analyze these issues, in particular considering the following:

- Characteristics of older households: size, habitat, income (salaries and pensions), wealth, education level, equipment, time use.
- Consumption and expenditure breakdown for older households by age group (55-64, 65-74 and 75 years and older), per person and by consumption-equivalent unit.
- Private consumption by older individuals: direct and indirect impact on aggregate income and employment and main sectoral and occupational effects.
- Revenue and employment impact of public spending on services for the older population.

- Intensity of demand for public health and social protection services by the older population.

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

The Ivie, in collaboration with the Valencian regional government, has 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 debate, design new methodologies and develop tools (such as databases and indicators) to foster knowledge and awareness of the state of public policy in Spain. In 2019, through the IvieLAB program, various seminars and conferences were held, methodological working papers were produced, and ten reports on diverse subjects were prepared, as detailed below.

Recent developments, current situation and socio-economic impact of immigration in the Valencian Community

In recent decades, immigration has been a significant driver of population growth in the Valencian Community. Current economic and social changes have affected migration patterns and foreign population composition and characteristics in the Valencian Community, creating new social, economic and public policy challenges. The objective of this project is to provide a comprehensive view of the current situation and evolution of the immigration phenomenon in the Valencian Community, focusing on how it affects the use of public services and the economy.

Throughout the report, a comparison of the results between the immigrant population and the Spanish population will be made, as well as between the Valencian Community and other Spanish regions. For this reason, an analysis will be carried out on the recent developments of the foreign population and its main characteristics, its contribution to population growth and to solving the aging population problem. Secondly, the features of immigrant people's households and sociodemographic traits, especially those related to education, health and social services, will be studied because of their relevance to the demand for public services. And, finally, the economic impact of the foreign population will be considered, examining their employment situation, income and consumption levels, wages and the amount of public expenditure they generate.

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Energy conversion in the Valencian Community. Lessons from international experience

The objectives set by the European Commission for 2030 horizon known as Winter Package on “Clean energy for all Europeans” are: 40% reduction in greenhouse gas emissions as compared to 1990, binding target of 32% for renewable energy sources and 32.5% for energy efficiency and 15% electricity interconnection among EU member states. In Spain, three out of four tons of greenhouse gases are emitted from the energy system, thus, energy transition must necessarily go through decarbonization and Spain’s Autonomous Communities will play a key role during this process. In this sense, the Valencian Community is in a favorable situation to generate electricity through renewable sources such as wind, sun or biomass because of its meteorological, geographical and productive characteristics. Recent technological improvements have made substituting conventional sources of energy with renewable ones a reality.

The project aims to analyze not only the potential of renewable energy to reduce greenhouse gas emissions but also to reduce or possibly eliminate dependence on fossil fuel imports. Eliminating barriers to self-consumption will allow the shift from a centralized system of distribution of energy to a distributed generation system, which will result in advantages for energy efficiency. In addition, and subject to the available information, the impact of the transition to a sustainable energy system in the main productive sectors of the Valencian Community (including ceramics) will be analyzed. Examples of actions taken in places where nuclear power plants have been closed will be taken into consideration to assess the possibility of a future closure of the Cofrentes power plant in the Valencian Community.

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The determinants of productivity of the Valencian Community in a regional context

The Valencian Community’s GDP per capita level is below the national average. This is caused by a low percentage of working population over total population and the region’s labor and capital productivity levels (and therefore their combined total factor productivity [TFP]) which are also below the Spanish average. The report will analyze the influence of demographic factors and productivity in the Valencian region on its GDP per capita level and trajectory. In addition, the project considers the population composition, human capital and investment in the region, as well

as the weight of the different types of assets that make up the capital stock, namely, infrastructures and real estate assets versus machinery and equipment, and the importance of human capital and intangible assets (R&D&I, programming, organizational capital). The analysis of TFP takes into account the influence of both the quality of work (human capital) and capital (distinguishing ICT from non-ICT). The study of the Valencian case is carried out using as reference both Spain and the economies of the most productive Spanish regions, including a descriptive analysis and an application of econometric and growth accounting techniques.

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Valencian firm productivity: The importance of size

Both the Valencian and Spanish economies are characterized by a high percentage of small firms compared to other countries. This report aims to study the relationship between firm size and productivity in the Valencian Community. It is based on a usual approach that describes the Valencian firm structure by size, comparing it with that of Spanish firms. In addition, it offers in-depth information on the Valencian productive fabric by providing a broader classification of firms, distinguishing among firms that grow rapidly (gazelles), large firms that do not grow rapidly (elephants), small firms that tend to stay small (mice), start-ups, etc. From this taxonomy two analyses will be carried out. First, the relationship between productivity and size, addressing the determinants of productivity, the percentage of companies according to their size versus leading firms in sector, the relationship between size and ICT intensity and the importance of restrictions on access to funding based on the size of the company. Second, the determinants and barriers to business growth will be considered.

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The cost of not being an autonomy

This report analyses the reasons that defend the State of Autonomy in Spain and, on the other hand, the consequences of not being a part of it. The analysis covers the administrative cost associated with the existence of the autonomous communities, the provision of public services according to territorial preferences, inequalities in the amount of resources and spending,

transparency and accountability, fiscal co-responsibility, the effects on the market unit and the contribution to the development of endogenous policies based on the use of local knowledge resources. The study evaluates these issues by considering the position of the Valencian Community in a decentralization scenario and in a hypothetical scenario of recentralization.

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The Valencian Community's economic productivity: The importance of inter- and intra-sectoral differences

This report analyses the change in the Valencian production model from two different perspectives. Firstly, the changes in the sectoral productive specialization of the Valencian Community are analyzed using a macroeconomic approach, comparing the evolution of its productive structure with that of Spain, in order to observe whether sectors that are directly related with new technologies or innovation are becoming more relevant or, if instead, traditional ones continue to dominate. Secondly, the sectoral analysis is accompanied by a firm-level study, using a database with information on over half a million Spanish firms and 60,000 Valencian firms. This data studies the intensity of relocation of companies within sectors, the obstacle that zombie (non-viable in the long run) firms represent for the transformation of the production model and the importance of frontier firms for productivity as a driving force for transformation.

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Infrastructures and firm access to digital services in the Valencian Community

This report complements the study *La Transformación Digital de la Comunitat Valenciana: Avances Recientes y Situación Actual* (The Valencian Community's digital transformation: recent progress and current situation) and expands on the analysis of infrastructures and firm access to digital services. The report is structured in two parts. First, it offers a global view, from a comparative

perspective, of the evolution and current positioning of the Valencian productive fabric in terms of digital infrastructures and accessibility. The second part focuses on firm access to new technologies, assessing whether it is homogeneous or, if on the contrary, it depends on the area where the firm is located. The main objective is to evaluate the importance of broadband access in industrial park areas and to identify the measures that need to be taken to avoid shortages or limitations.

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The economics of aging in the Valencian Community

The evolution of the population confirms an upward trend toward an increasingly aging society. Increased life expectancy and growing longevity have important economic consequences, such as variations in household consumption patterns (along with new companies and institutions that respond to these changes), size and composition of public expenditure (increased spending on health, long-term care and pensions), savings rates, demand for financial products, workforce, etc. The term “ageingnomics” or economics of aging refers to the economic effects of aging, a process that presents challenges for current welfare states and also offers opportunities to develop other complementary activities and increase the economic growth of the territories in which they are located.

This study analyzes two of these issues in the Valencian case: the importance of older people in private consumption (based on the consumption of goods and services of older people’s households) and their demand for public services, especially health care (primary, hospital, etc.) and social protection (dependency and population at risk of poverty). The data is offered according to age groups, specifically, 55-64 years, 65-74 years and 75+ years, since consumption patterns and needs vary depending on age and the demand for health and long-term services increases with age. Based on expenditure estimates, direct and indirect effects on the Valencian economy are calculated, both in terms of income and job creation. The report also analyzes the future of the main sectors affected by growing longevity and the strengths, weaknesses and opportunities that it presents to the Valencian Community.

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Evaluation of the economic contribution of the Valencian Community's audiovisual industry

The objective of this report is to update the study carried out in 2018, *Aportación económica de la industria audiovisual de la Comunitat Valenciana* (Economic contribution of the Valencian Community's audiovisual industry), with new estimates on the contribution of the audiovisual industry of the Valencian Community in terms of number of companies, number of employees, turnover and value added. The study will offer updated information on firm sales and value added for 2017, and up to 2018 for business census and employment.

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Evaluation of public procurement by the Valencian regional government. Part 2: Analysis of competition in public procurement procedures

As a continuation of the 2018 report on the duration of procurement processes, based on the ContraPubIvie2019 database, this project analyzes the intensity of competition in public procurement through mid-level indicators of the importance of processes in which only one company participates, the prevalence of certain types of procedures that limit the participation of companies or the existence of barriers due to contract size. It also studies the relationship between the level of competition and price savings in public contracts.

The second part of the report will focus on the study of the contracted companies, with the aim of detecting barriers that limit access to certain procurement procedures. In particular, it will consider the participation of small and medium enterprises, the location of the contracted companies, as well as the existence of possible patterns in awarding contracts to the same firms. The study will assess the situation of the Valencian regional government as compared to other regional governments or other levels of the Public Administration. In order to accomplish this, it will make use of the public contract database created by the Ivie with information from the Public Sector Procurement Platform.

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RESEARCH PROGRAMS WITH OTHER INSTITUTIONS

GROWTH AND CAPITALIZATION

Assessment of the Spanish transport infrastructure (2019-2020)

This study aims to provide a panoramic view of the Spanish transport infrastructure during the 1986–2016 period (or year of last data available) and to analyze the impact of transport infrastructure investment from the economic, social and environmental perspectives. The study also aims to develop a cost-benefit methodology for transport infrastructure investment and a methodology to facilitate the movement of residents in territories off the Spanish peninsula, seeking to increase connectivity and reduce mobility costs.

The study examines all types of transport infrastructure:

1. Road (distinguishing between toll motorways and roads)
2. Rail infrastructure (distinguishing between high-speed and standard rail)
3. Ports
4. Airports

Institution: Authority for Fiscal Responsibility (AIReF)

Research team:

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HUMAN CAPITAL, EDUCATION AND EMPLOYMENT

Estimating COFOG breakdowns for education expenditure (2019)

The objective of this project is to investigate the possibility of using UNESCO/OECD/EUROSTAT (UOE) data, together with other possible relevant data sources, in order to compile estimated breakdowns of COFOG (Classification of the Functions of Government) data, so as to provide separate data on government expenditure on early childhood education and care, expenditure on pre-primary education, and expenditure on primary education in a timelier manner and according to the ISCED 2011 classification.

Institution: SOGETI

Research team:

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Spain's Talent Map 2019. How the autonomous communities generate, attract and retain talent (2018-2019)

Prepared for the Cotec Foundation, this study analyzes and compares Spain's 17 autonomous communities' capacity to attract and retain talent. It offers the first regional ranking using the methodology developed by INSEAD to create the Global Talent Competitiveness Index (GTCI).

The index for each region is constructed from 52 indicators, grouped in six fundamental pillars that influence talent: enable; attract; grow; retain; available vocational and technical skills; and regional knowledge skills. The Community of Madrid is the leader in all the pillars analyzed except for Enable (led by the Basque Country) and Retain (Navarra).

The project includes the publication of a database, which will supplement the existing intangible assets database prepared by the Cotec Foundation and the Ivie. It therefore constitutes a step forward in understanding the factors that contribute to a society's well-being and the achievement

of intelligent, knowledge-based growth, the attraction and retention of talent, education, R&D, innovation and the construction of a digital society.

Institution: Cotec Foundation for Innovation

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Rodrigo Aragón (**Ivie**)

Iván Vicente (Universitat de València)

M^a Cruz Ballesteros (**Ivie**)

Alicia Raya (**Ivie**)

Susana Sabater (**Ivie**)

Belén Miravalles (**Ivie**)

Business leaders' commitment to education. Now and future challenges (2019)

This report analyzes the current situation of education and training in Spain, from the valuable perspective of firms, which is often not taken into account when considering the educational system. However, their point of view was made known thanks to the initiative of the Valencian Association of Entrepreneurs (AVE) and the collaboration of the Associations of Family Businesses in the Autonomous Communities in organizing several round table discussions with employers and human resource managers and by carrying out a survey to businesses on issues related to the educational system and the labor market.

This work represents, therefore, a double contribution: it provides new information and it does so from the employers' perspective that, although very relevant, is less usual. This analysis serves as a complement to the first part of the report, which includes a summary of the educational system in Spain from statistical sources and available data, in order to have a detailed objective analysis with which to contextualize and properly assess the opinion of employers.

This report is part of the collaboration program between **Ivie** and the Valencian Association of Entrepreneurs (AVE) to carry out an analysis and provide information on relevant socio-economic issues related to the Valencian Community.

Institution: Valencian Association of Entrepreneurs (AVE)

Research team:

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

José Ramón (dir.) (**Ivie** and Universitat de València)

Ángel Soler (**Ivie** and Universitat de València)

Héctor García (**Ivie**)

M^a Cruz Ballesteros (**Ivie**)

Susana Sabater (**Ivie**)

The design of a database to develop a map of the situation and outlook of vocational training in Spain (2019-2020)

The purpose of this contract is to provide technical assistance with the development of a database that maps the situation and outlook of vocational training in Spain. By combining the appropriate data and computing inferential statistics, information will be obtained on the medium- and long-term aspects that will determine if education and training efforts meet the labor market skills' demand in the productive and services sectors.

Institution: Ministerio de Educación y Formación Profesional

Research team:

Lorenzo Serrano (Ivie and Universitat de València)

Laura Hernández (Ivie)

Ana Lleó (Universitat de València)

Ángel Soler (Ivie and Universitat de València)

UNIVERSITIES

Updating and maintenance of the Valencian Public University System of Information–SIUVP (2019)

SIUVP (Valencian Public University System of Information) is a project born in 2012 from the collaboration of the five Valencian public universities with the aim of offering a complete set of indicators on its activity and results.

SIUVP is a window to the Valencian university activity, through which 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

In 2019, the SIUVP website has been updated twice with the latest information available.

Institution: Valencian Public Universities

Research team:

Francisco Pérez (dir.) (Ivie and Universitat de València)

Rodrigo Aragón (Ivie)

Irene Zaera (Ivie)

Héctor García (Ivie)

Yolanda Jover (Ivie)

Alicia Raya (Ivie)

Technical assistance to AIREF in evaluating work carried out on the efficiency of Andalusian public universities (2019)

The purpose of the contract is to assist the Independent Authority for Fiscal Responsibility (AIREF) in selecting and subsequently developing the work of a consulting company that will provide technical assistance in evaluating specific areas of Andalusian public universities in terms of technical strategies and procedures, efficiency and effectiveness.

Institution: Authority for Fiscal Responsibility (AIREF)

Research team:

Francisco Pérez (dir.) (Ivie and Universitat de València)

Joaquín Aldás (Ivie and Universitat de València)

Irene Zaera (Ivie)

Estimation of the potential demand for a degree in Interior Architectural Design (2019)

The object of the study is to make an estimate of the number of students that would be interested in studying a bachelor's degree in Interior Architectural Design at the Universitat Politècnica de València.

Institution: Universitat Politècnica de València

Research team:

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

Irene Zaera (Ivie)

KNOWLEDGE ECONOMY AND DIGITAL TRANSFORMATION

ABACO (2019)

ABACO (Knowledge-Based Activities) is a project that was launched in 2011 under the umbrella of the Campus of International Excellence (VLC/Campus), in collaboration with the Cotec Foundation, which aims to become a national benchmark for the measurement and analysis of knowledge-based activities and to promote the recognition of its importance for Spain's economic growth. The project has been commissioned by VLC/Campus and is organized around three elements: (i) the creation, through the ABACO website, of an open and accessible information system on all the relevant dimensions of knowledge-based activities, from a global and national perspective; (ii) the production, storage and dissemination of documents, reports, briefing notes, maps, and other audiovisual materials that analyze the trajectory of these activities in Spain, from multiple perspectives; (iii) and the encouragement of initiatives that aim to share opinions and views on the situation of the knowledge-based activities and, through them, promote knowledge-based competitiveness, growth and well-being.

The 2019 update of the ABACO System of Indicators includes the management and maintenance of the contents of ABACO's website, as well as the following tasks:

1. Definition, revision and increase in the number of indicators
2. Data update at international, national and regional level, based on the available data from statistical sources
3. Development of specific technical files for each indicator
4. Development of graphs representing the results of the indicators
5. Upload of indicators in pc-axis file format to easily access and download information.

Institution: Universitat de València and Universitat Politècnica de València

Research team:

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

Consuelo Mínguez (**Ivie**)

Jimena Salamanca (**Ivie**)

Belén Miravalles (**Ivie**)

Yolanda Jover (**Ivie**)

Alicia Raya (**Ivie**)

Technological changes, work and business activity: socio-economic impact of the digital era (2017-2019)

This research project for the Economic and Social Council (CES) aims to take stock of the social and economic impacts resulting from the gradual introduction of the digital economy Spain, both in its

most distinctive activities —providing services based on digital platforms— and in its permeation in other areas to modify processes in numerous ways.

The project has a four-fold aim. First, to identify the main impacts of these changes in two major spheres: employment and job content, and organization of work and companies. Second, to assess the implications of these impacts on the labor market, labor relations, business activity organization, and value chains. Third, to empirically evaluate these effects on the Spanish production system from the employment and business perspectives. And fourth, to analyze the factors conditioning the penetration of the digital economy, its probable scenarios, the barriers and levers that condition the take up of the opportunities it offers, and how to avoid the threats it poses. The project's interdisciplinary approach is reflected in a research team of specialists from various areas of the social sciences, and it is empirically oriented to the situation in Spain from a European perspective.

Institution: Economic and Social Council (CES)

Research team:

José María Peiró (dir.) (Ivie and Universitat de València)

Francisco Pérez (dir.) (Ivie and Universitat de València)

Bruno Broseta Dupré (Universidad Europea)

Alejandro Escribá (Ivie and Universitat de València)

Alicia Gómez (Ivie and Universitat de València)

Laura Hernández (Ivie)

Isabel Narbón (Universitat Autònoma de Barcelona)

Juan Pérez (Conselleria de Hacienda y Modelo Económico [GVA])

Lorenzo Serrano Martínez (Ivie and Universitat de València)

Ángel Soler (Ivie and Universitat de València)

Adrián Todolí (Universitat de València)

Rodrigo Aragón (Ivie)

M^a Cruz Ballesteros (Ivie)

Rosa Buitrago (Ivie)

Alicia Raya (Ivie)

Susana Sabater (Ivie)

Belén Miravalles (Ivie)

The intangible economy in Spain and its regions: 1995-2016 (2019)

The aim of this project is to analyze the role of intangible assets as a source of growth in the Spanish regions during the period 1995-2016.

The project is made up of two parts. The first is a database with investment estimates and accumulated stock of intangible assets information by regions and sectors. Based on this information, a report will be developed as the second part of the project, to examine the role that investment and capital endowments in these assets have played in the growth and development of

Spain and its 17 autonomous communities. In addition, the report will provide an assessment of its impact on well-being and the achievement of intelligent growth based on knowledge, education, R&D and innovation, and the development of a digital society.

Institution: Cotec Foundation for Innovation

Research team:

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

Javier Quesada (dir.) (Ivie and Universitat de València)

Eva Benages (Ivie)

Laura Hernández (Ivie)

Marta Solaz (Ivie)

Alicia Raya (Ivie)

Business dynamics in Spain. The importance of ICT (2019-2020)

This project will conduct a microanalysis of the characteristics of Spanish firms according to their business dynamics and type of sector they belong to: ICT production, ICT intensive or non-ICT intensive.

The analysis will respond to issues of interest such as:

- What are the dynamics of business growth in Spain and how has this phenomenon changed in the post-crisis recovery?
- What sectors do fast-growing firms belong to? Are they ICT producing sectors? Or ICT intensive sectors?
- Are fast-growing firms more productive than those in other sectors? How has their productivity evolved in recent years? Does the intensity of ICT production or use make a difference?
- Are fast-growing firms more profitable? Are there any differences in profitability depending on the sector in which they belong to?
- How does the financial structure and sources of funding of fast-growing firms compare with other types of firms? Are they more in debt? Are they more dependent on external funding?

Institution: Ramón Areces Foundation

Research team:

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

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

Consuelo Mínguez (Ivie)

ECONOMIC IMPACT

Economic impact of Mercadona in 2018 (2018-2019)

The objective of this study conducted for Mercadona is to estimate the economic impact the company has had on the Spanish economy in terms of employment and income (value added). To this end, three types of impacts are estimated: a) direct, deriving from the final sale of products in their stores; b) indirect, deriving from Mercadona's activity throughout the different sectors of the economy as a result of purchases from their suppliers and hiring various types of services; and c) induced, deriving from the consumption of income generated through direct and indirect impacts. In 2019, the research team studied the impact of the supermarket chain in 2018.

Institution: Mercadona

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)

Marta Solaz (Ivie and Universitat de València)

M^a Cruz Ballesteros (Ivie)

Belén Miravalles (Ivie)

Economic impact of Mercadona in Castilla and León in 2018 (2019)

The reports on the economic impact of Mercadona demonstrate the driving effect the company's activity has in generating income and jobs. As the supermarket chain is present all over Spain, it has an impact across the entire country at a level proportional to its activity in each region. The economic impact Mercadona has in a region arises both from the spending of Mercadona stores open in this region (on wages and salaries, operating costs, purchases from regional suppliers, etc.) and the spending of Mercadona stores outside the region (and central services) on goods and services provided by suppliers in this region.

Against this backdrop, the study aims to estimate the total economic impact of Mercadona in terms of production, value added and employment in the Spanish region of Castilla and León.

Institution: Mercadona

Research team:

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

Ramiro García (Universidad de Valladolid)

Marta Solaz (Ivie and Universitat de València)

M^a Cruz Ballesteros (Ivie)

Belén Miravalles (Ivie)

Economic impact of Mercadona in Murcia in 2018 (2019)

This study aims to estimate the total economic impact of Mercadona in terms of production, value added and employment in the Spanish region of Murcia.

Institution: Mercadona

Research team:

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

Francisco Alcalá (Ivie y Universidad de Murcia)

Marta Solaz (Ivie and Universitat de València)

Jimena Salamanca (Ivie)

M^a Cruz Ballesteros (Ivie)

Belén Miravalles (Ivie)

Analysis of the economic impact of the Valencian language in the Valencian Community (2018-2019)

This project aims to estimate and quantify the direct impact of the Valencian language on production, income (GDP) and employment. The report will include a disaggregated delimitation of the sectors with economic activities related to the Valencian language, as well as a directory of the businesses, associations and institutions within the region of Valencia that belong to each sector. The study will also estimate the relative weight of the economic activities related to the Valencian language in the total activity of the abovementioned sectors.

Institution: Conselleria d'Educació, Investigació, Cultura i Esport

Research team:

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

Ernest Reig Martínez (dir.) (Ivie and Universitat de València)

Fernando Pascual (Ivie)

Belén Miravalles (Ivie)

Natalia Mora Sanchis (Ivie)

M^a Cruz Ballesteros (Ivie)

Susana Sabater (Ivie)

Economic impact of the 38th Valencia Trinidad Alfonso EDP Marathon Race (2019)

The objective of this study, commissioned by the Sports Club Correcaminos of Valencia —in coordination with Trinidad Alfonso Foundation and Valencia's Sports Foundation, was to (i) quantify the economic impact of the celebration of the 38th Valencia Trinidad Alfonso EDP Marathon, which took place in 2018, in terms of production, income (value added) and employment of the Valencian economy; and (ii) to analyze the runners' satisfaction with this sport event. In relation to the first aim, the expenditure required to host the event as well as the tourist expenditure made by the participants during their stay in Valencia have been estimated. Once the full direct costs associated

to the marathon are computed, the overall impact is estimated using the input-output methodology. With respect to the second objective of the study, fieldwork was carried out, including a satisfaction survey of runners who took part in the race.

Institution: Sports Club Correcaminos of Valencia

Research team:

Joaquín Aldás (dir.) (Ivie and Universitat de València)

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

Eva Benages (Ivie and Universitat de València)

Irene Zaera (Ivie)

Alicia Raya (Ivie)

Economic impact of Arena Valencia data as of 2018 (2019)

The main objective of this project is to measure the economic impact (on income and employment) that the new multipurpose center Arena Valencia will have on the Valencian economy based on the estimated investment and operating costs of its construction. According to the report, the future project will create 300 jobs and will have an annual economic impact of over 10 million euros.

Institution: Licampa 1617, SL

Research team:

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

Eva Benages (Ivie and Universitat de València)

Consuelo Mínguez (Ivie)

Alicia Raya (Ivie)

Economic impact of the Trinidad Alfonso Foundation's program to support sports competitions in the Valencian Community (2017-2019) (Third edition)

The Trinidad Alfonso Foundation has presented the rules governing its Competition Support Program, which is aimed at promoting and supporting the organization of official sports competitions in the Valencian Community. To be eligible for support, sports events must be official competitions (national or international), and funding recipients must be Spanish federations or universities that organize official sports competitions hosted in the region. In addition to raising the national and international profile of the Valencian Community, the aim is to encourage wealth creation in the regional economy, given that it is the spending by participants from outside the region that is most significant when it comes to generating economic impacts.

In this context, the study estimates the economic impact in terms of income (GDP) and employment associated with the Competition Support Program, taking into consideration all the competitions that will be funded during the period covered by the program. The estimated impacts are generated both by tourist spending (by participants from outside the Valencian Community) and

expenditure on the organization of events. Two reports have already been carried out and a third is being developed on the economic impact of the competitions that will take place between 1 July 2018 and 30 June 2019. As in other economic impact studies, an input-output model will be used, and the corresponding table will be constructed for the Valencian Community.

Institution: Trinidad Alfonso Foundation

Research team:

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

Carlos Albert (Ivie and Universitat de València)

Rosa Buitrago (Ivie)

M^a Cruz Ballesteros (Ivie)

Economic and social impact of the annuities for 2017 and 2018 of the City of Arts and Sciences (2018-2019)

As detailed in the technical specifications section, this study aims to provide the City of Arts and Sciences (CACSA) with a set of economic and social profitability indicators of the CACSA project for 2017 and 2018.

The study aims to offer both economic and social impact indicators –the latter in terms of intellectual enrichment– that will inform CACSA of the impact that the City of Arts and Sciences has on tourism, and quantify the extent to which its scientific dissemination activities are reaching the general public.

Institution: CACSA

Research team:

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

Carlos Albert (Ivie and Universitat de València)

Fernando Pascual (Ivie)

Alicia Raya (Ivie)

Economic and social impact of the annuity for 2019 of the City of Arts and Sciences (2019-2020)

This work continues with the analysis of both the economic and social impact, in terms of intellectual enrichment, of the City of Arts and Sciences of València, but with data from the 2019 financial year. This study and those referring to 2017 and 2018 allow CACSA, on the one hand, to know the tourist impact that the activity of the complex has, and on the other hand, to quantify in what way its scientific divulgation work is reaching society.

Institution: CACSA

Research team:

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

Fernando Pascual (Ivie)

Impact of sporting events at the L'Alqueria del Basket in 2018 (2019)

In 2017, Valencia Basket inaugurated L'Alqueria 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'Alqueria del Basket aims to host various sporting events, especially those related to basketball.

The Ivie will measure the economic impact of the sporting events that take place in L' Alqueria del Basket. The first report analyzes the impact of the Basketball Valencia Challenge, the Final Phase of the Women's League and the Endesa Mini Cup.

Economic impact refers to the increase in income (value added, GDP equivalent) and the employment generated in the Valencian economy as a result of the spending incurred by visitors and event organizers and is measured by using an input-output methodology, distinguishing the direct, indirect and induced impacts.

Institution: Fundació València Bàsquet 2000

Research team:

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

Carlos Albert (Ivie and Universitat de València)

Rosa Buitrago (Ivie)

M^a Cruz Ballesteros (Ivie)

Economic impact of Feria Valencia in 2018 (2019)

Feria Valencia (Valencia Trade Fair) is one of the top exhibition venues for national and international events. One of Feria Muestrario Internacional de Valencia's goals is to promote industry and trade in the Valencian Community. When it organizes an event, the companies that attend as exhibitors promote their business and thus increase their sales, making themselves more visible to potential customers.

The aim of the study is to measure the impact of Feria Valencia's activity on the Valencian economy in terms of output (sales), income (GDP) and employment. This is done by estimating the direct, indirect and induced impact of the institution's activities. The impacts are estimated at an aggregate level for the economy as a whole and for individual industries, so as to be able to identify the industries that benefit most from Feria Valencia's activity. This is the second economic impact report developed, the first was presented in 2018 with data corresponding to activities that took place in 2017.

Institution: Feria Valencia (Valencia Trade Fair)

Research team:

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

Carlos Albert (Ivie and Universitat de València)

Eva Benages (Ivie and Universitat de València)

Fernando Pascual (Ivie)

Alicia Raya (Ivie)

Assessment of the use of the Valencia 5k Circuit (2019)

The 5k Circuit located in the Turia Gardens in the city of Valencia, promoted by the Trinidad Alfonso Foundation (FTA), covers 5,731 meters with a special surface to soften the impacts caused by running which is certified by the Institute of Biomechanics of Valencia.

In November 2015 a study was carried out to estimate the use of the circuit and to know the opinion of the runners. New studies were also carried out in 2016, 2017 and 2018 to determine the evolution of the number of users and uses of the circuit.

Due to some recent improvements that have been made to the 5k Circuit, the FTA wants to carry out a new estimation of the use of the circuit to confirm its increasing popularity, as well as a survey to determine the users level of satisfaction.

Institution: Trinidad Alfonso Foundation

Research team:

Iván Arribas (dir.) (Ivie and Universitat de València)

Alicia Raya (Ivie)

PUBLIC POLICY DESIGN AND EVALUATION

SWOT analysis and assessment of the relative needs of the Valencian Autonomous Community for the National Strategic Plan of the 2021-2027 CAP (2019)

This study aims to carry out a SWOT analysis and assessment of the relative needs of the Valencian Community that should be included in the Strategic Plan of the 2021-2027 CAP (Common Agricultural Policy). Thus, analysis is done on the needs of each of the Specific Objectives of the CAP foreseen in the Regulation proposal of the European Parliament.

Institution: Agència Valenciana de Foment i Garantia Agrària (AVFGA)

Research team:

Carlos Albert (Ivie and Universitat de València)

Intermediate assessment of the Intelligent Specialization Strategy for Research and Innovation in the Valencian Community (RIS3-CV) (2019)

This study aims to perform an intermediate assessment of the RIS3-CV planned for 2019 covering the 2014–2018 implementation period. This assessment must determine to what extent the objectives set have been achieved, identify any necessary measures for improving the current RIS3-CV (review of priorities, proposal of new measures, monitoring of deadlines, etc.) based on a review of the context and initial diagnosis that allows updating the SWOT analysis and, therefore, the assessment on whether the priorities are still valid in a new framework of action.

Institution: Conselleria d'Economia Sostenible, Sectors Productius, Comerç i Treball

Research team:

Ernest Reig (**Ivie** and Universitat de València)

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

Silvia Mollá (**Ivie**)

Irene Zaera (**Ivie**)

Ana Lleó (Universitat de València)

Alicia Raya (**Ivie**)

Belén Miravalles (**Ivie**)

Technical assistance to determine unit costs to be paid to wine producers for vineyard restructuring operations (2019)

The objective of this project is to review the sources of information available and to develop a methodology to calculate 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 if they are carried out with their own resources or by third parties.

Institution: AVFGA (Agència Valenciana de Foment i Garantia Agrària)

Research team:

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

Pilar Chorén (**Ivie**)

VALENCIAN ECONOMY

Analysis of the intensity of the economic relations between Madrid and the Valencian Community (2019)

The objective of this report is to analyze the intensity of the socioeconomic relations between the Spanish regions of Madrid and Valencia and to quantify the trade and financial flows, as well as the

movement of people between the regions. To estimate the intensity of these connections, data on purchases and sales between firms in Madrid and Valencia will be used, in addition to information on the share of Valencian capital in Madrid firms and vice versa. Finally, the report will also examine the flow of people that migrate from one region to the other and the proportion of people from one region that live or work in the other.

Institution: Fundación Conexus

Research team:

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

Consuelo Mínguez (Ivie)

Marta Solaz (Ivie)

M^a Cruz Ballesteros (Ivie)

Susana Sabater (Ivie)

Belén Miravalles (Ivie)

Promotion, socio-economic development and territorial integration of the Valencian Community (2017-2019)

The aim of this collection of documents, developed for the Valencian Association of Entrepreneurs (AVE), is to provide information and analysis on relevant socio-economic questions related to the Mediterranean Corridor. The AVE champions the construction of the corridor as part of its mission to defend the interests of the Valencian Community, and also includes initiatives calling for rectification of the lower levels of resources, investment and public funding allocated to the region.

The AVE-Ivie partnership will develop two types of documents. First, the project will publish Foco AVE documents which are brief documents, developed on a regular basis, describing the current evolution and position of the Valencian economy in the national context, providing a diagnosis of its strengths and weaknesses in terms of the future convergence toward a more knowledge-based economy with correspondingly higher levels of productivity and GDP per capita. Second, the project includes other lengthier reports on subjects related to the economy or education of the regions within the Mediterranean Corridor.

Institution: Valencian Association of Entrepreneurs (AVE)

Research team:

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

Carlos Albert (Ivie and Universitat de València)

Eva Benages (Ivie and Universitat de València)

Consuelo Mínguez (Ivie)

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Ángel Soler (Ivie and Universitat de València)

Héctor García (Ivie)

M^a Cruz Ballesteros (Ivie)

Alicia Raya (Ivie)

Susana Sabater (Ivie)

Belén Miravalles (Ivie)

INCOME DISTRIBUTION

Household expenditure patterns in Spain: evolution in time (1973-2017) and the impact of the crisis of 2007 (2018-2019)

Household expenditure patterns, defined as the average amount spent on different items making up the shopping basket, vary significantly depending on the different socio-economic characteristics, such as income, education level of the main breadwinner, social class, stage in life, geographic location, etc. Having accurate knowledge of these differences allows to better understand the determinants of spending, the type of households predominating in the areas analyzed (city or neighborhood) and which products will have a high demand.

These expenditure patterns are not static, they slowly change under stable conditions, while at high speeds during crisis periods. For this reason, the project will also analyze the changes in expenditure during the current period with respect to previous periods of growth, as well as, what type of expenses have been removed from the shopping basket and replaced with others.

Institution: Ramón Areces Foundation

Research team:

Joaquín Aldás-Manzano (dir.) (Ivie and Universitat de València)

Marta Solaz (Ivie)

M^a Cruz Ballesteros (Ivie)

Belén Miravalles (Ivie)

GLOBALIZATION

Baltic Countries Capital, Labour, Energy, Material and Service Inputs (2017-2019)

Through a Marie Skłodowska-Curie grant, the European Commission is funding the project Baltic Countries Capital, Labour, Energy, Material and Service Inputs, which will extend the research for the EU KLEMS project to the Baltic countries. The aim of BALTIC KLEMS is to develop a specific methodology adapted to these countries to analyze patterns of productivity growth and evolution.

Institution: European Commission

Research team:

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

Toma Lankauskiene (Vilnius Gediminas Technical University)

Eva Benages (Ivie and Universitat de València)

Juan Carlos Robledo (Ivie)

LAKLEMS - Situation and recent evolution of productivity in Latin American countries (2019-2020)

Following the methodology used in WORLD KLEMS, the LAKLEMS project includes a database that collects the main economic variables of a group of Latin American countries by using a common approach in the collection and processing of the information. The objective of the project is to revise and update the information already available on five Latin American countries (Colombia, Chile, Argentina, Brazil and Mexico) and include information on five other countries: Dominican Republic, Costa Rica, Peru, Honduras and El Salvador.

Institution: Inter-American Development Bank

Research team:

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

Eva Benages (Ivie and Universitat de València)

Data for European ICT industries analysis (PREDICT). Part 2 (2018-2019)

The aim of this study is to update the data in the report developed for the European Commission's Joint Research Centre, which analyses not only the ICT sector, but also the media, e-content and retail sectors, as well as the intensity of ICT use in European industries and the EU's position in the global value chain of technology products.

Institution: European Commission

Research team:

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

Juan Fernández de Guevara (Ivie and Universitat de València)

Rodrigo Aragón (Ivie)

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Consuelo Mínguez (Ivie)

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Juan Carlos Robledo (Ivie)

Jimena Salamanca (Ivie)

Marta Solaz (Ivie and Universitat de València)

Iván Vicente (Universitat de València)

Héctor García (Ivie)
Rosa Buitrago (Ivie)
Alicia Raya (Ivie)
Susana Sabater (Ivie)

SECTORAL STUDIES

Technical assistance for the Family Business Chair at the Universitat de València (2017-2019)

This project provides technical assistance to the Chair of Family Business of the Universitat de València (CEFUV) in areas of research and communication. Tasks undertaken include the gathering and analysis of secondary data, support in the integration and exploitation of databases, statistical consultancy and support, document layout, and help with maintenance of the CEFUV website.

Institution: Universitat de València

Research team:

Alejandro Escribá (dir.) (Ivie and Universitat de València)
Carlos Albert (Ivie and Universitat de València)
M^a Cruz Ballesteros (Ivie)
Alicia Raya (Ivie)

The Spanish food and agriculture sector in the European context. 2018 Report (2019)

The 2018 report on the Spanish food and agriculture sector in the European context (*Observatorio sobre el sector agroalimentario español en el contexto europeo. Informe 2018*) analyzes the behavior of the Spanish food and agriculture sector compared to other EU countries, quantifying side by side the production branches that define the sector. This edition of the study for Cajamar includes for the first time the analysis of a new link in the food and agricultural chain: distribution, alongside the primary sector and processing.

Institution: Cajamar

Research team:

Joaquín Maudos (dir.) (Ivie, Universitat de València and CUNEF)
Jimena Salamanca (Ivie)
M^a Cruz Ballesteros (Ivie)
Belén Miravalles (Ivie)

FIRM COMPETITIVENESS

Corporate Governance, Strategy and Competitiveness Observatory (GECE observatory) (2019)

The aim of the Corporate Governance, Strategy and Competitiveness (GECE) Observatory, in the Valencian Community is to study levels of competitiveness in Valencian firms, and the factors and internal criteria that facilitate it. The agreement between the **Ivie** and Bankia to create the observatory also stipulates the publication of quarterly reports on its main conclusions, together with a collection of short informative notes (Keys to competitiveness) and descriptions of successful firms in the Valencian Community that can provide a benchmark for other companies.

The GECE Observatory will combine macroeconomic information (breakdown by sector) with new databases providing detailed information about firms, such as their financial statements, shareholders, capital structure, internal governance, etc. In 2019, the projects's web was created: <https://www.observatorioegece.es/>

Institution: Bankia

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**)
Rodrigo Aragón (**Ivie**)
Héctor García (**Ivie**)
M^a Cruz Ballesteros (**Ivie**)
Alicia Raya (**Ivie**)
Susana Sabater (**Ivie**)
Belén Miravalles (**Ivie**)

7.1.2. International networks

The **Ivie** collaborates in nine international networks: SPINTAN, Competitividad, ICTNET, World KLEMS, LA KLEMS, EU KLEMS, Wolpertinger, INDICSER and PREDICT.

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. The latest initiative of this global network is ASIA KLEMS, which includes the Asian countries. 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) is 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 García-Montalvo is researcher of the Projects ERC Grant PERSISTDEBT (2015-2019), *Debt and persistence of financial shocks*, and ERC Grant HISTROOTS (2015-2019), *Historical roots of conflict and development: from prehistory to the colonization*, funded by the European Research Council.

Iván Arribas is statistical expert of the Project *Public Procurement Initiative* funded by the European Commission (2017-2019).

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.

Professor José María Peiró is the director of the Universitat de València research team which collaborates with the European Institute of Innovation and Technology (Climate-KIC) and the Provdavis School of International Management and Technology in the project "Certified Professional. European Certification Framework for Postgraduate Professional Education (2014-2019)".

In addition, José María Peiró is head of the Spanish team of the Project *European Safety Training and Evaluation supporting European Mobility (ESTEEM)* (2017-2020), coordinated by the University of Sheffield, with participation by the University of Bologna, IPPLE, Valora prevención and the Universitat de València, funded by KA2 Strategic Partnerships of Horizon 2020 (2017-1-UK01-KA202-036560).

Finally, José María Peiró is also head of the Spanish team in the research project EVENT, *European and Vietnamese collaboration on graduate employment* (2016-2019), under the European initiative Erasmus + Capacity Building for Higher Education, No. 573903-EPP-1-2016-1- SE-EPPKA2-CBHE-SP, funded by the Education, Audiovisual and Culture Executive Agency of the European Commission and led by the University of Uppsala in collaboration with Hue University (Vietnam).

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

The **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 2019, the researchers and Associate Researchers participated in the following projects:

ECO2016-77579-C3-3-P: *Sobre la estrategia corporativa de comunicación Financiero-contable: Elecciones y objetivos* (2017-2019). Beatriz García Osma and Encarna Guillamón Saorín (Main researchers), Belén Gill de Albornoz.

GC2018-099415-B-I00: *Digitalización financiera en un contexto de revolución digital: competencia, regulación y adopción* (2019-2021). Santiago Carbó (Main researcher). Ministerio de Ciencia, Innovación y Universidades.

ECO2016-80002-R: *Roots for growth and competitiveness in Family and Non-Family SMEs. Microfoundations in the governance, management and ownership bodies* (2017-2020). Alejandro Escribá-Esteve y Vicente Safón (Main researchers).

ECO2017-82696-P: *Crisis económica y fragilidad social: el papel de las instituciones, la diversidad social, la política pública y los medios de comunicación* (2018-2020). Marta Reynal Querol (Main researcher), José García-Montalvo.

ECO2017-84828-R: *Factores de competitividad en la economía digital y del conocimiento* (2018-2021). Joaquín Maudos (Main researcher), Juan Fernández de Guevara.

PSI2016-78158-R: *Cooperación entre profesionales y familiares en centros de atención a personas con discapacidad intelectual y su impacto sobre la calidad de vida (COPDICA)* (2017-2020). Vicente Martínez-Tur and Carolina Moliner (Main researchers), José Ramos.

ECO2016-76818-C3-2-P: *Investigación sobre Capital Humano y Desigualdad, y sobre Tecnología y el Medio Ambiente-2* (2016-2019). Gustavo Marrero Díaz (Main researcher), Jesús Rodríguez-López. Ministerio de Ciencia, Innovación y Universidades

Francisco Alcalá es miembro del equipo investigador del *proyecto Mercados globales, calidad, innovación, longevidad y bienestar*, financiado por Secretaría de Estado de Investigación, Desarrollo e Innovación, Ministerio de Ciencia, innovación y universidades (2019-2021).

7.2.3. Other projects financed by public institutions

José García-Montalvo is the main researcher on the research team 2017SGR-616 *Macroeconomía Aplicada i Mètodes Quantitatius* (2017-2020) funded by the Agencia Gestio Ajuts Universitaris i Recerca.

José María Peiró is director of *Nuevos desafíos en el estudio del bienestar laboral en el escenario de salida de la crisis. Estudio internacional de la calidad del empleo, factores personales, generacionales y socio-culturales* (EMPQUAL) (2017-2019) financed by the Spanish Ministry of Economics and Competitiveness and FEDER (European Regional Development Fund).

José María Peiró is also main researcher of the Project Prometeo 2016/138, *Dynamics of subjective wellbeing and its dimensions: A study form the adaptation theory* (2016-2019) funded by the Valencian Government. **Ivie** researcher José Ramos also takes part in the project.

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

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).

José Manuel Pastor is main researcher responsible 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 for the support of public economy research groups in the research centers of the Comunitat Valenciana of the Conselleria d'Hisenda i Model Econòmic (2019).

7.2.4. Other projects financed by private institutions

José Ramos is the main researcher for the Project *Colaboración en el Análisis y Evaluación del II Plan de Igualdad entre Hombres y Mujeres 2015-2018* (2016-2018) funded by Banco de Crédito Social Cooperativo/Cajamar.

Belén Gill de Albornoz is director of the Project *La Comparabilidad internacional de la información financiera: Un reto para la investigación y la formación* (2018-2019) financed by the Spanish Association of Accounting and Business Administration (AECA).

Belén Gill de Albornoz is also director, along with Susana Callao and Ignacio Jarne from the University of Zaragoza, of the report *Estudio técnico Identificación, descripción y análisis de los tipos de salvedades en los informes de auditoría de las empresas españolas durante los ejercicios 2016 y 2015* (2018), financed by the Spanish Association of University Lecturers in Accounting (ASEPUC) and the Spanish Institute of Chartered Accountants (ICJCE).

In addition, José Enrique Devesa Carpio is also member of the research team of the project *Educación financiera para universitarios. Diseño de una formación para la vida*, funded by Funcas (2019). Main researcher: Inmaculada Domínguez Fabián.

8. DATABASES AND INDICATOR SYSTEMS³

Several **Ivie** projects have generated databases or indicator systems of interest to economic research, and to facilitate decision making based on appropriate up-to-date information. The **Ivie** website provides access to the Institute's 26 databases and indicator systems classified into eight subject blocks: growth and capitalization, human capital and human development, socio-economic, globalization, international, public sector, universities, and knowledge economy.

In addition to these, in 2019, two new databases⁴ have been developed: *Investment and capital endowments in durable goods of Spanish households (2000-2017)* and *The economic value of human capital in Spain and its regions*, which make up a total of 28 databases.

8.1. Growth and capitalization

Capital stock in housing in Spain and its territorial distribution

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/

³ 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.

⁴ At the time of publication of this Annual Report, information on these two new databases was not included on **Ivie**'s website.

Stock and capital services in Spain and its territorial distribution

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 2017 and until 2016 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 31 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 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-**Ivie** series.

The extensive database, that **Ivie** 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. Nearly 900 published specialized works have been based on this information, as of November 2019.

The database is available on the BBVA Foundation website: www.fbbva.es/

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

Since 1995, **Ivie** 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 **Ivie** 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/

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) 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 to 2011 for the whole Spanish economy with a wide level of sectoral disaggregation (24 sectors, NACE Rev.2). 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.

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 AIPIB, and those not yet included in the national accounts which are grouped under the name AIMAPIB (intangibles 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>.

Investment and capital in the durable goods of Spanish households (2000-2017)

The database *Investment and capital in the durable goods of Spanish households (2000-2017)* contains information on the economic value of durable consumer goods accumulated by Spanish households over time, from a national and regional perspective. The database has been structured in two sections. The first section (A.1) provides information on investment in durable goods by households, while, the second section (A.2) collects the main series of net capital stock in durable goods.

The first section (A.1) presents the series of investment at current prices (A.1.1) and investment at constant prices of 2010 (A.1.2), which cover the period 2000-2017 and are available for Spain and its regions. A greater detail of investment is provided at national level, comprising a total of 33 individual goods, grouped into four large categories: furniture and household goods; household appliances; vehicles and other means of personal transportation; and digital equipment. At regional level, series are available for 11 durable consumer goods that are grouped in the same four large categories as the national breakdown.

The second section (A.2) corresponds to the net capital stock in household durable goods. As in the previous section which is aimed at investment, the information is presented in current terms (A.2.1) and in constant terms (A.2.2) of 2010, and with the same temporal and territorial coverage and detail by type of durable goods.

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 the **Ivie**'s website: 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 **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.

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; reasons for looking for a job, 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, leave home, form their first relationship and have 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.

The economic value of human capital in Spain and its regions

The amount of information on human capital available at the moment is not homogeneous for Spain and its regions. Particularly, the economic value of human capital by regions is very limited because, in general, the information available focuses on educational-type indicators. Given this situation, the objective of this new database is to compile information on the value of human capital in Spain and its regions since 2000, with three basic characteristics:

- a) to use standard methodologies that comply with recent international practices.
- b) to obtain results with a territorial breakdown.
- c) to perform an economic assessment, in monetary terms, of human capital.

In this database, the value of human capital for each year corresponds to the value of the gross labor income that a person of working age in that year will generate throughout the rest of their lives. Therefore, it depends on their level of education, training and experience at that given time and foreseeably in the future, their willingness to participate in the labor market, their present and future employment prospects and their life expectancy, as well as on the future evolution of the economy's productivity, resulting from the accumulation of other types of capital and from technological and organizational improvements. The application of this approach allows obtaining the estimates of the value of human capital in Spain and its regions for the period 2000-2018.

8.3. Socio-economic regional differences

Access to banking services

The restructuring of the Spanish banking industry has led to a drastic cutback in installed capacity, which is reflected in the closure of more than 40% of the branches that were operating in 2008, before the onset of the financial crisis. This drastic cutback has affected people's access to banking services, resulting in an increase in the percentage of the population living in towns and villages where there is no bank branch.

In this context, the aim of this database is to update the indicators of accessibility to banking services by calculating, for 2017, the number and population of municipalities that do not have a bank branch. This analysis is being performed for all the regions of Spain (disaggregated at municipal level), so as to obtain a comparative picture of financial accessibility in the provinces and autonomous communities. The observatory's findings will help the Valencian Regional Government detect and remedy financial exclusion.

The database is available for download in Excel format on the **Ivie** website: <http://www.Ivie.es>.

Inequality in Spain, its regions and its provinces

Sponsored by the 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 the **Ivie**'s website (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/

Homogeneous population series

It is for more than one decade now that 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 Homogeneous population series.

The process of homogenization of the de jure resident population, taking into account the changes in the 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, 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 the 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.

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 1975-2017. 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. In May 2019, data was updated until 2018.

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 have been 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 the interested public via the **Ivie** website (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 and was 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.

8.4. Globalization

INTEGRA

The INTEGRA data bank is framed within **Ivie'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 provide 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.

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 Conference Board is responsible for coordinating the work of all members of the consortium and keeping the database up-to-date.

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. The latest initiative of this global network is ASIA KLEMS, which includes the Asian countries. In the same way, the **Ivie** participates actively in the development of World KLEMS that frames the rest of projects and regional KLEMS databases.

In addition to the **Ivie**, more than 40 research centers and institutions from around the world participate in the KLEMS consortium. Information is available at www.euklems.net and can be accessed through **Ivie'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), 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), 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 sub-sectors 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 2016 (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 2017 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.

Also, together with the JRC, meetings in Brussels aimed at policy makers and international experts are organized to present the results of the project. The main conclusions of the research carried out are summarized in Policy Briefs, which include economic policy recommendations.

The database is available since 2017 on the **Ivie**'s website: www.Ivie.es.

8.6. Public sector

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 differences between regions to be distinguished 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** which has a double objective. First, to generate new fresh information on the public-sector performance in Spain and its regions. Second, to analyze the data obtained in order 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), contains regionalized data for the period 2000-2008 and covers information on the size 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 at the BBVA Foundation website, www.fbbva.es, contains information on public health expenditure by region covering the period 1991-2010 in Spain, with specific data for 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, 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), which are assessed through 25 indicators grouped into four different areas: resources, output, quality and internationalization. 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.

U-Ranking 2019 analyzes a total of 62 Spanish universities, 48 public and 14 private universities.

This information is available on the U-Ranking project's website: 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 with the aim of offering a complete set of indicators on its 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) is updated twice a year with the latest available data.

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, in collaboration with the Cotec Foundation 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 users a powerful database which is regularly updated with over 200 indicators structured in five areas: New technologies, Human capital, Innovation system, Business environment, 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.

Economic value of knowledge

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 The database 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.

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

9. SCIENTIFIC MEETINGS⁵

The Institute has taken an active part in this field through the participation of its associates in national and international meetings, and also by organizing and supporting 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.

9.1. Organized by the **Ivie**

▪ The seminar **UNIVERSITY INFORMATION SYSTEMS: RANKINGS AND INDICATORS** was held at ADEIT University-Business Foundation on 4 June with the objective of analyzing the possibilities that the increasingly growing amount of information available at all levels offers for generating databases, in general, and, in particular, those related to the classification of universities.

The objective of the seminar was twofold. On the one hand, to offer recent results on the Spanish university system from different perspectives with data prepared by institutions of notable reputation, many of which are often used by directors of academic institutions to design strategic plans and are undoubtedly a very valuable tool for decision making.

On the other hand, the seminar delved into the most adequate methods to convert large heterogeneous data systems into easy to read indicators. The amount of information currently available will increase at a very fast rate in the near future, making the techniques to manage this information increasingly complex. Therefore, it is necessary to continue exploring alternatives for the construction of synthetic indicators and rankings.

The seminar had as speakers well accredited academic specialists in the analyzed topics, as well as a wide audience related to the educational systems, in addition to people interested in information systems and the elaboration of rankings in different contexts.

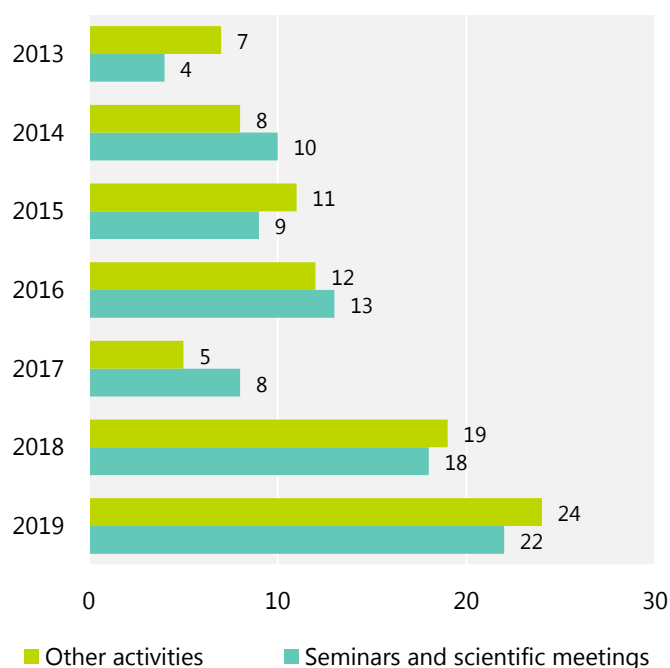
▪ On 18 September the **10th CONFERENCE ON THE BANKING SECTOR** organized by the **Ivie** took place in Valencia. On this occasion, the Governor of the Bank of Spain, Pablo Hernández de Cos, gave the lecture "Profitability of the Spanish banking sector".

The lecture given by the Governor before an audience of more than 250 people, focused on the challenges that the banking sector faces in order to increase efficiency and improve profitability. **Ivie**

⁵ 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.

Research Director and Deputy Director, **Francisco Pérez** and **Joaquín Maudos**, respectively, were in charge of opening the event and the Regional Minister for Finance and the Economic Model, **Vicent Soler**, offered the closing words.

Figure 6.
Seminars,
scientific
meetings and
other activities



- The seminar **LET’S TALK ABOUT EUROPE: WHAT KIND OF EUROPE DO WE WANT?**, celebrated in Valencia on 24 September, was organized within the “Let’s talk about Europe” initiative of the Spanish Ministry of Foreign Affairs and aimed at encouraging discussion on the future of Europe and improving the effects of belonging to the European Union. The seminar brought experts from the business, public administration and university communities together with university students to talk about the advantages of the EU, especially for employment prospects.

The event was inaugurated by **José Manuel Pastor**, Dean of the Faculty of Economics at the Universitat de València, and, **Matilde Mas, Ivie** Director of International Projects and organizer of the seminar. In the round table discussion that followed, the following experts participated: **Joaquín Aldás**, Vice-Chancellor of the Universitat de València; **Araceli Ciscar**, CEO of the Dacsa Group; **Vicente Francés**, Deputy Director of the ADEIT University-Business Foundation; **Andreu Iranzo**, General Director of European Funds of the Valencian Regional Government.

Also during the discussion, an interactive survey was conducted by **Ángel Soler** to determine the participants’ opinion of Europe, in which over 90% felt that EU membership was positive and that EU citizens achieved more together than separate.

▪ Between 15 October and 26 November, the four-part seminar **PUBLIC FUNDING OF SPAIN'S AUTONOMOUS COMMUNITIES**, organized by **Ivie** Research Director, Francisco Pérez, took place in Valencia. The seminar served as a training program for public workers of the Valencian Ministry of Finance, combining technical training lectures with informative round table discussions. The four sessions were:

- Approach and evolution of regional funding. 15 October
- Problems with the current funding system. 4 November
- New funding model. 12 November
- Model reform. 26 November

▪ Also on 18 October, at the Faculty of Economics in Valencia, the international workshop **KNOWLEDGE, INNOVATION AND REGIONAL DEVELOPMENT: NEW EVIDENCE** was held with the support of the BBVA Foundation, to analyze the determinants of regional and local development, focusing on innovation as an economic driver.

The activity was aimed not only at academics interested in regional economics, but also at students and individuals, including public policy makers. The speakers were expert researchers from different Spanish and European universities, such as **Alice Bertolotti** from the Polytechnic University of Milan, **Jasmina Berbegal-Mirabent** from the International University of Catalonia and **Liza Jabbour** from the University of Birmingham. Professor of Applied Economics at the Universitat Jaume I and **Ivie** Associate Professor, **Emili Tortosa-Ausina**, was the organizer of the international workshop.

▪ The BBVA Foundation and the **Ivie** organized the seminar **LONGEVITY AND LIVING CONDITIONS IN SPAIN** on 21 November to analyze the economic and social challenges for Spain that growing longevity, or the duration of human life beyond expected present. The seminar was organized in two parts that analyzed firstly, the socioeconomic features of older people's households, and secondly, their overall living conditions.

In the presentation of the seminar, **Joaquín Maudos**, **Ivie** Research Deputy Director, highlighted that, although increased public spending on health, pensions and dependency may worsen Spain's economic deficit, it also creates new market services for the growing population of elderly people in Spain.

The first part of the seminar was given by **Francisco Pérez** (**Ivie** Research Director), **Mercedes Ayuso** (Professor of Actuarial Science at the University of Barcelona) and **Laura Crespo** (Head of the Bank of Spain's Spanish Survey of Household Finances Unit). The second part of the seminar, which focused more on the quality of life of older people rather than their economic situation, was given by **Aida Solé-Auró** (Professor of political and social science at Pompeu Fabra University), **Juan Oliva** (professor of Economic Analysis and researcher in the Research Seminar on Economics and Health at the University of Castilla-La Mancha) and **Alba Catalán** (**Ivie** economist).

- Finally, on 10 December, the **Ivie**, once again in collaboration with the BBVA Foundation, presented the seminar **THE VALUE OF HOUSEHOLD AND LEISURE ACTIVITIES: DOES GDP MEASURE HUMAN WELL-BEING IN A DIGITAL SOCIETY?** analyzing the existing difficulties to quantify the value of non-market activities excluded from national accounts, while providing possible alternatives of measurement.

In the first part of the seminar, the following experts took part: **Carlos Angulo** (former area manager of the Spanish National Statistics Institute [INE]), **Matxalen Legarreta** (Professor at the University of the Basque Country) and **Juan Carlos Robledo** (**Ivie** research technician). During the second part which focused more on quantifying the value of leisure time, the following participated: **Laura Hernández** (**Ivie** research technician), **Xavier Raurich** (Professor at the University of Barcelona), **Alicia Gómez** (Assistant Professor of the Universitat de València and **Ivie** research professor), **Ezequiel Uriel** (Professor Emeritus at the Universitat de València and **Ivie** research professor) and **Eva Benages** (Adjunct Professor at the Universitat de València and **Ivie** research technician).

IvieLAB conferences and seminars

- The IvieLAB (Laboratory for the Analysis and Evaluation of Public Policy) is an initiative created by the **Ivie** in collaboration with the Valencian Regional Government to generate ideas, design new evaluation methods and prepare information in order to study the actions of public policies in different areas and improve their design. This project continues with the series of lectures and seminars titled *Evaluation of the sustainability of welfare policies in the 21st century* that began in 2018.

In 2019, six different conferences were organized with participation by high-level experts in areas such as health care, productivity, digitalization and corruption.

- The first talk of the series took place on 9 April with the lecture **Barriers to business growth and productivity** given by **Vicente Salas**, (Professor of the University of Zaragoza) in which he explained the barriers that firms have to overcome in order to grow and increase their productivity levels.
- On 3 May the Chilean economist, **Daniel Kaufmann**, examined the cost of poor governance in his talk **The Challenge of Governance, State Capture and Corruption: Evidence and Solutions**. Based on his analysis of the evidence, he explained how the fight against corruption can be won with good governance reflected in transparency, accountability, effective regulations, meritocratic systems, independence and stronger judiciary powers. Corruption is a worldwide phenomenon, annually costing around 2 trillion USD, equivalent to 2% of world GDP, according to the data presented.
- 7 May. The Bank of Spain advisor, **Juan F. Jimeno** discussed the need for changes in social protection policies to maintain their effectiveness in a talk titled **Growth and social policies in a world marked by major technological and demographic changes**.

- 20 de June. In his lecture **Digitization and sustainability of the welfare state in Spain**, the President of AFI, **Emilio Ontiveros**, spoke about the impact that robots and Artificial Intelligence (AI) will have on the labor market but emphasized that it does not necessarily mean that certain occupations will be entirely replaced by machines.
- 9 de July. Beatriz González López-Valcárcel, Professor at the University of Las Palmas de Gran Canaria, offered the talk **Health care Innovation: Towards a Value-Based Health care System**. The health economics warned of the risk entailed by the middle-class preference for private over public healthcare , except for high-cost treatments.
- The last of the 2019 IviELAB lectures took place on 21 October and was given by former President of the Authority for Fiscal Responsibility (AIReF), **José Luis Escrivá**. He cited a lack of access to data, methodological problems, poor implementation of recommendations, which, in any case, are not sufficiently well communicated, and the fact that evaluation of results is not included in public policy budgeting processes as just some of the factors that indicate defective evaluation policies in Spain.

The talk by the president of AIReF, chaired by the regional Minister of Finance, **Vicent Soler**, and **Ivie** Research Director, **Francisco Pérez**, concluded the IviELAB 2019 series of talks on *Evaluation of the Sustainability of Welfare Policies in the 21st Century*.

Ivie-Ernest Lluch Foundation Dialogues on “Inequalities and Democracy”

The collaboration between Ernest Lluch Foundation and the **Ivie** began in 2018 with a series of dialogues on “Inequalities and Democracy” with the objective of discussing the problems facing today’s society in a globalized world that is unable to put an end to existing inequalities. The 2019 dialogues titled “The quest for prosperity: challenges of migration” brought together internationally well-known experts who gave their views on how to address the problems posed by migration.

The five dialogues that took place in 2019 were:

- Dialogue 1: **The quest for prosperity: challenges of migration**. 19 September. **Anna Terrón** (Director of the International and Ibero-American Foundation for Administration and Public Policies, FIIAPP) and **Sami Nair** (French philosopher and political expert)
- Dialogue 2: **Migration and welfare state sustainability. Can national solutions work?** 25 September. **José Antonio Herce** (Associate Director of AFI) and **Francisco Javier Moreno** (Senior Researcher at the Institute of Public Goods and Policy at CSIC)
- Dialogue 3: **Democracy, diversity policies and prosperity in Europe**. 15 October. **Gemma Pinyol-Jiménez** (Head of Migration Policies and Diversity at Instrategies) and **Hector Cebolla** (Professor in the Sociology II Department at the UNED)
- Dialogue 4: **From the rise of populisms to Brexit: economic grounds and impact on mobility**. 28 October. **Fernando Fernández** (International Consultant and IE Business

School Professor) and **Sandra León** (PhD in Political Sciences from UAM and Juan March Institute of Study and Research)

- Dialogue 5: **International competition for talent: territorial risks and opportunities**. 12 November. **Ana Revenga** (Senior fellow at the Global Economy and Development at Brookings Institution and President of the Board of ISEAK) and **Teresa Coelho** (HR Leader in Spain and Executive Committee Member at KPMG).

9.2. Organized by other institutions in collaboration with the **Ivie**

The Corporate Governance, Strategy and Competitiveness Observatory (GECE Observatory), an initiative launched by Bankia in collaboration with the **Ivie**, celebrated on 25 June the **GECE OBSERVATORY ANNUAL CONFERENCE** to analyze the results obtained during its first year of activity. Participating in the conference, held at the Bankia headquarters in Valencia, were **José Sevilla** (CEO of Bankia), **Joaquín Maudos** (Ivie Research Deputy Director), **Alejandro Escribá** (Ivie researcher and Director of the Universitat de València Chair of Family Business) and **Carlos Aguilera** (Director for Business Banking of the Valencian Community and Murcia). In addition, the following experts took part in a round table discussion on benchmark companies: **Emi Boix** (CEO of EMAC), **Alberto Gutierrez** (CEO of Aquaservice) and **Angela Perez** (CEO of Imegen).

ADEIT University-Business Foundation and Cotec Foundation for Innovation organized, in collaboration with the **Ivie**, the **CONFERENCE ON SPAIN'S TALENT POSITIONING MAP** on 27 June, in Valencia. It was an informative session to analyze the needs of talent and the risks of loss of talent to countries that offer better job opportunities.

Professors of Economic Analysis and **Ivie** researchers, **Matilde Mas** and **Javier Quesada** and **Ivie** economist **Fernando Pacual** presented the report *Spain's talent positioning map*, with data specific to the Valencian Community.

The Family Business Association of Madrid (ADEFAM) and the Valencian Business Association (AVE), with support from the **Ivie**, organized on 18 October the conference **BUSINESS COMMITMENT TO EDUCATION** in which **Ivie** researcher, **José Ramos**, gave the main conclusions of the report regarding education in Spain covering the current situation, business community options and proposals for improvement.

The conference was introduced by **Alberto Zoilo Álvarez**, President of ADEFAM, **Vicente Boluda**, President of AVE, and **Juan José Juárez**, Senior Project Manager of the Bertelsmann Foundation. The presentation of the report was followed by a business round table discussion, moderated by **José Luis Pérez**, journalist and history advisor to the Spanish University Foundation (FUE), and participated in by **Clemente González Soler**, President of the Alibérico Group, **Maite Marín**, General Director of Mas Camarena International Students' Resort & Sport Centre, and **Arturo de las Heras**, President of CEF-UDIMA.

The Spanish Regional Science Association (AEER) organized in Castellón the **XLV Regional Studies Meeting** and the **VI Valencian Regional Studies Conference** that took place on 20, 21 and 22 November at the Universitat Jaume I. The **Ivie** collaborates for another year running in this initiative that aims to make the determining factors and particularities of the regional economy visible, through conferences, lectures and, in general, the promotion of debates among experts. In this sense, the **Ivie** researcher and Professor at the Universitat Jaume I, **Emili Tortosa-Ausina**, addressed, in one of the programmed sessions, the problem of financial exclusion for some sectors of the population that, in recent years, have lost access to bank branches in their municipalities.

Over 200 papers were presented at the conference on issues related to the development of territories, such as sustainability, natural resources, energy and the environment, globalization and territory, the labor market, productivity, inequality, population and migratory movements, methods for spatial analysis, the knowledge economy, the public sector and regional financing, etc.

9.3. Participation of Ivie researchers and technicians in other scientific meetings

DECEMBER

- 20 **Carmen Herrero**, moderator of the Round Table: *Atracción de Talento Gen-T: perspectivas de Futuro*, in 'Navidades con Raicex', organized by the Conselleria de Innovación, Universidades, Ciencia y Sociedad Digital. Alicante, Distrito Digital.
- 19 **Francisco Pérez** took part in the workshop Foro Futuro: *Riesgos de japonización en Europa: la anomalía monetaria*. Foro Futuro Observatorio de tendencias económicas. Santander, Cinco Días and El País, Madrid.
- 14 Paper by **Carmen Herrero**: *The impact of the crisis in the labor market in the OECD: a new appraisal*. Symposium of the Spanish Economic Association. Alicante.
- 12 **Francisco Pérez** took part in the dialogue *La via valenciana 2019, en homenaje a Ernest Lluch*. Diàlegs La via valenciana 2019: els reptes fonamentals. En record d'Ernest Lluch. Facultat d'Economia de València.

Paper by **Joaquín Maudos**: *Trayectoria y situación actual de la economía valenciana: retos pendientes*. Presentation of the report: La sofisticación de las exportaciones de la Comunidad Valenciana, motor del crecimiento. Caixabank and Cámara de Comercio de Valencia.
- 11 **Joaquín Maudos** took part in the workshop *Economía del turismo deportivo*. Diàlegs MESVAL, Càtedra Model Econòmic Sostenible Valencià i Entorn. Facultat d'Economia de Universitat de València.

- 10 **José García-Montalvo** organized the Conference-Round Table: *Big data y economía en la era de las "fake news"*. Ramón Areces Foundation. Madrid.
- Joaquín Maudos** took part in the informative breakfast meeting: *El impacto económico de Feria Valencia*. Diario Levante-EMV, València.
- 5-7 Paper by **Santiago Carbó**: *The timing and determinants of FinTech profitability*. International Finance and Banking Society (IFABS 2019). Medellín (Colombia) (in collaboration with P.J. Cuadros and F. Rodríguez).
- 3 Paper by **Alejandro Escribá-Esteve**: *Las empresas familiares ante el desafío del crecimiento*. Desayuno-tertulia Cátedra de la Empresa Familiar de la Universitat de València. València.

NOVEMBER

- 28-29 Paper by **Emili Tortosa-Ausina**: *Quality of government and economic growth at the municipal level*. XVI INTECO Workshop on Economic Integration, Castelló de la Plana.
- 28 **Francisco Pérez** took part in the workshop **Foro Futuro sobre el futuro de la actividad financiera**. Foro Futuro Observatorio de tendencias económicas. Santander, Cinco Días and El País, Madrid.
- 25 Lecture by **Santiago Carbó**: *Bancs, 'Big Tech' i criptomonedes*. Espai d'Economia. Gandia (Valencia).
- 23 Paper by **José María Peiró**: *Promoure la implicació i la motivació dels col·laboradors en la empresa. El paper de la direcció de proximitat*. XXX Convenció de Màrqueting. Caixa d'Ontinyent. Ontinyent (Valencia).
- 20-22 Participation with various papers by **Emili Tortosa-Ausina** at the *XLV Reunión de Estudios Regionales*. Universitat Jaume I, Castelló de la Plana.
- 20 **Francisco Alcalá** took part in the workshop *Calidad de las instituciones democráticas y efectos de la corrupción*. Fundación César Manrique. Lanzarote (Islas Canarias).
- 19 Paper by **Silvia Molla** and **Francisco Pérez**: *Contratación pública en España: duración de los procedimientos y competencia*. Workshop Retos regulatorios y de defensa de la competencia en la contratación. Funcas, Madrid.
- 14 **Francisco Pérez** took part in the workshop *Foro Futuro sobre mercado de trabajo*. Foro Futuro Observatorio de tendencias económicas. Santander, Cinco Días and El País, Madrid.
- Paper by **Matilde Mas**: *Mapa de Talento 2019: el caso de La Rioja*. Federación de Empresas de La Rioja. Logroño.
- Paper by **José María Peiró**: *The impact of HR practices on workers' well-being: A study across five countries and two data waves*. 11th Biennial International Conference of the Dutch HRM

Network. Tilburg (The Netherlands) (with E. Villajos, N. Tordera, A. Pérez-Nebra, E. Ingusci and M. Vera-Perea).

Paper by **José María Peiró**: *Multi-level 2-1-2 "bathtub" Model HRM-WB-Unit Performance*. 11th Biennial International Conference of the Dutch HRM Network. Tilburg (Países Bajos) (with Y. Ayala and N. Tordera).

11 Paper by **Carmen Herrero**: *Population structure and the Human Development Index*. Wittgenstein Centre Conference 2019, Demographic aspect of human wellbeing. Vienna.

7 **Joaquín Maudos** took part in the workshop *Principales retos actuales y futuros del sector bancario español*. Presentation by la Paper by la 5ª Sesión del Panel de Seguimiento Financiero IEAF-FEF de la Economía Española. Palacio de la Bolsa de Madrid.

Paper by **Joaquín Aldás**: *El abandono en la educación superior*. XVII Foro de Almagro 'La acreditación y la excelencia de los títulos universitarios'. Universidad de Castilla-La Mancha.

6-8 Paper by **Emili Tortosa-Ausina**: *Evaluación del desempeño y determinantes de la eficacia pre-escolar en Chile*. ENEFA 2019 (XXXV Encuentro Nacional Escuelas y Facultades de Administración). Universidad de la Frontera, Campus de Pucón (Chile).

OCTOBER

27 Paper by **Francisco Pérez**: *L'economia valenciana i el finançament autonòmic*. Congrés Internacional L'Estatut de Morella i la Construcció d'Europa. 40 Aniversari de l'inici dels procés autonòmic 1979-2019. Morella (Castelló).

25 Lecture by **José Manuel Pastor**: *Las contribuciones económicas y sociales de los universitarios*. Día del titular mercantil y empresarial. Colegio Oficial de Titulares Mercantiles y Empresariales. València.

24 Paper by **José Enrique Devesa Carpio**: *¿Dónde están y hacia dónde van las pensiones públicas y el sistema complementario?*. Banco Sabadell. València.

Lecture by **José Manuel Pastor**: *El papel de las universidades españolas en el desarrollo económico y social*. Acto de clausura e inauguración del Máster en Entidades de Crédito. Universidad de Castilla-La Mancha. Albacete.

Lecture by **Alba Catalán**: *Entendiendo las brechas de género*. Colegio de Economistas de Cantabria. Ateneo de Santander.

23-26 Paper by **Santiago Carbó**: *Do Bank Bailouts Have an Impact on the Underwriting Business?*. Financial Management Association (FMA) meetings 2019. New Orleans (USA).

Paper by **Santiago Carbó**: *Evaluating Post-Crisis Financial Reforms*. Financial Management Association (FMA) meetings 2019. New Orleans (USA).

- 22 Lecture by **José María Peiró**: *Desempeño y bienestar laboral sostenibles y su dinámica: Principales antecedentes y consecuencias*. I Congreso sobre calidad del trabajo y del empleo desde una perspectiva psicosocial y organizacional. Instituto de Investigación IDOCAL de la Universitat de València.
- 17 **Francisco Pérez** took part in the workshop *Foro Futuro sobre vivienda: propiedad o alquiler*. Foro Futuro Observatorio de tendencias económicas. Santander, Cinco Días and El País, Madrid.
- 15 **Joaquín Aldás** took part in the Round Table: *Los ránkines como instrumentos para la mejora y dirección estratégica de las universidades españolas*. Workshop El desempeño de la Universidad Española, a debate. Organiza CRUE. Universidad de Almería.
- 14 Lecture by **José Manuel Pastor**: *Universidad y sociedad. Workshop El desempeño de la Universidad Española, a debate*. CRUE. Universidad de Almería.
- 9 Paper by **José Enrique Devesa Carpio**: *El sistema de cuentas nacionales individuales: Aspectos teóricos e implicaciones para España*. Fundación Largo Caballero. Madrid.
- 4 Lecture by **José Ramos**: *Formación investigadora en los programas de doctorado: retos y oportunidades*. I Workshops Departamentales de Psicología. Teruel.
- 3 Paper by **Alejandro Escribá-Esteve**: *Situación y retos de las empresas familiares en la Comunitat Valenciana*. III Workshop Empresas Familiares en el Mundo: Lecciones prácticas de gestión en la empresa familiar: Los casos de UK, Austria y Hungría. Workshop Cátedra de la Empresa Familiar de la Universitat de València.
- 1 Paper by **Francisco Pérez**: *Desequilibrios verticales en España: dos perspectivas*. Workshop RIFDE: Desafíos pendientes de la descentralización en España: suficiencia y autonomía tributaria. Santiago de Compostela.

SEPTEMBER

- 26 Paper by **Alejandro Escribá-Esteve**: *¿Qué aportan las Family Offices a las familias empresarias?*. Business meeting: Cátedra de la Empresa Familiar de la Universitat de València. València.
- Matilde Mas** took part in the seminar *Boosting productivity in Spain: what can be done? Public policies priorities and business engagement*. Round Table What is hampering productivity growth in Spain? RePresentation by European Commission in Madrid.
- 19 Lecture by **Fernando Pascual**: *Impacte i valor econòmic del valencià*. Inicio del curso escolar La Cívica – Escola Valenciana. Sede Universitaria Ciudad de Alicante.

- 11 Paper by **José María Peiró**: *Efectos a largo plazo del sistema de RRHH sobre el desempeño de los empleados: el papel mediador del capital psicológico*. IX Scientific Conference on HR Psychology Research. València (with D. Montesa and I. Rodríguez).

Paper by **José María Peiró**: *Developing Transformational Leadership for Enhancing Employee Health and Reducing Sickness absence*. IX Scientific Conference on HR Psychology Research. València (with T. Hauth).

- 5-7 Paper by **Emili Tortosa-Ausina**: *Evaluation and determinants of pre-school effectiveness in Chile*. 7th International Workshop on Efficiency in Education, Health and Other Public Services. Barcelona.

- 2 **Santiago Carbó** took part as Keynote speakers in *Research development in banking and finance ten years after the financial crisis*. JFMMI Conference 2019. Turin (Italy).

AUGUST

- 28 Wolpertinger 2019 Conference. With participation by **Juan Fernández de Guevara**, **Joaquín Maudos** and **Javier Quesada**. Venice (Italy).

- 26-30 Paper by **Francisco Alcalá**: *International Relocation of Production and Growth*. 34 Congreso anual de la European Economic Association. Manchester (UK).

- 13 Paper by **José María Peiró**: *The interaction between HR practices and age for sustainable careers across the lifespan*. AOM-Annual Meeting. Boston (with N. Tordera, Y. Ayala, E. Villajos and D.M. Truxillo).

JULY

- 29 Invited Keynote by **José María Peiró**: *Wellbeing at work: from the study of individual differences to the analysis of the intraindividual change*. International Society for the Study of Individual Differences (ISSID) Conference. Florence (Italy).

- 22 **Francisco Pérez** took part in the workshop *Foro Futuro sobre Fiscalidad personal, ahorro, empresas y actividad digital*. Foro Futuro Observatorio de tendencias económica. Santander, Cinco Días and El País, Madrid.

- 21-24 Paper by **José Ramos**: *El Certificado Europeo de Psicología (EuroPsy) como proceso de evaluación de competencias profesionales: Implicaciones institucionales y académicas*. IV Congreso Nacional de Psicología. Vitoria-Gasteiz (with F.J. Medina).

Paper by **José Ramos**: *La sobre-cualificación en el trabajo como fuente de insatisfacción: las experiencias laborales como factores moduladores*. IV Congreso Nacional de Psicología. Vitoria-Gasteiz (with R. Bedemarian and G. Dinc).

Paper by **José Ramos**: Barreras de igualdad de género y su relación con la satisfacción laboral. IV Congreso Nacional de Psicología. Vitoria-Gasteiz (with A. Ramos, F. Latorre-Navarro and I. Tomás).

21 **José María Peiró** took part in the symposium: *La internalización en la formación de los profesionales de la psicología*. IV Congreso Nacional de Psicología. Vitoria-Gasteiz.

15 Lecture by **José María Peiró**: *Presente y futuro de la Psicología organizacional. Líneas actuales de trabajo*. 37 Congreso Interamericano de Psicología. La Habana (Cuba).

Paper by **José María Peiró**: *El rol de las prácticas de recursos humanos y los valores laborales en el desarrollo de patrones sostenibles de bienestar y desempeño en el trabajo. Una perspectiva transcultural*. 37 Congreso Interamericano de Psicología. La Habana (Cuba) (with N. Tordera, A. Pérez-Nebra and M. Vera-Perea).

5 Paper by **Javier Quesada**: *Retos y oportunidades de la economía valenciana*. 11º Congreso de la Innovación. La Innovación como palanca de Transformación y Crecimiento. Club para la innovación de la Comunitat Valenciana, València.

4 **Pilar Chorén**, "madrina" (godmother) at the Master's Degree Graduation Ceremony of the Facultat d'Economia. Universitat de València. Palacio de Congresos de València.

1-2 Paper by **José Enrique Devesa Carpio**: *El sistema de pensiones español. ¿Alguna vez ha existido una ecuación de equivalencia actuarial?* V Workshop on Pensions and Insurance 2019. Universidad de Barcelona. Barcelona.

Paper by **José Enrique Devesa Carpio**: *Las Comunidades Autónomas y la Seguridad Social*. V Workshop on Pensions and Insurance 2019. Barcelona (with M. Devesa, I. Domínguez, B. Encinas and R. Meneu).

Paper by **José Enrique Devesa Carpio**: *La edad de jubilación y la equidad actuarial*. V Workshop on Pensions and Insurance 2019. Barcelona (with M. Devesa, I. Domínguez, B. Encinas and R. Meneu).

JUNE

27 Paper by **Ángel Soler**: *El abandono educativo temprano*. Seminar La educación en el marco de la Unión Europea. Objetivos y desafíos para España. Movimiento Europeo de España. Congreso de los Diputados, Madrid.

Francisco Pérez took part in the workshop *Foro Futuro sobre Pensiones y Estado de Bienestar*. Foro Futuro Observatorio de tendencias económicas. Santander, Cinco Días and El País, Madrid.

- 24 Paper by **José María Peiró**: *Sick leave absenteeism and return to work*. 2nd Steering Group meeting of the Returning and thriving at work project. Sheffield (with T. Hauth and J.M. Mesa).
- 13 Paper by **Joaquín Aldás**: The **Ivie** report on U-Rankings. EQUAMBI Meeting at the Universitat de València. Facultad de Derecho. València.
- 12-14 Invited paper by **José Enrique Devesa Carpio**: *Gasto de las personas mayores y la pérdida de poder adquisitivo*. XXXIX Workshops de Economía de la Salud. Albacete.
- 12 **Javier Quesada** took part in the *Foro Cañada Blanch 2019*. Sede CaixaBank, València.
- Paper by **Emili Tortosa-Ausina**: *Sustainable development Goals and Mutual Funds Industry*. EEFAG Workshop on Ethical Finance and Sustainable Development. Durham University Business School, University of Durham.
- 7 Invited Keynote speaker **José María Peiró**: *Digitalización y bienestar en el trabajo: retos y oportunidades para la prevención de riesgos psicosociales*. ORP Conference MADRID 2019. Empresas saludables: el valor de las personas en la era digital. Madrid.
- 6-7 Paper by **Alejandro Escribá-Esteve**: *Ten-year anniversary of the workshop – A decade of working together in developing TMT and business strategy research*. EIASM 10th Workshop on Top Management Teams AND Business Strategy Research. Passau (Germany).
- Paper by **Alejandro Escribá-Esteve**: *The influence of upper echelons theory in strategic management research*. EIASM 10th Workshop on Top Management Teams AND Business Strategy Research. Passau (Germany) (with J.F. López-Muñoz).
- 4 **José Ramos** took part in the Round Table: *El rol del psicólogo experto en Organizaciones, Trabajo y Recursos Humanos*. Colegio Oficial de Psicología de Cataluña.

MAY

- 31 **Francisco Pérez** took part in the workshop Foro Futuro sobre ¿Qué necesita la economía española para tener un futuro brillante?. Foro Futuro Observatorio de tendencias económicas. Santander, Cinco Días and El País, Madrid.
- 29 Presentation by **José Ramos** and **José María Peiró**: *Job demands and change in innovation behaviors as predictors of well-being: the role of innovation climate*. 19th European Congress of Work and Organizational Psychology. Torino (Italy) (with E. Lira, P. Martín-Hernández and A. Zornoza).
- Presentation by **José María Peiró**: *Enhancing Safety Training for Migrant Workers in the Construction Industry: A Systematic Review*. 19th European Congress of Work and Organizational Psychology. Torino (Italy) (with R. Shepherd, K.M., Nielsen, M. Vignoli and F. Latorre).

Presentation by **José María Peiró**: *Issues and Challenges of Training Construction Migrant Workers in Spain: A Qualitative Study on the multiple stakeholders' views*. 19th European Congress of Work and Organizational Psychology. Torino (Italy) (with L. Lorente, A. Salvador and V. Martínez-Tur).

Presentation by **José María Peiró**: *Organizing Mindfully: Testing a Structural Equation Model of Antecedents and Outcomes of Collective Mindfulness*. 19th European Congress of Work and Organizational Psychology. Torino (Italy) (with M. Reneclé, F.J. Gracia and I. Tomás).

Paper by **Santiago Carbó**: *How Do Bank Customers Go Digital? A Machine Learning Approach*. Banca March Workshop on Contemporary Issues in Banking. Madrid (in collaboration with P.J. Cuadros and F. Rodríguez).

- 22 **José García-Montalvo** as coordinator and moderator: *The future of Aging*. Dialogue del Premio Nobel. Madrid.
- 21 Seminar given by **Carmen Herrero**: *Comparison of group performance with categorical data*. Seminar. Universidad Miguel Hernández.
- 17 Workshop given by **José Ramos**: *Psychological practice supervision in the context of the EUROPSY: Evaluating competences*. 2nd EFPA Workshop Supervision Training for Trainers. Bruselas (Bélgica): European Federation of Psychologists Association (with A. Kreuz).
- 16-17 **José García-Montalvo** co-organizer of the workshop: *The Political Economy of Development and Conflict VII*. Universitat Pompeu Fabra. Barcelona.
- 16 Paper by **Francisco Pérez**: *Necesidades de gasto en Servicios Públicos Fundamentales. Seminar sobre financiación de los servicios públicos fundamentales*. Revista Presupuesto y Gasto Público. Instituto de estudios Fiscales. Madrid.
- Juan Pérez** took part in the Round Table *Dinámica del gasto en los servicios públicos fundamentales*. Seminar sobre financiación de los servicios públicos fundamentales. Revista Presupuesto y Gasto Público. Instituto de estudios Fiscales. Madrid.
- 15 **Francisco Pérez** and **Joaquín Maudos** participan en la Workshop *Comunidad Valenciana 2023*. PwC and AVE, València.
- 9-10 Paper by **Emili Tortosa-Ausina**: *Local development and efficiency: lessons from a quality of government perspective*. Workshop on Corruption, Transparency and Quality of Government. Universitat Jaume I-Conselleria de Transparència (Generalitat Valenciana), Castelló de la Plana.
- 9 Invited Keynote speaker **José María Peiró**: *Digitalization and the future of work: Implications for the future of W&O Psychology*. XIX- A Editie a Conferintei Nationale de Psychologie Industrial-Organizationala "Horia D. Pitariu". Iasi (Romania).

- 8 Paper by **Irene Zaera**: *Rankings y sistemas de información universitaria. Utilidad estratégica: El caso de U-Ranking*. II Encuentro del Foro de Universidades 2019. Universitat de les Illes Balears, Ibiza.
- 7 **Francisco Pérez** took part in the workshop Foro Futuro sobre El Brexit y sus consecuencias. Foro Futuro Observatorio de tendencias económicas. Santander, Cinco Días and El País, Madrid.

APRIL

- 16 Paper by **Alejandro Escribá-Esteve**: *Internacionalización de la Empresa Familiar: Más allá de las exportaciones*. Desayuno-tertulia Cátedra de la Empresa Familiar de la Universitat de València. València.
- 10 Lecture by **José María Peiró**: *La digitalización y sus implicaciones en la labor del psicólogo de las organizaciones*. La Academia de Psicología de España. Madrid.
- 5 **Francisco Pérez** took part in the workshop Foro Futuro sobre Tendencias económicas. Foro Futuro Observatorio de tendencias económicas. Santander, Cinco Días and El País, Madrid.
- 4 **Eva Benages** took part in the Workshop *Impacto económico de grandes eventos deportivos*. Organiza Grupo Baskonia-Alavés. Artium - Museo Vasco de Arte Contemporáneo (Auditorio principal). Vitoria-Gasteiz (País Vasco).
- Paper by **Joaquín Maudos**: *Rentabilidad y márgenes del sector bancario español*. V Panel de seguimiento financiero IEAF-FEF de la economía española. Instituto Español de Analistas Financieros and Fundación de Estudios Financieros (IEAF-FEF), Madrid.
- 2 Lecture by **José María Peiró**: *Happiness orientation and Psychological Capital as antecedents of well-being and performance at work*. Psychology College of Shaanxi Normal University. Xi'an (China).

MARCH

- 25 **Carmen Herrero** took part in the Round Table: *Situación de la Ciencia en España y Murcia*. Presentation by la Fundación Gadea para la Ciencia en Murcia. Templo del Monasterio. Murcia.
- 21-24 Paper by **Santiago Carbó**: *Do Bank Bailouts Have an Impact on the Underwriting Business*. 15th International Conference de la Western Economic Association International (WEAI). Keio University, Tokio (Japan) (in collaboration with P. J. Cuadros and F. Rodríguez).
- Paper by **Santiago Carbó**: *How Do Bank Customers Go Digital? A Machine Learning Approach*. 15th International Conference de la Western Economic Association International (WEAI). Keio University, Tokio (Japan) (in collaboration with P. J. Cuadros and F. Rodríguez).

Paper by **Santiago Carbó**: *Nowhere Else to Go: The Determinants of Bank-Firm Relationship Discontinuations after Bank Mergers*. 15th International Conference de la Western Economic Association International (WEAI). Keio University, Tokio (Japan) (in collaboration with O. Rehbein).

18 **Santiago Carbó** took part as panelista en la session: *How can we better understand the complexity of modern economies and societies?*. Workshop Understanding the economy and how to make it work better for people. OCDE and Ramón Areces Foundation, Madrid.

15 Lecture by **Santiago Carbó**: *Oportunidades y retos de la economía granadina ante la digitalización*. Workshop Conmemorativa de los Diez Años Granada Empresa. Diputación de Granada.

13 Lecture by **Francisco Pérez**: *Perspectivas a medio plazo de la economía valenciana*. Ciclo de conferencias 2019. Colegio de Economistas de València.

Javier Quesada and **Matilde Mas** took part in the workshop: *Los retos de las universidades españolas ante la industria 4.0*. Conferencia de Consejos Sociales and REDFUE. ADEIT University-Business Foundation, València.

7 Lecture by **Francisco Pérez**: *La inserción laboral de los doctores*. Semana 50 aniversario UPV Carrera Investigadora. Vicerrectorado de Investigación, Innovación y Transferencia, València.

6 **Carmen Herrero** took part in the III Coloquio Mujer, ciencia y empresa. Mujeres con futuro, futuro con mujeres. Fundación Premios Rei Jaume I and Fundación Valenciana de Estudios Avanzados. València.

FEBRUARY

22 Paper by **José Enrique Devesa Carpio**: *¿Qué sistema de pensiones tendrán nuestros hijos y nietos?*. XI Setmana de l'Economia. Ajuntament Alzira. Alzira (Valencia)

20 Paper by **Carmen Herrero**. *Economía: un lugar para los matemáticos*. En la Round Table: Desarrollo económico y matemáticas. Ramón Areces Foundation. Madrid.

19 Paper by **Ángel Soler**: *Abandono escolar temprano: formación y empleo de los jóvenes españoles*. Workshops del profesorado: prevención del abandono escolar temprano. Centro de profesores y recursos Región de Murcia (CPR).

14 Paper by **Alejandro Escribá**: *El consejo de familia: Un foro para la comunicación entre los miembros de la familia empresaria*. Desayuno-tertulia Cátedra de la Empresa Familiar de la Universitat de València. València.

13 Paper by **José María Peiró**: *Implicaciones de la digitalización para la investigación y profesión del Psicólogo del Trabajo y las organizaciones*. II Coloquio. La psicología aplicada en la

resolución de problemas glocles (globales y locales). Universidad Nacional Autónoma de México.

- 4 Lecture by **Carmen Herrero**: *Opportunity Bias*. Congreso Bienal de la Real Sociedad Matemática Española. Santander.

Lecture by **Antonio Villar**: *The social cost of unemployment: the Spanish labour market from a social welfare approach*. The Regional Economic Modelling team, presentation of the work developed by Antonio Villar, Sara de la Rica and Lucía Gordon. Joint Research Centre (JRC), Sevilla.

Francisco Pérez and **Joaquín Aldás** participan en las *Workshops SIACES. Workshops Constituyentes del Sistema Iberoamericano de aseguramiento de la calidad en la educación* (SIACES), organizadas por la Secretaría General Iberoamericana (SEGIB). Madrid.

JANUARY

- 31 Lecture by **Carmen Herrero**: *Igualdad de Oportunidades: Principios y Aplicaciones*. Cátedra and Foro Germán Bernácer. Alicante.

- 24-25 Paper by **Emili Tortosa-Ausina**: *On the role of Spanish provincial councils: Does it affect municipalities' performance?*. XXVI Encuentro de Economía Pública. Oviedo.

- 23 Lecture by **Matilde Mas**: *Com impulsar un creixement econòmic sostingut i sostenible*. Ciclo de conferencias Premis Nobel 2018: Economía. Octubre Centre de Cultura Contemporàni, València.

- 22 **Antonio Villar** organized the *III Workshops del Postgrado en Iberoamérica: El Futuro del Empleo*. Universidad Internacional de Andalucía. Sevilla. **Carmen Herrero** and **Francisco Pérez** also took part.

- 21 **Joaquín Maudos** took part in the *Espai d'Economia La Safor: Futur immediat de l'economia valenciana i espanyola*. Universitat de València, Centre de Gandia.

- 11 Lecture by **Matilde Mas**: *Estrategias para un crecimiento inteligente*. Ciclo de conferencias: La economía, esa ciencia que marca nuestra vida. Ateneo Cultural, Castelló de la Plana.

- 10 Lecture by **Alejandro Escribá**: *Análisis de la competitividad de las empresas familiares y no familiares*. Colegio de Economistas de València.

10. DISSEMINATION

10.1. Presentation of studies

During 2019, more than twenty studies by the **Ivie** researchers and technicians were presented:

- On 29 January 2019, the Trinidad Alfonso Foundation presented the study *Impacto económico del Programa de Apoyo a competiciones deportivas de la Comunitat Valenciana (2018-2019)*, developed by **Ivie** Research Deputy Director, **Joaquín Maudos**, and **Ivie** research technician, **Carlos Albert**.
- On 19 February the report *Impacto económico del 38 Maratón Valencia Trinidad Alfonso* was presented to the media in Valencia. **Ivie** researchers and co-authors, **Joaquín Maudos** and **Joaquín Aldás**, explained the main results of the study.
- The BBVA Foundation organized a press conference in Madrid on 27 February to present the book *Las Áreas Urbanas Funcionales en España: economía y calidad de vida*. **Ivie** researchers **Ernest Reig** and **Francisco J. Goerlich**, along with technician **Carlos Albert** were in charge of explaining the main findings.
- On 28 February, the main aspects of the report *Observatorio sobre la situación financiera de las empresas valencianas en el contexto nacional*, including the **IvieLAB** Project, were presented to the media. The document was developed by **Ivie** researchers **Juan Fernández de Guevara** and **Joaquín Maudos**, with the collaboration of **Ivie** research assistants, **Rodrigo Aragón**, **Héctor García** and **Consuelo Mínguez**.
- Cotec Foundation for Innovation and **Ivie** presented on 28 February in Madrid the results of the first Spanish study that measures the ability to attract and retain talent across the 17 Spanish regions. The authors, **Javier Quesada**, **Matilde Mas** and **Fernando Pascual**, explained the results to the public.
- During the presentation of their annual accounts to the press on 12 March, the supermarket chain Mercadona also released the main figures of the economic impact report developed by **Ivie** on their activity during 2018.
- On 21 March, the Feria Valencia (Valencia Trade Fair) organized an act to present the report *El impacto de Feria Valencia en la economía valenciana*, directed by **Ivie** Research Deputy Director, **Joaquín Maudos**, with the collaboration of **Ivie** technicians, **Eva Benages** and **Carlos Albert**.
- The BBVA Foundation released to the media on 11 April the main results of the study *El stock de capital en España y sus comunidades autónomas. Evolución de la edad media de las*

inversiones y envejecimiento del capital, along with a database on capital stock also developed by the **Ivie**.

- U-Ranking 2019 was presented at a press conference in Madrid on 25 April. This is the seventh edition of the report on Spanish universities and has been prepared jointly, like the previous ones, by the BBVA Foundation and **Ivie**. The project has been directed by **Francisco Pérez**, **Ivie** Research Director, and **Joaquín Aldás**, **Ivie** researcher, along with technicians **Irene Zaera** and **Rodrigo Aragón**.
- On 30 May, the report *Informe Impacto económico de la Ciutat de les Artes i les Ciències de 2018*, developed by **Joaquín Maudos**, **Ivie** Research Deputy Director, and **Fernando Pascual**, **Ivie** technician, was presented to the media in Valencia and was attended by the Regional Secretary of Tourism, **Francesc Colomer**, and General Director of the City of Arts and Sciences, **Enrique Vidal**.
- Also in Valencia, the Valencian Regional Government's Ministry of Education presented the report *Contribución e impacto económico del valenciano*, carried out by **Joaquín Maudos**, **Ivie** Research Deputy Director, along with **Ivie** researcher, **Ernest Reig**, and technician, **Fernando Pascual**. The act took place on 4 June and was presided by the Minister, **Vicent Marzà**, and the Director of Language Policy, **Rubén Trenzano**.
- On 17 June, AVE presented to the media the document developed by the **Ivie**, *El compromiso de los empresarios con la educación: situación actual y retos de futuro*, in an act in which **Ivie** Researchers, **José Ramos** and **Lorenzo Serrano**, along with **Ivie** Managing Director, **Pilar Chorén**, explained the main results.
- The SIUVP (Valencian Public University System of Information) website which collects information on the Valencian public universities is updated twice a year. Each update is accompanied by a press release with the most relevant messages. In 2019, the first took place on 17 June and the second on 27 November.
- The GECE Observatory, an initiative by Bankia and **Ivie** to analyze the competitiveness of Valencian firms, organized an event on 25 June in Valencia to celebrate its first year of activity, in which an issue of the brief documents 'Keys to Competitiveness' developed by the Observatory was presented by the project coordinator and **Ivie** researcher, **Alejandro Escribá**. Throughout 2019, 3 more 'Key' documents and three reports were published.
- In Madrid, on 27 June, the Ramón Areces Foundation gathered the media to present the report *Patrones de consumo de los hogares españoles: evolución histórica (1973-2017) e impacto de la crisis de 2007*. The authors, **Ivie** researcher and Professor at the Universitat de València, **Joaquín Aldás**, and **Ivie** economist, **Marta Solaz** were in charge of presenting the main results.

- Also on 27 June, in Valencia, the ADEIT University-Business Foundation organized an event on the Talent Positioning Map of Spain, focusing on the results of the Valencian Community. This report, developed for the Cotec Foundation, was presented earlier in the year on 28 February.
- On 1 July, in Castellón, the Universitat Jaume I organized an institutional act to present the study *La contribución socioeconómica de las universidades públicas valencianas*. **Ivie** Research Director and co-author of the book, **Francisco Pérez**, was in charge of explaining the main messages derived from the document.
- On 17 July, in Madrid, the second edition of the *Observatory on the Spanish agro-food sector in the European context* was presented. The report was prepared for Cajamar by **Ivie** Research Deputy Director, **Joaquín Maudos**, in collaboration with **Ivie** technician, **Jimena Salamanca**.
- On 26 July, the BBVA Foundation communicated to the media the main ideas from the report *La competitividad española en las cadenas de valor globales*, directed by **Francisco Pérez**, **Ivie** Research Director and Professor at the Universitat de València, in collaboration with **Ivie** economists, **Eva Benages**, **José Pla-Barber**, **Marta Solaz** and **Cristina Villar**.
- On 18 October, the report *El compromiso de los empresarios con la educación: situación actual y retos de futuro* was presented in Madrid by ADEFAM and AVE by **Ivie** research professor, **José Ramos**. The report had already been presented previously in June in Valencia.
- On 7 November, the BBVA Foundation distributed a press release with a summary of the main points found in the study *Condiciones financieras de las empresas españolas: efectos sobre la inversión y la productividad*, developed by **Ivie** Researchers, **Joaquín Maudos** and **Juan Fernández de Guevara**.
- The Cotec Foundation for Innovation presented on 28 November the second report on *La economía intangible en España. Evolución y distribución por territorios y sectores (1995-2016)* with updated information. The researchers and co-authors of the document, **Javier Quesada** and **Matilde Mas**, explained the main conclusions of the new report, which includes a database.
- On 18 December, the Conference of Rectors of Spanish Universities (CRUE) and the Conference of Social Councils presented in Madrid the report *La contribución socioeconómica del Sistema Universitario Español (SUE)*. The results of the study, commissioned to the **Ivie**, were explained by two of its authors, **Ivie** research professors, **José Manuel Pastor** and **Joaquín Aldás**.

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 updated with the latest data available, 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. In 2019, eleven issues were published:

- N.º 42/2019. *El porcentaje de empresas exportadoras se duplica desde 2009, pero solo cinco firmas concentran casi el 10% de las ventas españolas de bienes al exterior*
- N.º 41/2019. *El índice de fecundidad en España es el segundo más bajo de Europa, con diferencias entre regiones que suponen hasta el doble de hijos por mujer*
- N.º 40/2019. *Las posibilidades de inserción laboral de los universitarios pueden llegar a triplicarse según la titulación elegida*
- N.º 39/2019. *Las mujeres obtienen mejores resultados en la universidad, pero acceden a puestos de trabajo menos estables y un 9,5% peor remunerados que los hombres*
- N.º 38/2019. *El porcentaje de hogares que residen en viviendas de alquiler ha crecido en todas las comunidades desde 2007, pero las diferencias regionales alcanzan los 17 puntos porcentuales*
- N.º 37/2019. *España gana un 15,4% de habitantes desde el 2000, mientras más del 60% de municipios y 13 provincias pierden población*
- N.º 36/2019. *Los centros públicos asumen casi en exclusiva la formación de alumnos con entornos menos favorables, especialmente en las regiones menos desarrolladas*
- N.º 35/2019. *La tasa de temporalidad laboral en España casi duplica la de la UE y las diferencias regionales alcanzan 16 puntos porcentuales entre los extremos, Madrid y Andalucía*
- N.º 34/2019. *La gran empresa manufacturera en España es un 47,3% más productiva que la media del sector, lo que le permite pagar salarios un 26,4% más elevados y, además, ser más competitiva*
- N.º 33/2019. *La productividad de la economía española cae un 10,5% desde 1995 frente al crecimiento del 4,5% que registra la UE*
- N.º 32/2019. *El 65,1% de los jóvenes españoles de entre 16 y 34 años sigue viviendo en el hogar familiar, un porcentaje 7 puntos superior al de hace diez años*

10.2.2. Focos AVE

AVE (Valencian Association of Entrepreneurs) and **Ivie** have launched a new project to develop a series of informative documents analyzing the evolution and position of the Valencian economy in a national context.

The AVE Focus series aims to offer a diagnosis of the strengths of the Valencian economy and the weaknesses to overcome in order to converge toward a more knowledge-based economy with higher levels of productivity and of GDP per capita. The objective of these concise and periodic documents is to contribute and promote the socio-economic development and competitiveness of Valencia. In 2019, the following 4 issues were published:

- N.º 9/2019. Foco AVE. *Transformación digital*
- N.º 8/2019. Foco AVE. *Tamaño empresarial y productividad*
- N.º 7/2019. Foco AVE. *Capital humano de los emprendedores*
- N.º 6/2019. Foco AVE. *Resiliencia de las regiones españolas*

10.2.1. Claves GECE

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

One of the GECE Observatory's initiatives is the launch of the *Claves de competitividad* ('Keys to Competitiveness'), a collection of easy to read, visually attractive summaries targeted at the general public and the media, aimed at publicizing the Observatory's empirical findings.

Each document in the Claves de competitividad collection gives an overview of a particular aspect of the competitiveness of Valencian firms, based on the objective analyses carried out by the GECE Observatory. The aim is to encourage companies and institutions to reflect on the issues they must address in order to improve competitiveness and ensure long-term success.

This collection supplements the Observatory's reports, which offer a more in-depth analysis of companies' competitive position and associated drivers. In 2019, 3 issues were published, with a total of 5:

- N° 5/2020. *Las empresas familiares valencianas más competitivas destacan por su elevada contribución relativa al empleo, pero se mantienen como las que más optan por sistemas de gobierno personalistas.*
- N° 4/2019. *Crece 1,8 puntos el porcentaje de empresas familiares valencianas que logran situarse entre las más competitivas de España.*

- N° 3/2019. *Las empresas familiares valencianas más longevas son las más activas en exportación, situándose 16 puntos por encima de sus equivalentes a nivel nacional.*
- N° 2/2019. *El uso de consejo de administración en las empresas familiares valencianas más competitivas es 14,5 puntos más alto que en las de menor competitividad.*
- N° 1/2018. *Las empresas de mayor tamaño y las de sectores más intensivos en tecnología logran mejores niveles de competitividad.*

10.3. Websites⁶

During 2019, following the overhaul in 2017, the **Ivie** website was fleshed out with more content, especially in the videos section, where, besides the **Ivie** video blog, two new sections were included. First, the **Ivie** Interview's section was created with short interviews to experts participating in activities organized by the **Ivie**, such as workshops, seminars and dialogues, etc. Second, a new section was included with the full videos of the IvieLAB project conferences.

In 2019, a total of 166 news items with information on **Ivie**'s publications, acknowledgments and activities were published in the News and Events section. Also, the opinion articles section displays links to the 42 articles by **Ivie** members published in national and regional media.

The Research section, which describes the **Ivie**'s research projects classified by area, has been expanded to include the *Corporate competitiveness* area, which encompasses projects aimed at studying companies' ability to compete and expand their market shares, both in Spain and abroad, as well as analyzing companies' productivity, growth strategies, profitability and financial stability. This section also includes publications, dissemination documents, research articles and working papers, as well as documents developed directly in the Institute, such as those generated by the **Ivie**'s team. Specifically, it includes the series of informative documents titled *Essentials*, prepared for the BBVA Foundation and targeted at the media. A similar series of informative documents, also targeted at the media, was started in 2017 for the Valencian Finance Ministry, under the heading *Regional Funding Papers*. In 2018, continuing along these lines, the *AVE Focus* and *Claves GECE* series were started. *AVE Focus* includes very brief reports prepared for the Valencian Employers' Association (AVE), aimed at analyzing the relative performance and current position of the Valencian economy in Spain. The *Claves GECE* series consists of the informative documents produced by the Corporate Governance, Strategy and Competitiveness Observatory (GECE Observatory), a joint initiative of Bankia and the **Ivie**.

⁶ 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.

The third section of the website contains information and links to the 26 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 banking services, Social Capital, Human Development, Transition to the Labor Market, Inequality, Education Accounts in Spain, Homogenous Population Series, Life Tables, Trade Integration and Migrations, Intangible assets: national and regional database (1995-2014), Economic value of knowledge.*

The **Ivie** website reached **73,513** visits in 2019, 4.5% more than in the previous year. Of these, 66% were from users in Spain, while the remaining 34% came from 133 countries, of which Mexico, United States, Colombia, Peru and Argentina stand out.

The **Ivie** also manages and maintains the following websites: ABACO (Observatory of Knowledge-Based Activities) at www.observatorioabaco.es, U-Ranking at www.u-ranking.es and SPINTAN at www.spintan.net, the website of the European project of which the **Ivie** has been the coordinator, and the website of the Valencian Public University System of Information (SIUVP), which offers a complete information system with more than 60 indicators for the five Valencian public universities.

10.4. Circulation in press and online⁷

The **Ivie** has continued increasing its presence in the media, as a result of the attention given to publicizing its work. This progress is clearly shown by the 3,204 news items in the press in 2019 on the research conducted at the Institute and by the 42 opinion articles written the **Ivie** researchers.

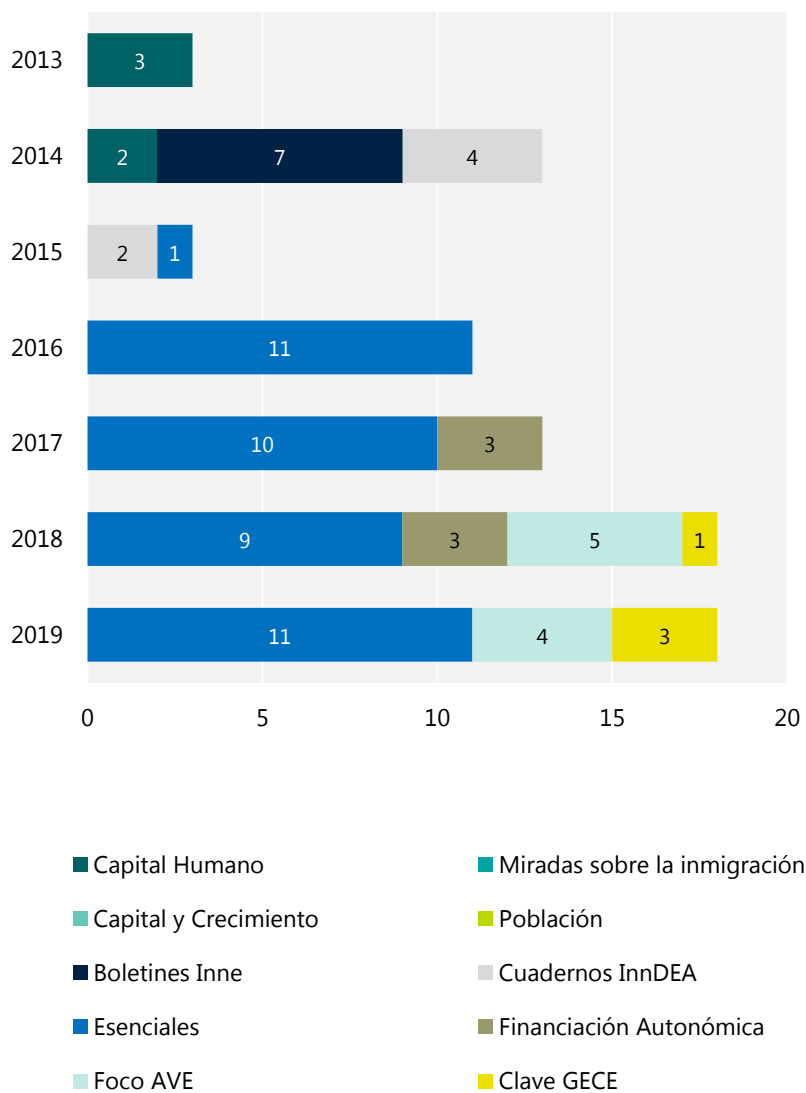
The research concluded in 2019 and its activities undertaken were publicized through 39 press releases and also through 11 *Esenciales*, 4 *AVE Focus* and three *Keys to Competitiveness* of the GECE Observatory. In 2019, 166 activities and new events by the **Ivie** researchers were reported in the agenda 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.

Among the topics that have had the most impact in the media in 2019 are: *Esenciales* which generated 602 news items; the 7th edition of U-Ranking, with 380 items; the various economic impact reports, with 308 news items (Mercadona, Valencian language, City of Arts and Sciences, Valencia Trade Fair, etc.); COTECT Foundation reports, with 189 news items and information related to access to banking services with 138 news items. In addition, the contributions made by

⁷ 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.

researchers to the media, in which they offered their expert views on certain topics, led to more than 498 press clippings.

Figure 7.
Dissemination
documents

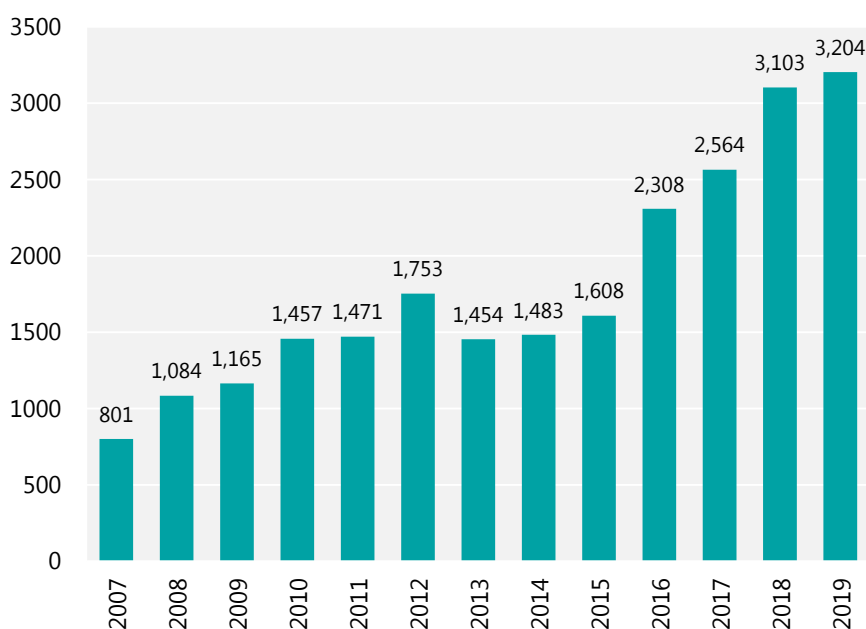


Nearly 43% of the news items issued by the **Ivie** in 2019 were published in the regional press (Valencian Community and other autonomous communities); around 18% in the digital press, 12% in the national press and 10% in economy related newspapers. The remaining 27% consists of news items broadcast on radio and television and by news agencies, sports press, international media, blogs and internet portals.

The newspaper *Levante*, with 174 items, is the one that published most news items in which the **Ivie** is mentioned; it is followed by *La Vanguardia*, with 108 items, and *Las Provincias*, which mentioned the **Ivie** on 107 occasions. The rest of the ten media outlets that mentioned the **Ivie** most were *El Mundo*, *ABC*, *Expansión*, *Cinco Días*, *El Periódico Mediterráneo*, *Europa Press* and the Alicante newspaper *Información*.

In 2019 the **Ivie** responded to more than 170 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 represents an increase of 42% compared to the previous year and shows how journalists' trust in the data, reflections and opinions provided by the **Ivie** has grown.

Figure 8.
News items published in the media



Social networks have also served as a platform to publicize the activity carried out by the **Ivie**. With 1,500 published tweets, the Institute's Twitter profile has more than 3,300 followers, 14% more than 2018. Meanwhile, U-Ranking and ABACO Twitter accounts increased their followers by 10% and 8%, respectively. The **Ivie** YouTube Channel received close to 11,400 visits. This year a total of 28 new videos were published in the channel, thanks to the recording of the IvieLAB's activities and the Ernest Lluch Foundation's dialogues, as well as the the **Ivie** video blog. In addition an informative video was released on the U-Ranking website.

Meanwhile, the presentations shared on Slide Share were viewed 19,257 times over the course of 2019 with 479 more visits than 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, has more than 500 followers, twice the number of followers in 2018.

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 2019 this monthly digital newsletter was emailed to **Ivie's** more than 2,600 contacts. In 2018 the general data protection law came into effect, forcing the **Ivie** to ask the members of the contacts groups to which it sends its emails to give their express consent. Therefore, the 2,630 contacts currently subscribed to the Institute's emails are therefore people who are genuinely interested in the information we provide. A total of 289 new people subscribed to the Newsletter during 2019.

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

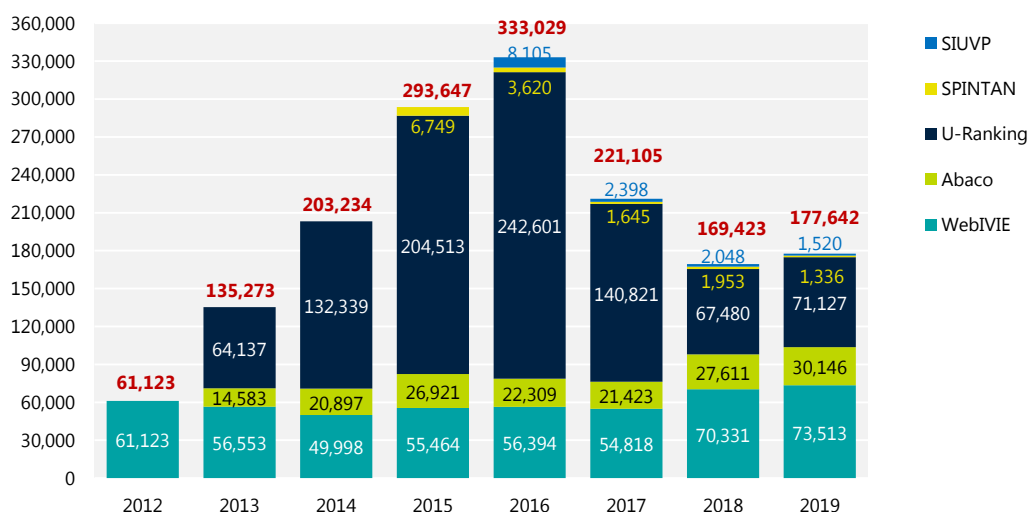
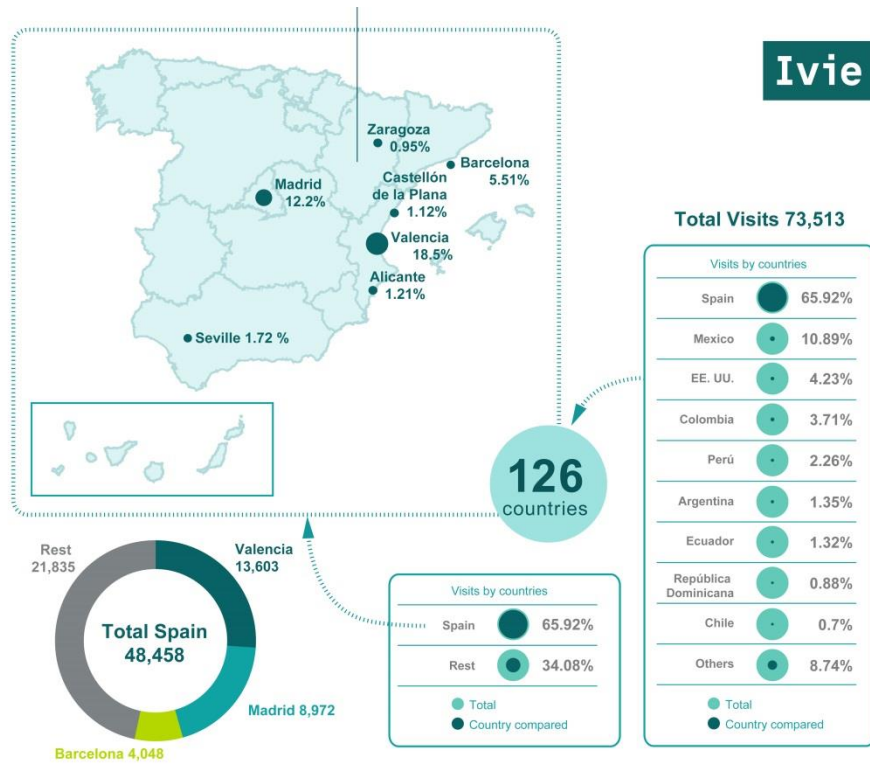


Figure 10.
Visits to **Ivie**'s website by geographical region in 2019





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