

Santiago Carbó Valverde
Curriculum Vitae

Personal and contact info:

- Born in Gandía (Valencia, Spain) on July 25th 1966.
- Address: Departamento de Análisis Económico, Facultad de Economía, Universitat de València, Av. dels Tarongers, s/n, 46022-Valencia
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Current affiliation:

- Professor of Economics – Universitat de València (Spain)

Selected other and previous academic affiliations/positions

- (2020-2022), Consultant to the World Bank
- (2021-) Independent Board member of Instituto Valenciano de Finanzas
- (2013-) Independent Board member of Cecabank
- (2012-2020), Professor of Economics and Finance. Bangor University (UK)
- (2014-2020), Professor of Economics and Finance. CUNEF Business School (Spain)
- (2014-2016, 2016-2018) Member of the Group of Economic Advisers (GEA) of ESMA (European Securities and Markets Authority)
- Consultant to the Financial Conduct Authority (FCA) (UK). 2016
- (2017) President of International Banking, Economics and Finance Association (IBEFA)
- (2014-2016) Vicepresident of International Banking, Economics and Finance Association (IBEFA).
- (2016-2020) External Examiner- Said Business School, Oxford University
- (2016-) Project referee - European Research Council (ERC).
- (2009, 2011-2013): Consultant, European Central Bank
- (2008-2012): Consultant, Federal Reserve Bank of Chicago (full-time during 2008 and part-time during 2009-2012).
- (2006-2008): Dean School of Economics and Business, University of Granada (Spain).
- (2004-2006): Head of the Department of Economics, University of Granada (Spain).
- (2003-2012) Professor of Economics, University of Granada (Spain)
- (1995-2012) Associate Professor of Economics, University of Granada (Spain)
- (1991-1995) Lecturer of Economics, University of Granada (Spain)

Education:

1993 - Ph. D. in Economics, University of Wales, Bangor (UK)
1990 - M. Sc. in Banking and Finance, University of Wales, Bangor (UK)
1989 - B.A. in Economics, Universidad de Valencia (Spain)

Selected journal articles

Carbo-Valverde, S., Cuadros Solas, P.J. and F. Rodríguez Fernández (2022), "Entrepreneurial, institutional and financial strategies for FinTech profitability", **Financial Innovation**, 8:15, DOI: <https://doi.org/10.1186/s40854-021-00325-2>, SpringerOpen.

Carbo-Valverde, S., Cuadros Solas, P.J. y F. Rodríguez Fernández (2021), "The Effects of Negative Interest Rates: A Literature Review and Additional Evidence on the Performance of the European Banking Sector", **The European Journal of Finance**, vol. 27, n° 18, págs. 1908–1938 DOI:10.1080/1351847X.2021.1927784

Carbo-Valverde, S., Cuadros Solas, P.J. y F. Rodríguez Fernández (2021), "The impact of lending relationships on the choice and structure of bond underwriting syndicates", **Journal of International Financial Markets, Institutions and Money**, DOI: <https://doi.org/10.1016/j.intfin.2021.101403>, vol. 74, 101403.

Carbo-Valverde, S., Rodríguez Fernández, F. y A. Saunders (2021), "Underwriting bank bonds: information sharing, certification and distribution networks", **Journal of Corporate Finance**, vol 70, 102057, DOI: <https://doi.org/10.1016/j.jcorpfin.2021.102057>

Carbo-Valverde, S., Cuadros Solas, P.J. and F. Rodríguez Fernández (2021), "Non-pricing drivers of underwriters' market shares in corporate bond markets", **International Review of Economics and Finance**, vol. 76, págs. 671-693.

Carbo-Valverde, S. and F. Rodríguez Fernández (2020),"Financial Digitalization: Banks, Fintech, Bigtech and Consumers", **Journal of Financial Management, Markets and Institutions**, vol 8, n° 1, págs 2040001-1 - 2040001-13.

Carbo-Valverde, S., Lacomba Arias, J. A., Lagos García, F., Rodríguez Fernández, F. and J. Verdejo-Román (2020), "Brain Sustrates explain differences in the adoption and degree of financial digitalization", **Nature-Scientific Reports**, vol. 10,17512(2020), <https://doi.org/10.1038/s41598-020-74554-3>.

Carbo-Valverde, S., Cuadros Solas, P. and F. Rodriguez Fernandez (2020), "A machine learning approach to the digitalization of bank customers: evidence from random and causal forests",**PLoS ONE** 15(10):e0240362. <https://doi.org/10.1371/journal.pone.0240362>

Carbo-Valverde, S., Cuadros Solas, P.J. and F. Rodríguez Fernández (2020), "Do bank bailouts have an impact on the underwriting business?" **Journal of Financial Stability**, vol. 49, 100756, <https://doi.org/10.1016/j.jfs.2020.100756>.

Carbo-Valverde, S., Cuadro Solas, P.J. and F. Rodríguez Fernández (2020), "The effect of banks' IT investments on the digitalization of their customers", *Global Policy*, Vol. 11, Special Issue, Supplement 1, January 2020, 9-17.

Carbo-Valverde, S., Mayordomo S. y F. Rodríguez Fernández (2018), "Disentangling the effects of household financial constraints and risk profile on mortgage rates", *Journal of Real Estate Finance and Economics*, vol 56, 76–100.

Carbo-Valverde, S. and F. Rodríguez Fernández (2018), "Do banks game on dynamic provisioning?", *Journal of Financial Management, Markets and Institutions*, vol 6, n1, 1850002-1 - 1850002-22.

Carbo-Valverde, S., Cuadros Solas, P.J. and F. Rodríguez Fernández (2017), "Do banks and industrial companies have equal access to reputable underwriters in debt markets?", *Journal of Corporate Finance*, vol 45, 176-202.

Carbo-Valverde, S. (2017), "The Impact on Digitalization on Banking and Financial Stability", *Journal of Financial Management, Markets and Institutions*, vol 5, n° 1, 133-140

Carbo-Valverde, S., Rodríguez Fernández, F. and R. Rosen (2017), "Are Covered Bonds a Substitute for Mortgage-Backed Securities?", *Journal of Economic Policy Reform*, vol. 20, n° 3, 238-253.

Carbo-Valverde, S., Chakravorti, B. and F. Rodríguez Fernández (2016), "The Role of Interchange Fees in Two-sided Markets: An Empirical Investigation on Payment Cards", *The Review of Economics and Statistics*, vol. 97, forthcoming.

Carbo-Valverde, S., F. Rodríguez Fernández and G. Udell, (2016), "Trade credit, the Financial Crisis and Firms Access to Finance", *Journal of Money, Credit and Banking*, vol. 47, forthcoming.

Qi, M., Carbo-Valverde, S. and F. Rodríguez (2016), "The diffusion pattern of non-cash payments: evidence from China", *International Journal of Technology Management*, vol. 67, forthcoming.

Carbo-Valverde, S., Degryse, H. and F. Rodríguez Fernández (2015), "The impact of securitization on credit rationing: empirical evidence", *Journal of Financial Stability*, vol. 20, 36-50.

Carbo-Valverde, S. and F. Rodríguez Fernández (2014), "ATM withdrawals, debit card transactions at the point of sale and the demand for currency", *SERIEs*, vol. 5, 399-417.

Carbo-Valverde, S. (2014), "Trust in banks after the financial crisis", *Journal of Financial Perspectives*, vol. 2 (issue 2), July 2014.

Carbo-Valverde, S., Kane, E. and F. Rodríguez Fernández,(2013), "Safety-net benefits conferred on difficult-to-fail-and-unwind banks in the US and EU before and during the great recession ", *Journal of Banking and Finance*, vol. 37, 1845-1859.

Carbo-Valverde, S., Kane, E. and F. Rodríguez Fernández, (2012), "Regulatory arbitrage in cross-border banking mergers within the EU", *Journal of Money, Credit and Banking*, vol. 44, 1609-1629.

Carbo-Valverde, S., Liñares Zegarra, J.M. and F. Rodríguez Fernández (2012), "Feedback Loop Effects in Payment Card Markets: Empirical Evidence ", *Review of Network Economics*, vol. 11, article 2.

Carbo-Valverde, S., Marqués Ibáñez, D. and F. Rodríguez Fernández, (2012), "Securitization, risk transferring and financial stability: the case of Spain" *Journal of International Money and Finance*, vol. 31, 80-101.

Carbo-Valverde, S. and J.M. Liñares Zegarra (2011), "How effective are rewards programs in promoting payment card usage? Empirical evidence", *Journal of Banking and Finance*, vol. 35, 3275-3291.

Carbo-Valverde, S. Hannan, T. and F. Rodríguez Fernández,(2011), "Exploiting Old Customers and Attracting New Ones: the case of Bank Deposit Pricing", *European Economic Review*, vol. 55, 903-915.

Carbo-Valverde, S. and R. López del Paso (2010), "Does the development of non-cash payments affect bank lending?", *The Manchester School*, vol. 78, nº 5, 412-436.

Carbo-Valverde, S. and M.A. Fortes Escalona (2010), "Spatial Cournot equilibrium: do branches matter?", *Annals of Regional Science*, vol 44, 377-407.

Carbo-Valverde, S., Rodríguez Fernández, F. and G. Udell (2009), "Bank market power and SME financing constraints", *Review of Finance*, vol. 13, 309-340.

Carbo-Valverde, S., Humphrey D., Maudos J. and P. Molyneux (2009), "Cross-Country Comparisons of Competition and Pricing Power in European Banking", *Journal of International Money and Finance*, vol. 28, 115-134.

Carbo-Valverde, S., Kane, E., and F. Rodriguez (2008), "Evidence of Differences in the Effectiveness of Safety Net Management in European Union Countries", *Journal of Financial Services Research*, vol. 34, 151-176.

Scholnick, B., Massoud, N., Saunders, A., Carbo-Valverde, S. and F. Rodriguez-Fernandez (2008), "The Economics of Credit Cards, Debit Cards and ATMs: A Survey and Some New Evidence", *Journal of Banking and Finance*, vol 32, 1468-1483.

Carbo-Valverde, S. (2007), "Implications of Basel II for different bank ownership patterns in Europe", *Atlantic Economic Journal*, vol. 35(4), 391-397.

Carbo-Valverde, S., Humphrey, D. and R. López del Paso (2007) "Opening the Black Box: Finding the Source of Cost Inefficiency", *Journal of Productivity Analysis*, vol. 27(3), June, 209-220.

Carbo-Valverde, S., Humphrey, D. and R. López del Paso (2007), "Do Cross-Country Differences in Bank Efficiency Support a Policy of "National Champions"?", *Journal of Banking and Finance*, vol 31, 2173-2188.

Carbo-Valverde, S. and F. Rodríguez Fernández (2007), "The determinants of bank margins in European banking", *Journal of Banking and Finance*, vol 31, 2043-2063.

Carbo-Valverde, S., López del Paso, R. and F. Rodríguez Fernández (2007), "Financial innovations in banking: impact on regional growth", *Regional Studies*, vol. 41 (3), 311-326.

Altunbas, Y., Carbo, S., Gardener E.P.M. and P. Molyneux, (2007), "Examining the Relationships between Capital, Risk and Efficiency in European Banking", *European Financial Management*, vol. 13, nº1, 49-70.

Carbo-Valverde, S., Gardener E. and P. Molyneux (2007), "Financial Exclusion in Europe", *Public Money and Management*, Vol. 27, No. 1, February 2007, 21-27.

Carbo-Valverde, S. and F. Rodríguez Fernández (2005), "New Evidence of Scope Economies among Lending, Deposit-taking, Loan Commitments and Mutual Fund Activities", *Journal of Economics and Business*, vol. 57, 187-207.

Berenguer, M.I., Carbo, S. and M.A. Fortés (2005), "Cournot Competition in a Two-Dimensional Circular City", *The Manchester School*, vol. 73, nº1 40-49.

Carbo-Valverde, S. and F. Rodríguez, (2004), "The Finance-Growth Nexus. A Regional Perspective", *European Urban and Regional Studies*, vol. 11, nº 4, 339-354.

Carbo-Valverde, S. and D. Humphrey (2004), "Predicted and Actual Costs from Individual Bank Mergers", *Journal of Economics and Business*, vol. 56, 137-157.

Carbo-Valverde, S., Humphrey, D. and F. Rodríguez Fernández (2003), "Bank Deregulation is Better than Mergers", *Journal of International Financial Markets, Institutions and Money*, vol. 13, nº 5, December, 429-449.

Carbo-Valverde, S., Gardener, E.P.M. and J. Williams, (2003), "A Note on Technical Change in Banking: The Case of European Savings Banks", *Applied Economics*, vol. 35 , nº 6, 705-719.

Carbo-Valverde Valverde, S., Humphrey, D. and F. Rodríguez Fernández (2002) "Deregulation, Bank Competition and Regional Growth", *Regional Studies*, vol. 37, nº 3, 227-237.

Carbo-Valverde, S. Gardener, E.P.M. and J. Williams (2002), "Efficiency in Banking: Empirical Evidence from the Savings Banks Sector", *The Manchester School*, vol. 70, nº 2, March 2002, 204-228.

Selected Books and book chapters:

Santiago Carbo-Valverde, Cuadros, Pedro J. and Francisco Rodriguez (2021), "FinTech and Banking: An Evolving Relationship", in T. King, F. Saverio Stentella Lopes, A. Srivastav and J. Williams (eds.), *Disruptive Technology in Banking and Finance. An International Perspective on FinTech*, Palgrave Studies in Financial Services Technology, Springer Nature Switzerland, Suiza, Chapter 6 (pp.161-194).

Santiago Carbo-Valverde and Francisco Rodriguez (2016), "Small Business Lending", in Thornsten Beck y Barbara Casu (eds.), *The Palgrave Handbook of European Banking*, Palgrave McMillan, London (UK), Ch. 10. 231-255.

Santiago Carbo-Valverde and Francisco Rodriguez (2016), "The Single Euro Payment AREA (SEPA): Implementation in Spain", in B. Batiz-Bazo and L. Eftymiou (eds.), *The Book of Payments. Historical and Contemporary View on the Cashless Society*, Palgrave McMillan, Basingstoke (UK), 351-358.

Santiago Carbo-Valverde, Cuadros, Pedro J. and Francisco Rodriguez (2016), "The Reputable Underwriting Matching in Corporate Bond Issuances: Evidence for Non-financial Bonds", in Santiago Carbó, Pedro J. Cuadros and Francisco Rodriguez (eds.), *Bank Funding, Financial Instruments and Decision-Making in the Banking Industry*, Palgrave McMillan, Basingstoke (UK), 95-115.

Santiago Carbo-Valverde, Cuadros Pedro J. and Francisco Rodriguez (2016c)(eds.), *Liquidity Risk, Efficiency and New Banking Business Models*, Palgrave McMillan, Basingstoke (UK).

Santiago Carbo-Valverde and María J. Nieto (2016), "Bank Crisis Resolution and the Insufficiency of Fiscal Stops: The Case of Spain", in J. Barth and G. Kaufman (eds) *The First Great Financial Crisis of the 21st Century. A retrospective*, World Scientific Publishing, Singapore, Ch. 17, 461-487.

Santiago Carbó, Cuadros Pedro J. and Francisco Rodriguez (2016)(eds.), *Bank Funding*, Santiago Carbo-Valverde and Francisco Rodriguez Fernandez,(2015), "Financial Regulation in Spain", en R. Kattel, J. Kregel and M. Tonveronachi (ed.), *Financial Regulation in the European Union*, Routledge, Abingdon (UK), Ch. 5, 109-132.

Santiago Carbo-Valverde and Luis Pedauga (2013), "Financial Stability and Economic Growth", in Juan Fernandez de Guevara and José Manuel Pastor (eds.), *Crisis, Risk and Stability in Financial Markets*, Palgrave McMillan, Basingstoke (UK), Ch. 1, 8-23.

Santiago Carbo-Valverde, David Humphrey and Francisco Rodriguez-Fernández,(2011), "A Revenue-Based Frontier Measure of Banking competition", en Philip Molyneux (ed.), *Bank Performance, Risk and Firm Financing*, Palgrave McMillan, Basingstoke (UK), Ch. 6, 135-153.

Santiago Carbo-Valverde (2010), "Financial Crisis and Regulation: the Case of Spain", in Robert R. Bliss and George G. Kaufman, (eds.) Financial Institutions and Markets. The Financial Crisis: An Early Perspective, Palgrave Macmillan, New York, US. Ch. 5, 127-145.

Santiago Carbo-Valverde and David B. Humphrey (2009), "Technological innovation in banking: the shift to ATMs and implicit pricing of network convenience", in Luisa Anderloni, David T. Llewellyn, Reinhard H. Schmidt, (eds.) Financial Innovation in Retail and Corporate Banking, Edward Elgar, Cheltenham, UK. Chp. 4, 59-110. ISBN: 978-1-84844-040-1.

Santiago Carbo and Francisco Rodríguez (2006), "Pricing strategies in European banking: specialization, technology and intertemporal smoothing", en Balling, M., Lierman, F. y A. Mullineaux (eds.), Competition and Profitability in European Financial Services. Strategic, systemic and policy issues, Routledge, Taylor and Francis Group, Abingdon, Oxon, UK, Chapter 9.

Santiago Carbo, David Humphrey and Rafael López (2006), "Electronic payments and ATMs: changing technology and cost efficiency in banking", en Balling, M., Lierman, F. y A. Mullineaux (eds.), Competition and Profitability in European Financial Services. Strategic, systemic and policy issues, Routledge, Taylor and Francis Group, Abingdon, Oxon, UK, Chapter 8.

Santiago Carbo, Edward P.M. Gardener and Philip Molyneux, (2005), Financial Exclusion, Palgrave-MacMillan, Basingstoke (UK).

Main Teaching experience

Undergraduate:

Financial System: Institutions and Markets
Industrial Organization
Microeconomics
International Economics and Finance

Postgraduate:

Banking
Financial intermediation theory
Economics of Banking
Bank Management

Selected funded research projects

(2018-2021) Director of the Research Project PGC2018-099415-B-I00), of the Spanish Ministry of Economy and Competitiveness: "Digitalización financiera en un contexto de revolución digital: competencia, regulación y adopción". Extended to 2022.

(2015-2017) Director of the Research Project ECO2015-67656-P of the Spanish Ministry of Economy and Competitiveness: "Digitalización y servicios financieros: efectos en el sector bancario, medios de pago e inclusión financiera".

(2013-2014): Researcher for the VII Framework Programme Project "Financialisation, Economy, Society & Sustainable development" (FESSUD).

(2012-2014): Director of the Research Project of the Spanish Ministry of Science: MCIN-FEDER ECO2011-27954 "Regulación financiera y sector bancario en tiempos de inestabilidad: mecanismos de prevención y resolución de crisis"

(2009-2011): Director of the Research Project of the Spanish Ministry of Science MCIN-FEDER ECO2008-05243/ECON "Organización industrial para la economía bancaria: mercados relevantes, competencia y costes de cambio

(2005-2008): Director of the research Project of the Spanish Ministry of Science MEC-FEDER SEJ2005-04927/ECON: "La dimensión social de la industria de servicios financieros y su incidencia en el crecimiento económico.

(2005-2007) Director of the Research Project of the BBVA-Excellence Research Grants on "Retail payment systems in Europe and the US".

(2003-2005) Researcher for the project of the BBVA-Excellence Research Grants on "Integration, competition and Efficiency in Europe".

(2002-): Researcher for the project "European Integration, Financial Systems and Corporate Performance" (Special Service Agreement IB-2002-SSA-O-00046 by Intech, The United Nations University). Contract with the European Union, DG Research (Contract HPSE-CT-1999-00039

(2002-2005): Director of the research Project SEC2002-00348 (2002 edition), funded by the Spanish Ministry of Science and Technology and FEDER: "La contribución de la integración de los sistemas bancarios europeos a la competitividad, crecimiento y bienestar social". Director: Santiago Carbo-Valverde.

(2001-2002): Researcher in the Project for the European Commission nº MARKT/2001/10/A: "Structural changes and trends in the internal market for financial services.

Select editorial activities and committee membership

- Editor in chief of The Journal of Financial Management, Markets and Institutions
- Member of the editorial board of "Financial Stability Review- Bank of Spain".
- Associate Editor of the "Journal of Financial Stability".
- Member of the European Shadow Financial Regulatory Committee