Carlos Alberto Castro Iragorri

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Faculty of Economics, Universidad del Rosario,
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Education

- Université Libre de Bruxelles, Belgium, PhD in Economics, 2010
  Ph.D Disertation "Essays in Dependence and Optimality in Large Portfolios".
- Université Libre de Bruxelles, Belgium, M.Sc. in Statistics (DEA en Statistique), 2007.
- Universidad de los Andes, Bogotá, Colombia, MA. in Economics, 2001.
- Universidad de los Andes, Bogotá, Colombia, Bachelor of Arts in Economics, 2000.

Fields: Risk Management, Financial Econometrics, Credit Risk, Stochastic Finance, Time Series.

Scholarships and Fellowships:

- Doctoral Fellowship, Université Libre de Bruxelles, 2007, 2008, 2009.
- ALBAN Scholarship, European Union, 2005-2006.

Research Grants:

- Research Assistant grants, Colciencias, 2011 (1), 2015 (2).
- Research Fund (FIUR), Universidad del Rosario, 2013, COP $20´000,000.
- Research Project (MAP-BID), Inter-American Development Bank, 2012-2013, €20,000.
- Research Fund (FIUR), Universidad del Rosario, 2011, COP $20´000,000.

Current position

Associate Professor, Faculty of Economics, Universidad del Rosario (2015-)

Previous positions

- Founding director of the Master in Quantitative Finance (2012-2015); Member of the Doctoral School Board (2011-2015); Assistant Professor, Faculty of Economics, Universidad del Rosario (2010-2015).
- Research program for young researchers (December 2009 - June 2010), Department of Financial Stability, National Bank of Belgium, Brussels, Belgium.
- Doctoral student consultant (2007-2009), Credit Portfolio Modeling department, Dexia sa, Brussels, Belgium.
- Visiting PhD student (January-April), INSEAD, Fontainebleau, 2007.
- Consultant (Summer 2008), Sub-Director (2004/2005), Advisor (2001/2003), Under Directorate of Sector Studies and Regulation, Directorate of Economic Studies, National Planning Department (DNP) Bogotá, Colombia.
- Research Assistant (Summer 2000), CEDE (Centro de Estudios sobre Desarrollo Económico), Universidad de los Andes, Bogotá, Colombia.

Publications

- Quantitative management of financial risk in supplying a health plan, *Revista Gerencia y Políticas en Salud*, 2015: 14(28), pp 1-12. (in Spanish)
- Default risk in agricultural lending, the effects of commodity price volatility and climate, *Agricultural Finance Review*, 74 (4), October 2014, pp 501-521. (with K. Garcia).

- Measuring and testing for the systemically important financial institutions, *Journal of Empirical Finance*, Volume 25, January 2014, Pages 1–14, (with S. Ferrari).
- Confidence sets for asset correlations in portfolio credit risk, *Revista de Economía del Rosario*, Vol. 15, No. 1, 2012.
- Portfolio choice under local industry and country factors, *Financial Markets and Portfolio Management*, 24(4), December 2010.
- Measuring the systemic importance of financial institutions using market information, in *Financial stability review*, National Bank of Belgium, June 2010, pp. 127-141 (with S. Ferrari).
- Uncertainty in asset correlation for portfolio credit risk: the shortcomings of the Basel II framework, *Proceedings CREDIT Conference Credit Risk, Financial Crises, and the Macroeconomy*, Vol. 2, Venice, Italy, September 2009.
- X-efficiency in Colombia's Banking Industry, Desarrollo y Sociedad, September 2001, 48, pp. 1-52, (in Spanish).

Working Papers

- Synthetic portfolio for event studies: Estimating the effects of volatility call auctions, March 2016, (with D. Agudelo and S. Preciado).
- Racial and spatial interaction for neighborhood dynamics in Chicago, Facultad de Economía, Documento de trabajo. 189, June 2016, pp. 30 (with A. Badel and C. Rodriguez).
- Network externalities across financial institutions, Facultad de Economía, Documento de trabajo. 184, February 2016, pp. 23 (with J.S. Ordoñez and S. Preciado).
- La administración cuantitativa del riesgo financiero en la provisión de un plan de salud, Universidad del Rosario, Facultad de Economía, Documento de trabajo. 163, August 2014. pp. 23.
- Stock return co-movements and integration within the Latin American integrated market, April, 2014, (with N.J. Marin), Universidad del Rosario, Faculty of Economics, working paper, no. 154.
- Default risk in agricultural lending: the effects of commodity price volatility and climate, IDB working paper series no. No. IDB-DP 362
- A Network model of systemic risk: identifying the sources of dependence across institutions, October, 2012, (with J.S. Ordoñez), Universidad del Rosario, Faculty of Economics, working paper, no. 121.
- Administración de riesgos en los Fondos Privados de Pensiones, *Archivos de Economía*, No. 351, Departamento Nacional de Planeación (DNP), Bogotá, Colombia, Enero 2009, in Spanish.
- El comercio internacional y la productividad total de los Factores en Colombia., *Archivos de Economía*, No. 307, Departamento Nacional de Planeación (DNP), Bogotá, Colombia, Enero 2006, (with J.R Perilla y O. Gracia, in Spanish).
- Un Modelo Gravitacional para la Agenda Interna., *Archivos de Economía*, No. 296, Departamento Nacional de Planeación (DNP), Bogotá, Colombia, Enero 2005, (with Lozano C., Campos, J.S. , in Spanish).
- El PIB potencial y la brecha del PIB en *Carta Financiera*, ANIF, Enero de 2005, (with J. Rodriguez).
- Yet another lagging, coincident and leading index for the Colombian Economy, Archivos de Economía, No. 233, Departamento Nacional de Planeación (DNP), Bogotá, Colombia, September 2003.
- Efficiency, competition and intermediation margins in The Financial Sector readiness toward the twenty-first century, ANIF, November de 2002, Volume 1, (with R. Steiner, in Spanish).
- Otra mirada al margen de intermediación financiera, Separata Especial, *Portafolio-DNP*, Septiembre 2001, (with N. Salazar).

Presentations at Conferences/Seminars/Academic visits

- XXIV Finance Forum, Madrid, July 2016.
- Second International Congress on Actuarial Science and Quantitative Finance, Cartagena, June 2016 (Local Organizer).
- Visiting Scholar, Federal Reserve Bank of St. Louis, January 2016.
- XII Salón del Inversionista "Métodos cuantitativos para la toma de decisiones de inversión", Medellín, October 2015.
- Universidad EAFIT, Medellin, March 2015.
- Visiting Scholar, Federal Reserve Bank of St. Louis, January 2015.
- 8th International Conference on Computational and Financial Econometrics, Pisa, December 2014.
- First International Congress on Actuarial Science and Quantitative Finance, Bogota, June 2014 (Local Organizer).
- IMEMC Conference, Universidad Nacional de Colombia, Bogotá, March 2014.
- 7th International Conference on Computational and Financial Econometrics, London, December 2013.
- Universidad Sergio Arboleda, October, 2013
- ICESI, Cali, April 2013,
- ECARES/ULB, Brussels, December, 2012.
- 6th International Conference on Computational and Financial Econometrics, Oviedo, December 2012.
- Actuarial Wednesdays, Universidad del Rosario-Asociación Colombiana de Actuarios, October 2012.
- Mathematical Finance Seminar, Universidad de los Andes, October 2012.
- 5th Financial Risk International Forum Systemic Risk, Paris, March, 2012.
- ECARES/ULB, Brussels, March, 2012.
- Banco de la Republica de Colombia, Bogotá, November, 2011.
- LACEA-LAMES 2011, Santiago, November, 2011.
- 11th Annual FDIC/JFSR Bank Research Conference, Washington D.C., September 2011.
- Visiting Scholar, Federal Reserve Bank of St. Louis, March 2011.
- Midwest Finance association, Chicago, March 2011.
- 4rd International Conference on Computational and Financial Econometrics, London, December 2010.
- Faculty of Economics, Universidad del Rosario, August 2010
- 3rd International Conference on Computational and Financial Econometrics, Limassol, October 2009.
- CREDIT Conference, Venice, September 2009.
- VU, Amsterdam, April, 2009.
- ENTER Jamboree, London February, 2009.
- Factor Structures for Panel and Multivariate Time Series Data, Maastricht, September, 2008.
- 2nd Annual Doctoral Workshop at ULB, Brussels, May, 2008.
- International financial Research Forum, Paris, March, 2008. (Poster)
- Workshop on Multivariate Time Series Modelling, UCL, Louvain-La-Neuve, May, 2007.

Courses:

- Universidad del Rosario: Models for the term structure of interest rates (2016), Quantitative methods in finance (2016), Quantitative Risk Management (2014-), Financial Econometrics (2013-), Financial theory in discrete time (2013-2015), Graduate Econometrics, (2010-2015), Undergraduate Econometrics (2011, 2012), Introduction to Economics, 2011, Macroeconometrics, TA, 2003
- Universidad de los Andes: Intermediate Econometrics (Undergraduate), TA, 2001-2002.

Computer skills

- Microsoft Certified Professional (MCP ID #2953622), Designing and Implementing Desktop Applications with Microsoft Visual Basic 6.0.
- Microsoft Office, Access, STATA, FrontPage, SPSS, RATS, GiveWin, Ox, PC-Give, GAUSS, Matlab, E-Views, R, WinBugs, C++.

Professional services and affiliations

Referee**:** *Archivos de Economía (DNP), Planeación y Desarrollo (DNP), Ensayos sobre Política Económica (Banco de la República de Colombia), Cuadernos de Economia (UN), Coyuntura Económica (Fedesarrollo), Advances in Decision Sciences, ODEON –Universidad Externado de Colombia.*

Member of the American Financial Association (2009, 2010), the Econometric Society (2009-2011).

Personal Information

Date of Birth:	June 10, 1978.
Languages:	Spanish, English, French (Intermediate).
Citizenship:	Colombian.

Details of student supervision

- Johana Marin (3th year Ph.D student): “Measuring risk and portfolio diversification”. Professor at Universidad de Medellin.
- Sergio A. Preciado (MSc Quantitative Finance, 2016): “Synthetic portfolio for event studies: Estimating the effects of volatility call auctions”. Quantitative Analyst at Banco Agrario de Colombia.
- Cristhian A. Rodriguez (MSc Quantitative Finance, 2016): “Estimating and Forecasting the Term Structure of Interest Rates: US and Colombia Analysis”. Research assistant at Universidad del Rosario.
- Maria A. Ceballos (MSc Quantitative Finance, 2015): “Multivariate copulas and applications in market risk” (in Spanish). Quantitative Analyst at Corpbanca.
- Carlos A. Cuadros (MSc Quantitative Finance, 2015): “Decomposing the term structure of interest rates for sovereign bonds of Colombia and the US” (in Spanish). Global Fixed Income Strategist in Credicorp Capital.
- Lina C. Vasquez (MSc Quantitative Finance, 2015): “A three factor affine term structure model for Colombia” (in Spanish). Professional at the market regulator AMV.
- Raulinso E. Solano (MSc Quantitative Finance, 2014): “Value at risk for the sovereign bond portfolio of the Colombian financial sector” (in Spanish). Professional at the Financial Superintendence.
- Jose L. Alayòn (MSc Quantitative Finance, 2014): “Portfolio selection and market risk management using the generalized hyperbolic distribution” (in Spanish). Portfolio Manager Acciones & Valores.
- Andres G. Cangrejo (MSc Quantitative Finance, 2014): “The term structure of inter-bank risk” (in Spanish). Fx trader Acciones & Valores.
- Juan S. Ordoñez (MSc in Economics, 2014): “From micro to macro prudential: an analysis of bank oversight using spatial econometrics” (in Spanish). 1st year Ph.D Student Universidad del Rosario.
- Lina Camero (MSc in Economics, 2012): “Risk adjustments in the Colombian healthcare system an application using a multilevel model” (in Spanish). Professional at the Ministry of Health.