Jaime Casassus

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EDUCATION

PhD in Finance, 2004, Carnegie Mellon University.

MSc in Finance, 2001, Carnegie Mellon University.

MSc in Industrial Engineering, 1996, Universidad Catolica de Chile.

BSc in Engineering (Computer Science), 1993, Universidad Catolica de Chile.

ACADEMIC POSITIONS

Associate Professor, Universidad Catolica de Chile, 2011-Present.

Managing Editor, Quantitative Finance, 2013-Present.

Associate Editor, Journal of Commodity Markets, 2015-Present.

Executive Committee Member, FinanceUC, Universidad Catolica de Chile, 2010-Present.

Graduate Programs Director, Instituto de Economia, 2015-2019.

Board Member of the Chilean Economic Association, 2013-2017.

Faculty Council Representative, Instituto de Economia, Universidad Catolica de Chile, 2012-2017.

Research Director, Instituto de Economia, 2015.

Business and Economics Group Coordinator, Becas Chile (CONICYT), 2011-2012.

Business and Economics Study Group, FONDECYT-Chile, 2007-2010.

Visiting Assistant Professor, Macquarie University, 2019.

Visiting Assistant Professor, Haas School of Business, University of California, Berkeley, 2006-2007.

Assistant Professor, Universidad Catolica de Chile, 2004-2011.

Lecturer, Universidad Catolica de Chile, 1997-2004.

PROFESSIONAL EXPERIENCE

Committees

 Member of the Financial Committee, Ministry of Finance, Chilean Government, 2014-Present.

Consulting Activity

- Consultant, Chilean Association of Banks and Financial Institutions, 2016-2018.
- o Consultant, Chilean Securities and Insurance Commission, 2013.
- o Consultant, Ministry of Finance, Chilean Government, 2013.
- Consultant, EuroAmerica, Chile, 2012.

- o Consultant, Ministry of Finance, Chilean Government, 2011.
- o Consultant, Chilean Securities and Insurance Commission, 2010.
- o Consultant, ACF Minera, 2009.
- o Research Advisor, RiskAmerica, Chile, 2004-2008.

Talks

- Latin America & the Caribbean Institutional Investors Forum, Panama City, Panama, June 2017.
- o 6th Annual Chile Investors Forum, Santiago, Chile, September 2016.
- Second Annual Latin America & the Caribbean Fixed Income Investors Forum, Panama City, Panama, April 2016.
- Seminario "Desafíos y Oportunidades para el Futuro Empresarial", Universidad Catolica de Chile, El Salvador, May 2015.
- Foro ICARE "Optimizando las Inversiones del Sistema de Pensiones", Santiago, Chile, May 2014.

RESEARCH INTERESTS

Asset pricing, asset allocation, commodity markets, pricing and hedging of derivatives, stochastic volatility models, general equilibrium models, real options theory.

WORKING Papers

The Economic Impact of Oil on Industry Portfolios (June 2017), with Freddy Higuera.

Adjusted Money's Worth Ratios in Life Annuities (January 2017), with Eduardo Walker.

Spanned and Unspanned Risks in Commodity Futures Markets (August 2014), with Freddy Higuera.

Product Differentiation and Option Games (June 2011), with Carlos Deck.

Optimal IPO Timing in an Exchange Economy (June 2010), with Mauro Villalon.

Backwardation in Production Economies (July 2008), with Hector Ortega.

Publications

Equilibrium Commodity Prices with Irreversible Investment and Non-linear Technologies (2018), with Pierre Collin-Dufresne and Bryan Routledge, *Journal of Banking & Finance*, vol.95, 2018, 128-147.

Maximal Gaussian Affine Models for Multiple Commodities: A Note (2015), with Peng Liu and Ke Tang, *Journal of Futures Markets*, vol.35, no.1, 75-86.

Economic Linkages, Relative Scarcity, and Commodity Futures Returns (2013), with Peng Liu and Ke Tang, *Review of Financial Studies*, vol.26, no.5, 1324-1362.

Short-Horizon Return Predictability and Oil Prices (2012), with Freddy Higuera, *Quantitative Finance*, vol.12, no.12, 1909-1934. Reprinted in *Commodities*, Michael A. H. Dempster and Ke Tang (eds.) Chapman and Hall/CRC, 2015.

Consumption and Hedging in Oil-Importing Developing Countries (2012), with Felipe Aldunate, European Financial Management, vol.18, no.5, 896-928.

Correlation Structure between Inflation and Oil Futures Returns: An Equilibrium Approach (2010), with Diego Ceballos and Freddy Higuera, Resources Policy, vol.35,

no.4, 301-310.

Stochastic Convenience Yield Implied from Commodity Futures and Interest Rates (2005), with Pierre Collin-Dufresne, *Journal of Finance*, vol.60, no.5, 2283-2331, nominated for Smith-Breeden Prize (best paper published in Journal of Finance).

Unspanned Stochastic Volatility and Fixed Income Derivatives Pricing (2005), with Pierre Collin-Dufresne and Robert Goldstein, *Journal of Banking & Finance*, vol.29, no.11, 2723-2749.

Optimal Exploration Investments under Price and Geological-Technical Uncertainty: A Real Options Model (2001), with Gonzalo Cortazar and Eduardo S. Schwartz, *R & D Management*, vol.31, no.2, 181-189. Reprinted in *Real R & D Options*, Dean A. Paxson (ed.) Burtterworth-Heinemann, 2002.

A Compound Option Model for Evaluating Multistage Natural Resource Investments (1999), with Gonzalo Cortazar, in *Project Flexibility, Agency, and Product Market Competition: New Developments in the Theory and Application of Real Options Analysis*, Michael J. Brennan and Lenos Trigeorgis (eds.) Oxford University Press, 1999.

Optimal Timing of a Mine Expansion: Implementing a Real Options Model (1998), with Gonzalo Cortazar, *The Quarterly Review of Economics and Finance*, vol.38, Special Issue, 755-769.

Honors and Awards

Energy and Commodity Finance Conference best paper award, 2016, The Economic Impact of Oil on Industry Portfolios.

Award For Excellence In Teaching, Universidad Catolica de Chile, 2015.

EBES best paper award, 2012, Long-Term Economic Relationships and Correlation Structure in Commodity Markets.

Award For Excellence In Research, Engineering, Universidad Catolica de Chile, 2007. Award For Excellence In Teaching, Engineering, Universidad Catolica de Chile, 2005. Carnegie Bosch Institute Fellowship Award, 2003-2004.

William Larimer Mellon Fellowship, Carnegie Mellon University, 2002-2003.

Beca Presidente de la República, MIDEPLAN, Chile, 1999-2002.

Beca Matrícula de Honor, Universidad Catolica de Chile, 1989.

Grants

CONICYT/PIA/Anillo-Chile, Large scale optimization and uncertainty: Challenges in Strategic Mine Planning. An Interdisciplinary Approach, 2015-2018.

FONDECYT-Chile, Value Premium and the Oil Price, 2014-2017.

FONDECYT-Chile, Determinants of Commodity Risk-Premia, 2011-2013.

FONDECYT-Chile, Oil Price and Stock Returns when Risk Premia are Time-Varying, 2009-2010.

FONDECYT-Chile, Bridging the Gap between General Equilibrium Production Economies and Exponentially Affine Commodity Pricing Models, 2007-2008.

FONDECYT-Chile, Commodity Prices in General Equilibrium and their Implications for Valuation and Risk-Management Decisions, 2004-2006.

FONDECYT-Chile, International Collaboration Research Grant, 2004.

FONDEF-Chile, New Computational Tools for Asset Allocation in Emerging Markets: An Application to Chilean Pension Funds, 2004-2006.

Thesis Advisor Doctoral Students

 Jocelyn Tapia (Thesis Committee Member, 2019), Freddy Higuera (Industrial Engineering, 2012).

Master Students

Hernan Morales (2011), Carlos Deck (2011), Mauro Villalon (2011), Arturo Zacharias (2010), Felipe Bezamat (2010), Sebastián Parot (2010), Rodrigo Dufeu (2009), Tomas Court (2008), Alfonso Astudillo (2008), Hector Ortega (2008), Diego Ceballos (2008), Ignacio Puentes (2008), David Cornejo (2008), Felipe Aldunate (2008), Gonzalo Morales (2007).

TEACHING EXPERIENCE

Universidad Catolica de Chile

- o Financial Markets, (EAE-3301), 2018.
- o Topics in Financial Economics, (EAE-378D), 2010, 2012-2014.
- Econometrics I, (EAE-250A), 2010, 2012-2019.
- o Mathematics for Economists, (EAE-319B), 2010-2018.
- o MSc, Fundamentals of Finance, (IND-3310), 2006-2009.
- o MSc, Financial Management, (IND-3410), 2006-2009.
- Workshop on Applied Finance (ICS-2532), 2005-2009.
- Finance (ICS-3532), 1997-1999, 2004-2009.
- Seminar in Empirical Finance (ICS-3551), 2005.
- Applied Econometrics (ICS-2562), 2008-2009.

University of California, Berkeley

- o PhD, Dynamic Asset Pricing (239B), 2006-2007.
- MBA, Futures and Option Markets (236A), 2006.
- MFE, Stochastic Calculus for Finance (230Q), 2006-2007.

Carnegie Mellon University

- TA, MS Computational Finance, Finance (45-710), 2003.
- TA, undergraduate, Finance I (70-391), 2000-2003.
- TA, MBA, Financial Analysis and Securities Trading (45-901), 2001.

OTHER ACTIVITIES

Conference Organizer & Scientific Committees

- Commodity and Energy Markets Conference (member of the scientific committee)
 - Carnegie Mellon University, Pittsburgh, PA, USA, June 2019.
- 15th International Conference FinanceUC (organizer), Santiago, Chile, December 2018.
- Commodity and Energy Markets Conference (member of the scientific committee)
 Sapienza University of Rome, Rome, Italy, June 2018.
- o 13th International Conference FinanceUC (organizer), Santiago, Chile, Decem-
- ber 2017.
- Encuentro Anual de la Sociedad de Economía de Chile (member of the scientific committee) - Universidad Catolica de Chile, Santa Cruz, Chile, September 2017.
- Commodity and Energy Markets Conference (member of the scientific committee)
 Oxford University, Oxford, UK, June 2017.

- 11th International Conference FinanceUC (organizer), Santiago, Chile, January 2017.
- Encuentro Anual de la Sociedad de Economía de Chile (member of the scientific committee) - Universidad Adolfo Ibañez, Viña del Mar, Chile, September 2016.
- Energy and Commodity Finance Conference (member of the scientific committee)
 ESSEC Business School, Paris, France, June 2016.
- Commodity Markets Conference (member of the scientific committee) Leibniz University, Hannover, Germany, June 2016.
- Encuentro Anual de la Sociedad de Economía de Chile (member of the scientific committee) - Universidad de Talca, Talca, Chile, September 2015.
- 8th International Conference FinanceUC (organizer), Santiago, Chile, March 2015.
- o Encuentro Anual de la Sociedad de Economía de Chile (member of the scientific committee) Universidad de Chile, Reñaca, Chile, September 2014.
- 6th International Conference FinanceUC (organizer), Santiago, Chile, December 2013.
- 4th International Conference FinanceUC (organizer), Santiago, Chile, January 2013.
- International Conference on Futures and Derivative Markets (member of the scientific committee) Beihang University, Beijing, China, October 2012.
- 2nd International Conference FinanceUC (organizer), Santiago, Chile, December 2011.

Presentations

 ASBA Seminar, Macquarie University, Sydney, Australia, 2019; Commodity and Energy Markets Conference, Rome, Italy, 2018; Energy & Commodity Finance Seminar, ESSEC Business School, Cergy-Pontoise, France, 2018; 2nd Australasian Commodity Markets Conference, Sydney, Australia, 2018 (keynote speaker); CEM Conference, Oxford, UK, 2017; ECOMFIN Conference, Paris, France, 2016; 2nd WKC, Turkey, 2015; HKUST Finance Symposium, Hong Kong, 2014; EWGCFM Meeting, Milano, Italy, 2014; LAMES Annual Meeting, Sao Paulo, Brazil, 2014; Swissquote-EPFL Conference, Lausanne, Switzerland, 2013; EURO-INFORMS Joint International Conference, Rome, Italy, 2013; EFMA Conference, Reading, UK, 2013; FEBS Conference, Paris, France, 2013; LAMES Annual Meeting, Lima, Peru, 2012; World Finance Conference, Rio de Janeiro, Brazil, 2012; Real Options Annual Conference, London, England, 2012; EBES Annual Conference, Istanbul, Turkey, 2012; Workshop on Risk Management and Insurance, Sevilla, Spain, 2011; European Meeting of the Econometric Society, Oslo, Norway, 2011; Real Options Annual Conference, Turku, Finland, 2011; LACEA Annual Meeting, Santiago, Chile, 2011; Econometric Society World Congress, Shanghai, China, 2010; ALIO-INFORMS Joint International Meeting, Buenos Aires, Argentina, 2010; Finance and Commodities Workshop, Madrid, Spain, 2009; EFM Symposium on Risk Management in Financial Institutions, Nantes, France, 2009; Encuentro Anual de Economistas de Chile, Viña del Mar, Chile, 2008; European Meeting of the Econometric Society, Milan, Italy, 2008; Encuentro Anual de Economistas de Chile (Sesión Plenaria), Viña del Mar, Chile, 2007; Real Options Annual Conference, Berkeley, CA, USA, 2007; Encuentro Anual de Economistas, La Serena, Chile, 2006; Western Finance Association, Keystone, CO, USA, 2006; Workshop on Operations and Management Science, Universidad de Chile, 2005; SED Annual Meeting, Florence, Italy, 2004; Western Finance Association, Vancouver, Canada, 2004; Real Options Annual Conference, Montreal, Canada, 2004; LACEA Meeting, Puebla, Mexico, 2003; Carnegie Mellon University, 2003, 2002; European Finance Association, Berlin, Germany, 2002; Real R & D Options Symposium, Manchester Business School, Manchester, England, 2000; Encuentro Nacional de Economistas, Universidad de Chile, 1998.

Discussions

FinanceUC Conference, Santiago, Chile, 2018; CEM Conference, Oxford, UK, 2017; NBER Economics of Commodity Markets Meeting, Boston, USA, 2016; ECOMFIN Conference, Paris, France, 2016; FinanceUC Conference, Santiago, Chile, 2014; EFMA Conference, Reading, UK, 2013; Western Finance Association, Lake Tahoe, NV, USA, 2013; FEBS Conference, Paris, France, 2013; The Macroeconomics of Risk and Uncertainty Workshop, Central Bank of Chile, 2012; EFM Symposium on Risk Management in Financial Institutions, Nantes, France, 2009; Western Finance Association, Big Sky, MT, USA, 2007; LACEA Meeting, Puebla, Mexico, 2003; European Finance Association, Berlin, Germany, 2002.

Referee

o Journal of Finance, Review of Financial Studies, Journal of Financial Economics, Review of Finance, Journal of Financial and Quantitative Analysis, Journal of Economic Theory, Journal of Econometrics, Journal of Economic Dynamics and Control, Journal of Banking & Finance, Quantitative Finance, European Financial Management, Management Science, Journal of Futures Markets, International Review of Economics & Finance, Applied Mathematical Finance, Studies in Nonlinear Dynamics & Econometrics, ABANTE, Latin American Journal of Economics, FONDECYT-Chile.

Affiliations

• American Finance Association (AFA), Western Finance Association (WFA), American Economic Association (AEA), Econometric Society, Chilean Economic Association (SECHI).

Additional

Computer skills include Fortran, Gauss, Matlab, Mathematica, LATEX, R.

Chilean citizen, fluent in Spanish and English.

References

Prof. Pierre Collin-Dufresne École Polytechnique Fédérale de Lausanne

Prof. Gonzalo Cortazar Universidad Catolica de Chile

Prof. Eduardo S. Schwartz University of California, Los Angeles

Prof. Chris Telmer Carnegie Mellon University
Prof. Eduardo Walker Universidad Catolica de Chile