

# Caio Almeida

## Graduate School of Economics, FGV

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## Academic Positions

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|--------------|--|
| 2006-present | <b>Assistant Professor</b> , Graduate School of Economics, Getulio Vargas Foundation |
| 2001-2006    | <b>Assistant Professor</b> , Department of Economics and Business School, IBMEC-RJ   |
| 2001-2003    | <b>Adjunct Professor</b> , M.S. Program in Financial Mathematics, IMPA-RJ            |
| 2002-2004    | <b>Post-Doctorate</b> , Department of Mathematics, Stanford University               |

## Education

Ph.D. in Electrical Engineering (Applied Statistics, 2001)  
Catholic University of Rio de Janeiro (PUC-RJ)

Post Graduation in Mathematics (Probability, 1999)  
National Institute of Pure and Applied Mathematics (IMPA-RJ)

M.Sc. in Electrical Engineering (Applied Statistics, 1998)  
Catholic University of Rio de Janeiro

B.Sc. in Computer Engineering, 1995  
Catholic University of Rio de Janeiro

## Research Interests

Empirical Issues in Finance and Financial Econometrics: Term Structure of Interest Rates; Stochastic Discount Factor Bounds; Stochastic Volatility Models; Credit Risk Models.

## Working Papers

1. “Do Interest Rate Options Contain Information About Excess Returns?”, (2005, last revised in 2008) (with J. Graveline and S. Joslin), revise and resubmit at *The Journal of Econometrics*.
2. “Term Structure Movements Implicit in Asian Option Prices”, (2006, revised 2008) (with J. Vicente), revise and resubmit at *Quantitative Finance*.

3. “Robust Economic Implications of Nonlinear Pricing Kernels”, (2009) (with René Garcia).

4. Assessing Misspecified Asset Pricing Models with Empirical Likelihood Estimators”, (2008) (with René Garcia), revise and resubmit at *The Journal of Econometrics*.

## Publications

5. “Does Curvature Enhance Forecasting?”, (2009) (with R. Gomes, A. Leite and J. Vicente), *International Journal of Theoretical and Applied Finance*, Vol 12, 8, 1171-1196.

6. “Are Interest Rate Options Important for the Assessment of Interest Rate Risk?”, *Journal of Banking and Finance*, Vol. 33, 7, (2009), 1376-1387. (with J. Vicente)

7. “Identifying Volatility Risk Premia from Fixed Income Asian Options ”, *Journal of Banking and Finance*, Vol. 33, 4, (2009), 652-661. (with J. Vicente)

8. “The Role of No-Arbitrage on Forecasting: Lessons from a Parametric Term Structure Model”, *Journal of Banking and Finance*, Vol. 32, 12, (2008), 2695-2705. (with J. Vicente)

9. “Stochastic Volatility Models and Option Pricing in Brazilian Stock Markets: An Empirical Investigation”, *Journal of Emerging Market Finance*, August 2005 (with S. Dana)

10. “Affine Processes, Arbitrage-Free Term Structures of Legendre Polynomials and Option Pricing”, *International Journal of Theoretical and Applied Finance*, Vol. 8, 2, (2005).

11. “Time-Varying Risk Premia in Emerging Markets: Explanation by a Multi-Factor Affine Term Structure Model”, *International Journal of Theoretical and Applied Finance*, Vol. 7, 7, (2004).

12. “A Generalization of PCA for Non-Observable Term Structures”, *International Journal of Theoretical and Applied Finance*, Vol. 6, 8, (2003). (with C. Fernandes and A. Duarte)

13. “Credit Spread Arbitrages in Emerging Eurobond Markets”, *Journal of Fixed Income*, 2, December, (2000). (with C. Fernandes and A. Duarte)

14. “Decomposing and Simulating the Movements of Term Structures in Emerging Eurobond Markets”, *Journal of Fixed Income*, 1, 21-31, June, (1998). (with C. Fernandes and A. Duarte)

## Teaching Experience

**PhD Courses:** - (2010): Continuous Time Finance  
- (2009): Empirical Finance  
- (2007): Continuous Time Finance

**MSc Courses:**

- (2010): Asset Pricing, Statistics and Probability I.  
- (2009): Asset Pricing, Statistics and Probability I.  
- (2008): Asset Pricing, Statistics and Probability I.  
- (2007): Asset Pricing.  
- (2005): Fixed Income, Derivatives, Topics in Empirical Finance, Risk Management with Value at Risk.  
- (2002/2001): Fixed Income Derivatives, Introduction to Fixed Income, Derivatives, Discrete Time Finance, Matlab in Finance.

**Undergraduate Courses:** Numerical Methods in Finance (2004)

**MBA Courses:** (2004/2005): Finance with EXCEL, and Portfolio Theory.

**Short Courses:** (2001 to 2005): Matlab in Finance, Introduc. to Fixed Income Markets, Affine Processes in Finance, Market Risk, and, Derivatives.

## Academic Awards

- \* Post-doctorate Fellowship 2002-2004, Department of Mathematics, Stanford University.
- \* Special PhD Fellowship 2000-2001, Fundação de Apoio a Pesquisa do Rio de Janeiro (FAPERJ, State Entity)
- \* PhD Fellowship 1998-1999, Coordenação de Aperfeiçoamento de Pessoal do Ensino Superior (CAPES, Brazilian Government)
- \* Master of Science Fellowship 1996-1998, Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq, Brazilian Government)
- \* Fellowships for Undergraduate Studies, 1993-1995, IBM and Catholic University of Rio

## Refereeing

### International Journals

Review of Financial Studies, Journal of Econometrics, Journal of Financial Econometrics, Journal of Banking and Finance (2), Global

Finance Journal, Journal of Emerging Markets Finance, International Review of Finance.

## Recent Conference Seminars

- \* EFA, Bergen, Norway, August 2009.
- \* ESEM, Barcelona, Spain, August 2009. (co-author presentation)
- \* Sofie European Conference, Geneva, Switzerland, June 2009. (scheduled)
- \* AFA Annual Meeting, San Francisco, USA, January 2009.
- \* FMA Annual Meeting, Texas, USA, October 2008 (co-author presentation).
- \* NFA Annual Meeting, Calgary, Canada, September 2008 (co-author presentation).
- \* 63rd European Meeting of the Econometric Society, Milan, Italy, August 2008.
- \* European Finance Association Meeting (EFA), Athens, Greece, August 2008 (co-author presentation).
- \* EFMA Annual Meeting, Athens, Greece, June 2008 (co-author presentation).
- \* WFA Annual Meeting, Hawaii, USA, June 2008.
- \* Sofie Inaugural Conference, New York, USA, June 2008.
- \* Imperial College Conference in Financial Econometrics, London, England, May 2008 (co-author presentation).
- \* EFMA Symposium on Risk and Asset Management, Nice, France, April 2008.
- \* CIREQ GMM Conference, November 2007, (invited seminar) (co-author presentation).
- \* 26th Brazilian Colloquium of Mathematics, IMPA, Brazil, July 2007, (invited seminar).
- \* AFA Annual Meeting, Chicago, USA, January 2007, (co-author presentation).

## PhD Students

-José Vicente (IMPA, 2006)

Thesis: Essays in General Equilibrium and Empirical Finance

-Bruno Lund (Getulio Vargas Foundation, 2009)

Thesis: Essays in Macroeconomics and Dynamic Term Structure Models

-Axel Simonsen (Getulio Vargas Foundation, 2009)  
Thesis: Essays in Finance and Macroeconomics

-Daniela Kubudi (Getulio Vargas Foundation, Expected: 2010)  
Thesis: Essays on Stochastic Discount Factor Models

## **Professional Experience**

- 12/2009-12/2010 **Technical Consulting Project at ANBIMA, Brazil**  
Modeling and implementation of term structure models for Illiquid Assets.
- 05/2007-02/2008 **Technical Consulting Project at ANDIMA, Brazil**  
Modeling and implementation of term structure models for Regulation Purposes.
- 11/2006-09/2008 **Technical Consulting Project at Central Bank of Brazil, Brazil**  
Modeling and implementation of term structure models with macroeconomic variables.
- 05/2005-07/2006 **Expert on Arbitrage Case: Mellon x Petros, Brazil**  
Expert report on innumerable question regarding risk management and asset pricing.
- 11/2005-04/2006 **Technical Consulting Project at Itau Bank Broker House**  
Modeling and implementation of fixed income models.
- 09/1999-08/2002 **Risk Manager at JGP Hedge Fund, Brazil**  
Estimation and management of market risk; performance evaluation of traders and investment funds.
- 10/1996-09/1997 **Fixed Income Quantitative Analyst, Pactual Bank, Brazil**  
Pricing and hedging Brady Bonds, Eurobonds, and fixed income options.

**Updated:** January 2010