

## DANIEL MANTILLA

Associate Professor | Finance Area

Joined the School in 2017

### ACADEMIC BACKGROUND

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- 2008 - 2011 Ph.D. in Finance. EDHEC Business School, Nice, France.  
2006 - 2007 M.Sc., Risk and Asset Management, EDHEC Business School, Nice, France.  
2001 - 2005 Bachelor in Industrial Engineering Universidad de los Andes, Bogotá, Colombia.

### TEACHING EXPERIENCE

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#### Courses Taught in Recent Years

##### Undergraduate

- Investment Decisions  
Asset Management

##### Graduate

- Portfolio Management (Master in Finance)  
Project (Master in Finance)

### ACADEMIC ACTIVITIES

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- 2022 – to date Associate Professor. Universidad de los Andes, School of Management, Bogotá, Colombia.  
2017 – 2022 Assistant Professor. Universidad de los Andes, School of Management, Bogotá, Colombia.  
2011 – to date Research Associate. EDHEC-Risk Institute, Nice, France.  
2014 - 2017 Head of Research. Optimal Asset Management, Los Altos, CA, United States.  
2011 - 2014 Head of Research & Development. Koris International, Sophia Antipolis, France.  
2010 -2011 R&D Engineer. Koris International, Sophia Antipolis, France.  
2008 - 2010 Research Assistant. EDHEC-Risk Institute, Nice, France.  
2004 - 2006 Consulting projects with Prof. Julio E. Villareal by project. Advance Consultores, Bogotá, Colombia

### PUBLICATIONS

#### Articles in Academic Journals

- 2022 Mantilla D. (2022) Improving Interest Rate Risk Hedging Strategies Through Regularization. *Financial Analysts Journal* (ISSN 19383312).

- 2022 Mantilla D, Malagon J, Aldana J. (2021) Can the Portfolio Excess Growth Rate Explain The Predictive Power of Idiosyncratic Volatility? *Finance Research Letters* (ISSN 1544-6123).
- 2021 Mantilla D, ter Horst E. (2021) Asset Dependency Structures and Portfolio Insurance Strategies. *International Journal of Theoretical and Applied Finance* (ISSN 0219-0249) 24 (3), pp. --28.
- 2017 Mantilla D and Vaidyanathan V., Predicting stock returns in the presence of uncertain structural changes and sample noise. *Financial Markets and Portfolio Management* 31.3 (2017): 357 - 391.
- 2015 Mantilla D, Growth Optimal Portfolio Insurance for Long-Term Investors, *Journal of Investment Management* (2015) Vol.13 No.2, pp.59 - 93.
- 2014 Mantilla D, Dynamic Allocation Strategies for Absolute and Relative Loss Control, *Algorithmic Finance* (2014), 3:3 - 4, 209 - 231.
- 2014 Mantilla D, Dynamic-Allocation-Based Portfolio Insurance for Long-Term Investors Pensions & Investments (2014) (Research for Institutional Money Management supplement), Vol. 1, No. 4, August 2014.
- 2014 García R, Mantilla D. and Martellini L., A Model-Free Measure of Aggregate Idiosyncratic Volatility and the Prediction of Market Returns, *Journal of Financial and Quantitative Analysis*, Vol. 49, No. 5, Oct. 2014.
- 2011 Mantilla D. Essays on Idiosyncratic Risk and Return Predictability, PhD Thesis, EDHEC Business School, November 2011.
- 2008 Mantilla D. Optimal portfolio choice: An Extreme Risk Management Approach, *Cahiers du Centre N.3*, Centre de Professions financiers, October 2008.

## Conference Presentations

- 2022 Netspar International Pensions Workshop 2022, "Back to The Funding Ratio! Improving Incentives and Retirement Security in Defined Contribution Plans with a Hedgeable Liability Measure", Netherlands, January 2022.
- 2021 Business Association of Latin American Studies (BALAS) 2021 Annual Conference. "Is My Pension Fund More Expensive? Estimating Equivalent Assets-based and Contribution-based Management Fees"
- 2020 Seminario Mejores Prácticas en Fondos de Pensiones, Superintendencia Financiera de Colombia. (2020)
- 2019 EFMA conference, Azores Islands (Portugal), June 2019: "Assets' Dependence Structure Implications for Portfolio Insurance".
- 2019 FEBS conference, Prague (Czech Republic), June 2019: "Assets' Dependence Structure Implications for Portfolio Insurance".
- 2019 Invited keynote speech at IDB's red PLAC & AIOS international seminar, April 2019, Montevideo, Uruguay: "Hacia un cambio de paradigma en soluciones de inversión para el retiro: ¿Una posible respuesta a la crisis pensional?"
- 2019 Financial Engineering and Banking Society International Conference 2019 in Prague. (2019). "Assets' Dependence Structure Implications for Portfolio Insurance".

- 2018 Paper presentation at II Congreso Internacional de Mercados Financieros. November 19 and 20, 2018. Universidad de los Andes, School of Management (Bogota). "Assets' Dependence Structure Implications for Portfolio Insurance".
- 2018 Invited talk at the World Economic Forum Workshop: Retirement Investment Systems Reform Project, Santiago, Chile, 25 October 2018. "¿Qué problemas pueden resolver los SeLFIES de jubilación?"
- 2018 "Conversatorio de Reforma pensional", Universidad de los Andes, School of Management, 8 October 2018. "¿Qué problemas pueden resolver los SeLFIES de jubilación?"
- 2018 Financial Engineering and Banking Society conference 2018 (FEBS), in Rome. "Maximizing the Volatility Return: A Risk-Based Strategy for Homogeneous Groups of Assets".
- 2016 Guest Lecture on the Risk Management Seminar 217 on "Disentangling the Volatility Return: A Predictable Return Driver of Any Diversified Portfolio", UC Berkeley Economics and UC Berkeley Statistics. September 13, 2016.
- 2015 By co-author Maxime Bonelli, paper presentations of "An Alternative Model of Expected Returns and its Implications for Return Predictability". European Financial Management Association 2015 Annual Meeting, the 8th International Conference on Computational and Financial Econometrics, the Forecasting Financial Markets Conference 2015, the 32nd International Conference of the French Finance Association (AFFI), and the 5th International Conference of the Financial Engineering and Banking Society (FEBS).
- 2013 "Efficient Risk Transfer under Solvency II». EDHEC-Risk Days Europe. London, March 2013.
- 2013 Guest Lecture in Msc. course "Advanced Topics in Finance II - Asset Allocation». Birkbeck College, University of London. January 2013.
- 2012 Conference talk on "Advances in Dynamic Risk Control». EDHEC-Risk Days Europe. London, March 2012.
- 2009 Vaidyanathan V. (co-author), "Predicting Stock Returns in the presence of Uncertain Structural Changes and Sample Noise", Presented at the 2nd International Workshop of the ERCIM, Cyprus, October 2009.
- 2008 Seminar talk on "Optimal Portfolio choice: an integrated extreme risk management approach». Petits-déjeuners of the French Association of Asset and Liability Managers (AFGAP), April 2008.
- 2005 Análisis del Precio Internacional del Petróleo con la Teoría del Valor Extremo, Presented at the Industrial Engineering Seminar, Universidad de los Andes, Bogotá, Colombia. December 2005.

## Working Papers

- 2021 Mantilla D, García-Huitrón M., Martellini L. and Martinez-Carrasco M. A. "Back to The Funding Ratio! Improving Incentives and Retirement Security in Defined Contribution Plans with a Hedgeable Liability Measure"

- 2021 Mantilla D, García-Huitrón M., Aldana J. and Concha A., "Is My Pension Fund More Expensive? Estimating Equivalent AUM-based and Contributions-based Management Fees"
- 2018 Mantilla D, "Maximizing the Volatility Return: A Risk-Based Strategy for Homogeneous Groups of Assets".
- 2015 EDHEC-Risk publication. "An Alternative Model of Expected Returns and its Implications for Return Predictability", with Bonelli M.
- 2014 EDHEC-Risk publication, with Bonelli M., "Should a Skeptical Portfolio Insurer Use an Optimal or a Risk-Based Multiplier?" 2014.

### Press Articles

- 2022 Mantilla D. (2022) ¿Por qué genera tanta resistencia la reforma pensional de Petro? El Espectador.
- 2022 Mantilla D. (2022) Un nuevo contrato social para el sistema pensional. La Silla Vacia.
- 2022 Mantilla D. (2022) ¿Hacía qué sistema pensional nos dirigimos? La Silla Vacia.
- 2021 Mantilla D. (2021) Por una reforma pensional de fondo que aumente protección y cobertura. La Silla Vacia
- 2019 Mantilla D. (2019) La insuficiencia del régimen de ahorro individual y cómo atacarla. Colombia. La Silla Vacia
- 2018 Mantilla D. (2018) 'Selfies' de jubilación para mayor cobertura. Portafolio (ISSN 0123-6326)
- 2018 Mantilla D. (2018) SELFIES de jubilación: el arma secreta para aumentar la cobertura. La Nota Económica (ISSN 0123-3394) Colombia.

### Other Publications

- 2021 Mantilla D. (2021). PLAC Network Best Practices Series: Target-Income Design of Incentives, Benchmark Portfolios and Performance Metrics for Pension Funds. Inter-American Development Bank, Labor Markets Division, title II., series III., technical note IDB-TN-02263. Estados Unidos.
- 2019 Mantilla D and Ospina J. (2019) Bonos de jubilación: Un elemento fundamental para la reforma pensional. Colombia

### Thesis Director

- 2021 Ricaurte Rodríguez, D.F. Tesis pregrado en Economía Uniandes.
- 2020 Gonzalez N and Mantilla D. ¿Cómo tomar SELFIES en Colombia? Tesis Maestría en Economía Uniandes (PEG).
- 2020 Hoyos, A. Predictibilidad de bonos gubernamentales en periodos de choque petroleros. Tesis pregrado en Ingeniería Industrial Uniandes.

## PARTICIPATION IN BOARDS, COMMITTEES AND ASSOCIATIONS

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2020 – to date Member of the Advisory Board. Colombian Climate Asset Disclosure Initiative (CCADI).

## SCHOLARSHIPS AND ACADEMIC DISTINCTIONS

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2008 – 2011 Full tuition waiver for the duration of the PhD at Edhec Business School.

2008 PRMIA (Professional Risk Managers' International Association) and AFGAP (Association Francaise des Gestionnaires Actif-Passif) award for best Msc. thesis in Economics and Finance national contest: «Concours des mémoires de l'économie et de la finance», Paris, 2008.

2006 - 2007 EDHEC Foundation Scholarship, 2006 - 2007.

2006 Edhec-Olympia Alternative Investments, 2006 Scholarship, summer seminar. Full tuition waiver for the duration of the PhD at EDHEC Business School.