

ANDRÉS MORA

Associate Professor | Finance Area

Joined the School in 2015

ACADEMIC BACKGROUND

- 2014 Ph.D. in Business Economics. Universidad de Salamanca, Salamanca, Spain.
- 2011 - 2013 Master in Banking and Quantitative Finance. Universidad Complutense Madrid, Universidad del País Vasco, Universidad de Valencia and Universidad Castilla-La Mancha, Spain.
- 2010 - 2011 PgDip in Statistics. Universidad Nacional de Colombia. Bogotá, Colombia.
- 2001 - 2003 PgDip in Mathematics. Universidad Nacional de Colombia. Bogotá, Colombia.
- 1998 - 2000 Master in Industrial Engineering. Universidad de los Andes. Bogotá, Colombia.
- 1991 - 1997 B.S. Industrial Engineering. Universidad del Valle. Cali, Colombia.

TEACHING EXPERIENCE

Courses Taught in Recent Years

Undergraduate

- Investment decisions
- Thesis counselling

Master in Finance

- Econometrics
- Quantitative Finance
- Final Project Counselling
- Statistics
- Machine Learning

International Master in Finance

- Computational Methods in Finance

Ph.D in Management / Master of Research in Management

- Investments
- Elective course: Financial Risk Quantification
- Guided reading: Correlation analysis in financial applications

ACADEMIC ACTIVITIES

- 2019 - to date Associate Professor. UASM. Bogotá, Colombia.
- 2015 - 2019 Assistant Professor. UASM. Bogotá, Colombia.

- 2013 - 2015 Lecturer. Universidad EAFIT. Medellin, Colombia.
- 2008 - 2011 Lecturer. Colegio de Estudios Superiores en Administración. CESA. Bogotá, Colombia.
- 2000 - 2003 Lecturer. Universidad de los Andes. Bogotá, Colombia.
- 1998 - 2000 Teaching Assistant. Universidad de los Andes. Bogotá, Colombia.

OTHER PROFESSIONAL ACTIVITIES

- 2007 – 2008 Senior Consultant. KPMG ADVISORY SERVICES.
- 2004 – 2005 Financial and Strategic Consultant. ADVANCE CONSULTORES.

PUBLICATIONS

Articles in Academic Journals

- 2022 Mora A, Javier Perote. (2022) Has the interaction between skewness and kurtosis of asset returns information content for risk forecasting. *Finance Research Letters* (ISSN 1544-6123) N/A (103105), pp. 1-6.
- 2022 Mora A, Javier Perote. (2022) Semi-nonparametric risk assessment with cryptocurrencies. *Research in International Business and Finance* (ISSN 0275-5319) 59 (101567), pp. --27.
- 2022 Mora A, Leon B, Javier Perote. (2022) Technical note: Modified variance incorporating high-order moments in risk measure with Gram-Charlier returns. *THE ENGINEERING ECONOMIST* (ISSN 1547-2701) N/A (N/A), pp. 1-16.
- 2021 Mora A, NOVALES A, URTUBIA P. (2021) Cross-Hedging Portfolios in Emerging Stock Markets: Evidence for the LATIBEX Index. *Mathematics* (ISSN 2227-7390) 9 (21), pp. --19.
- 2021 Mora A, Javier Perote, Castillo J. (2021) Moral hazard index for credit risk to SMEs. *International Economics* (ISSN 21107017) 168 (na), pp. 1-13
- 2021 Mora A, Rodríguez S, Vanegas E. (2021) Skew index: Descriptive analysis, predictive power, and short-term forecast. *The North American Journal of Economics and Finance* (ISSN 1062-9408) 56 (-), pp. 1-21.
- 2020 Mora A, Javier Perote, Velásquez D. (2020) A comparison of the risk quantification in traditional and renewable energy markets. *Energies* (ISSN 1996-1073) 13 (2805), pp. --41.
- 2020 Molina J, Mora A, Javier Perote. (2020) Backtesting expected shortfall for world stock indexETFs with extreme value theory andGram-Charliermixtures. *International Journal of Finance and Economics* (ISSN 1099-1158) 26 (-), pp. --27.
- 2020 Mora A, Javier Perote, Molina J. (2020) Market-crash forecasting based on the dynamics of the alpha-stable distribution. *Physica A: Statistical Mechanics and its Applications* (ISSN 0378-4371) 557 (124876), pp. 1-28.
- 2020 Mora A, Javier Perote, Ñiguez T. (2020) Portfolio Risk Assessment under Dynamic (Equi)Correlation and Semi-Nonparametric Estimation: An Application to Cryptocurrencies. *Mathematics* (ISSN 2227-7390) 8 (12), pp. 1-24.

- 2020 Mora A, Javier Perote, Jiménez I. (2020) Risk quantification and validation for Bitcoin. *Operations Research Letters* (ISSN 0167-6377) 48 (4), pp. 534-541.
- 2019 "Expected shortfall assessment in commodity (L)ETF portfolios with semi-nonparametric specifications". *European Journal of Finance*, Del Brio, E., Mora, A., Perote, J.
- 2019 "Quantifying Risk in Traditional Energy and Sustainable Investments". *Sustainability Journal*, Díaz, A., García, A., Mora A.
- 2018 "Retrieving the implicit risk neutral density of WTI options with a semi-nonparametric approach". *North American Journal of Economics and Finance*, Cortes, L., Mora, A., Perote, J.
- 2018 "Testing Expected Shortfall: An Application to Emerging Market Stock Indices". *Risk Management*. Cardona, E., Mora, A., Velásquez D., pp 1-30.
- 2018 "Moral hazard and default risk of SMEs with collateralized loans". *Finance Research Letters*, Castillo J., Mora, A., Perote, J.
- 2018 "Risk quantification for commodity ETFs: Backtesting value-at-risk and expected shortfall". *International Review of Financial Analysis*. Del Brio, E., Mora, A., Perote, J.
- 2017 "Measuring firm size distribution with semi-nonparametric densities", *Physica A: Statistical Mechanics and its Applications*, Cortés, L., Mora, A., Perote, J.
- 2017 "Risk quantification in turmoil markets", *Journal Risk Management*, Diaz A., García G, Mora Valencia A., vol 19, pp 202-204.
- 2017 Mora A. (2017) A note on the standard measurement approach vs. the loss distribution approach-advanced measurement approach: The dawning of a new regulation. *Journal of Operational Risk* (ISSN 1744-6740) 12 (4), pp. 51-69.
- 2017 "The kidnapping of Europe: High-order moments' transmission between developed and emerging markets". *Emerging Markets Review*, vol 31, pp 96 – 115.2016 "The productivity of top researchers: a semi-nonparametric approach". *Scientometrics* Vol. 109, Issue 2, pp 891–915. 2016. Joint with Lina M. Cortés and Javier Perote.
- 2016 "Multivariate approximations to portfolio return distribution". *Computational and Mathematical Organization Theory* (forthcoming). Joint with Trino M. Níguez and Javier Perote.
- 2016 "The Return Performance of Cubic Market Model: An Application to Emerging Markets". *Emerging Markets Finance and Trade* (forthcoming). Joint with Javier Perote and José E. Tobar.
- 2016 Mora A, Javier Perote. (2016) The productivity of top researchers: a semi-nonparametric approach. *Scientometrics* (ISSN 0138-9130) 109 (2), pp. 891-915.
- 2015 "Opciones reales aplicadas en redes integradas de servicios de salud empleando diferentes métodos de estimación de la volatilidad". In: *Estudios Gerenciales*. ISSN: 0123-5923. Vol. 31, Issue 136, pp. 287–298, 2015.

- 2014 "Semi-nonparametric VaR forecasts for hedge funds during the recent crisis". In: Physica Statistical Mechanics and its Applications. ISSN: 0378-4371. Vol. 41, pp. 330-343, 2014. Joint with Esther B. del Brio and Javier Perote.
- 2014 "VaR performance during the subprime and sovereign debt crises: An application to emerging markets". In: Emerging Markets Review. ISSN: 1566-0141. Vol. 20, p. 23-41, 2014. Joint with Esther B. del Brio and Javier Perote.
- 2014 "El uso de la distribución g-h en riesgo operativo". In: Revista Contaduría y Administración ISSN: 0186-1042. Vol. 59, No. 1 pp. 123-148. División de Investigación de la Facultad de Contaduría y Administración de la UNAM.
- 2013 "Construcción de la distribución de pérdidas y el problema de agregación de riesgo operativo bajo modelos LDA: Una revisión". In: Revista Ingenierías ISSN: 1692-3324. Vol. 12, No. 23 pp. 71 - 82. Universidad de Medellín.
- 2011 "Un estudio comparativo de algunos estimadores del índice de cola ". In: Innovar ISSN: 0121-5051. Centro de Publicaciones Universidad Nacional De Colombia. Vol.40 No.21 p.17 - 34, 2011.
- 2010 "Cuantificación del Riesgo Operativo en Entidades Financieras en Colombia". In: Cuadernos de Administración ISSN: 0120-3592 ed: Pontificia Universidad Javeriana. Vol.23 No.41 pp.185 - 211, 2010.
- 2010 "Estimadores del índice de cola y el valor en riesgo". In: Cuadernos de Administración ISSN: 0120-4645. Facultad de Ciencias de la Administración Universidad Del Valle. No.44 pp.71 - 88, 2010.

Articles in Professional / Trade Journals

- 2011 "CDS: relación con índices accionarios y medida de riesgo". In: Ensayos Sobre Política Económica ISSN: 0120-4483 no. 64, p. 178 - 211, 2011. (Joint with León, Bernardo).
- 2010 "Una Propuesta de Creditmetrics y Expected Shortfall para Medición de Riesgo Crediticio". In: Colombia. Revista Civilizar de Empresa y Economía ISSN: 2145-6194. Fondo De Publicaciones de la Universidad Sergio Arboleda. Vol.1 No.2 pp.104 - 125, 2010.
- 2010 "Consideraciones para la Estimación de Cuantiles Altos en el Riesgo Operativo". In: Análisis - Revista del Mercado de Valores ISSN: 2215-9150 vol.1 No.1 p.181 - 216, 2010.

Books

- 2013 "Una introducción a las Matemáticas Financieras Modernas para no matemáticos". Editorial CESA.

Books Chapters

- 2015 "Financial Market Risk Before and After the Subprime Crisis". Ed: Díaz-Roldán, C. and Perote, J. En: Advances on International Economics. Editorial: Cambridge Scholars Publishing. p. 299-320. 2015.

Directed and Co-Directed Thesis Work

- 2020 Jesús Enrique Molina. "Two essays on Quantitative Finance: Market Risk Analysis and Market Crashes Forecast". Doctorado en Administración. Universidad de los Andes, 2020.
- 2020 Liliana Patricia Campos. "Financial Crashes Prediction Using the BSEYD Model: Evidence in Several Emerging Market Countries". International Master in Finance. Universidad de los Andes y NOVA. Tutor: Andre Silva, 2020.
- 2019 Esteban Nicolás Vanegas. "Skew Index: Descriptive analysis, explanatory power and short-term forecast". Maestría en Investigación en Administración. Universidad de los Andes, 2019.
- 2018 José Augusto Castillo. Pymes: el aval del Fondo Nacional de Garantías de Colombia y el riesgo moral en el desempeño ex-post en el crédito. Doctorado en Administración, Universidad del Valle, 2018.
- 2017 Lina Marcela Cortés. "Enfoque semi-noparametrico para la medición de variables positivas de colas pesadas en los campos de la economía y las finanzas". Doctorado en Economía, Universidad de Salamanca. Codirección con Javier Perote, 2017.
- 2017 Natalia Andrea Garzón. "Aplicaciones de momentos de orden mayor en finanzas". Maestría en Investigación en Administración, Universidad de los Andes, 2017.

Conferences

- 2022 6th annual HFE Conference
- 2021 ACROPOLIS-BeFinD Special Issue Conference on Financing for Development.
- 2020 eMAF 2020. Remote International Conference.
- 2019 ICASQF Conference 2019. (2019)
- 2018 EFMA CONFERENCE 2018. (2018)
- 2016 "Backtesting Value-at-Risk and Expected Shortfall" en Francia 2016. Event: Energy and Commodity Finance Conference.
- 2013 "Cuantificación del riesgo en presencia de eventos extremos" In: España 2013. Event: XI WORKSHOP EN BANCA EN FINANZAS CUANTITATIVAS, FUNCAS.
- 2011 "MCMC applied to a jump diffusion process" En: México. 2011. Event: WORKSHOP ON FINANCE, CIMAT.
- 2010 "A comparison between different methods of quantifying operational risk" In: Argentina. 2010. Event: ALIO-INFORMS Joint International Meeting.
- 2010 "Medida de VaR para el mercado de electricidad colombiano" In: México. 2010. Event: Semana de Métodos Matemáticos y Estadísticos en Finanzas dentro del «Instituto Panamericano de Estudios Avanzados en Probabilidad y Estadística», PASI. CIMAT.
- 2009 "Una Recomendación para Cuantificar el Riesgo Operativo en Entidades Financieras en Colombia" In: Colombia. 2009. Event: VI Simposio Nacional y III Internacional de Docentes en Finanzas.

Press Articles

- 2020 Mora A, Cruz A. (2020) Predecir el futuro de los mercados financieros, ¿realidad o mito?

SCHOLARSHIPS AND ACADEMIC DISTINCTIONS

- 2014 "Premio Extraordinario de Doctorado". Universidad de Salamanca.
- 2011 – 2013 Scholarship of Basque Country Government. Master of Quantitative Finance and Banking.

PARTICIPATION IN BOARDS, COMMITTEES AND ASSOCIATIONS

- 2020 – to date Participation in "Comité Académico Maestría en Finanzas".
- 2016 – to date Member of International Editorial Board of Revista de Investigación en Ciencias Contables y Administrativas.
- 2017 – 2021 Participation in PhD Comprehensive Exams. UASM
- 2017 – 2019 Participation in "Comité Académico Doctoral". UASM.