

Victor DeMiguel

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London Business School

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Academic Positions

- 2012- Professor of Management Science and Operations, London Business School.
- 2014-17 Chair, Management Science and Operations Faculty, London Business School.
- 2009-12 Class of 2008 Term Associate Professor of Management Science and Operations.
- 2008-12 Associate Professor of Management Science and Operations, London Business School.
- 2001-08 Assistant Professor of Management Science and Operations, London Business School.

Education

- 2001 PhD, Management Science and Engineering, Stanford University.
- 1998 MS, Engineering-Economic Systems and Operations Research, Stanford University.
- 1996 MS, Industrial Engineering, Universidad Politécnica de Madrid, Spain.

Papers

In refereed journals

1. "Optimal Portfolio Diversification via Independent Component Analysis", with N. Lassance and F. Vrans, *Operations Research*, 70(1), 55–72 (2022).
2. "Cover-Up of Vehicle Defects: The Role of Regulator Investigation Announcements", with S.-H. Cho and W. Hwang, *Management Science*, 67(6), 3834–3852 (2021).
3. "A Transaction-Cost Perspective on the Multitude of Firm Characteristics", with A. Martin-Utrera, F.J. Nogales, and R. Uppal, *The Review of Financial Studies*, 33(5), 2180–2222 (2020).
4. "Technical Note—A Robust Perspective on Transaction Costs in Portfolio Optimization", with A.V. Olivares-Nadal, *Operations Research*, 66(3), 733–739, (2018).
5. "Wholesale Price Contracts for Reliable Supply", with W. Hwang and N. Bakshi, *Production and Operations Management*, 27(6), 1021–1037 (2018).
6. "Supplier Capacity and Intermediary Profits: Can Less Be More?", with E. Adida and N. Bakshi, *Production and Operations Management*, 25(4), 630–646 (2016).
7. "Multiperiod Portfolio Optimization with Multiple Risky Assets and General Transaction Costs", with X. Mei, and F.J. Nogales, *Journal of Banking and Finance*, 69, 108–120 (2016).
8. "Parameter Uncertainty in Multiperiod Portfolio Optimization with Transaction Costs", with A. Martin-Utrera and F.J. Nogales, *Journal of Financial and Quantitative Analysis*, 50(6), 1443–1471 (2015).
9. "Stock Return Serial Dependence and Out-of-Sample Portfolio Performance", with F.J. Nogales and R. Uppal, *The Review of Financial Studies*, 27(4), 1031–1073 (2014).

10. “Improving Portfolio Selection Using Option-Implied Volatility and Skewness”, with Y. Plyakha, R. Uppal, and G. Vilkov, *Journal of Financial and Quantitative Analysis*, 48(6), 1813–1845 (2013).
11. “Size Matters: Optimal Calibration of Shrinkage Estimators for Portfolio Selection”, with A. Martin-Utrera and F.J. Nogales, *Journal of Banking and Finance*, 37(8), 3018–3034 (2013).
12. “Supply Chain Competition with Multiple Manufacturers and Retailers”, with E. Adida, *Operations Research*, 59(1), 156–172 (2011).
13. “A Stochastic Multiple Leader Stackelberg Model: Analysis, Computation, and Application”, with H. Xu, *Operations Research*, 57(5), 1220–1235 (2009).
14. “Improving Performance By Constraining Portfolio Norms: A Generalized Approach to Portfolio Optimization”, with L. Garlappi, F.J. Nogales, and R. Uppal, *Management Science*, 55(5), 798–812 (2009).
15. “Portfolio Selection with Robust Estimation”, with F.J. Nogales, *Operations Research*, 57(3), 560–577 (2009).
16. “Optimal versus Naive Diversification: How Inefficient Is the $1/N$ Portfolio Strategy?”, with L. Garlappi and R. Uppal, *The Review of Financial Studies*, 22(5), 1915–1953 (2009).
17. “On Decomposition Methods for a Class of Partially Separable Nonlinear Programs”, with F.J. Nogales, *Mathematics of Operations Research*, 33(1), 119–139 (2008).
18. “A Local Convergence Analysis of Bilevel Decomposition Algorithms”, with W. Murray, *Optimization and Engineering*, 7, 99–133 (2006).
19. “A Two-Sided Relaxation Scheme for Mathematical Programs with Equilibrium Constraints”, with M.P. Friedlander, F.J. Nogales, and S. Scholtes, 2005, *SIAM Journal on Optimization*, 16(2), 587–609 (2005).
20. “Portfolio Investment with the Exact Tax Basis via Nonlinear Programming”, with R. Uppal, 2005, *Management Science*, 51(2), 277–290 (2005).

Working papers

21. “A Multifactor Perspective on Volatility-Managed Portfolios”, with A. Martin-Utrera and R. Uppal, LBS working paper (2022).
22. “Machine Learning and Fund Characteristics Help to Select Mutual Funds with Positive Alpha”, with J. Gil-Bazo, F.J. Nogales, and A.A.P. Santos, LBS working paper (2022).
23. “Comparing Factor Models with Price-Impact Costs”, with A. Li and A. Martin-Utrera, LBS working paper (2022).
24. “What Alleviates Crowding in Factor Investing?”, with A. Martin-Utrera and R. Uppal, LBS working paper (2022).

In conference proceedings

25. “Revenue Management With Correlated Demand Forecasting”, with C. Stefanescu, K. Fridgeirsdottir, and S. Zenios, Proceedings of the American Statistical Association, Business and Economics Statistics Section, Alexandria, VA (2004).
26. “An Analysis of Collaborative Optimization Methods”, with W. Murray, In Eighth AIAA/USAF/NASA/ISSMO Symposium on Multidisciplinary Analysis and Optimization (2000).

Other publications

27. “Two Decomposition Algorithms for Nonconvex Optimization Problems with Global Variables.” PhD thesis, Stanford University (2001).
28. “A Class of Quadratic Programming Test Problems with Global Variables”, with W. Murray, Technical Report SOL 01-2, Dept. of MS&E, Stanford University (2001).
29. “Generating Optimization Problems with Global Variables”, with W. Murray, Technical Report SOL 01-3, Dept. of MS&E, Stanford University (2001).
30. “What Multistage Stochastic Programming Can Do for Network Revenue Management”, with N. Mishra, LBS working paper (2007).

Invited presentations and conferences

- 2022 AFA Annual Meeting (online, co-author), FIRS Conference (Budapest, scheduled), Annual Hedge Fund Conference (Imperial College, co-author).
- 2021 AFA Annual Meeting (Chicago), 14th Financial Risks International Forum (Paris), 37th International Conference of the French Finance Association (online, co-author), London Business School, Bath AFL-QF & Fintech Research Seminar Series (Bath, online), SFS Cavalcade North America (discussant, online), 2021 FMA Annual Meeting (online).
- 2020 10th Annual Hedge Fund and Private Equity Research Conference (Paris), Toulouse Financial Econometrics Conference (cancelled), U. Miguel Hernandez (Alicante), 4th SAFE Market Microstructure Conference (Frankfurt), Northern Finance Association Conference (Banff), INFORMS Annual Meeting (online), U. of St. Gallen (online), INSEAD (online).
- 2019 Toulouse Financial Econometrics Conference, London Business School, 27th Finance Forum (Madrid), 2019 INFORMS Annual Meeting (Seattle), CORE/Louvain Finance Econometric/Finance Seminar (Louvain-la-Neuve).
- 2018 American Finance Association (Philadelphia, co-author), Stevanovich Center at University of Chicago, Durham University Business School, London Mathematical Finance Seminar (UCL), INFORMS Annual Meeting (Phoenix, co-author), Schrodgers (London), SYZ Asset Management (Geneva).
- 2017 European Finance Association (Mannheim, co-author), HEC (Paris), Free University of Bolzano (Bolzano), University de Nantes/Audiencia Business School (Nantes), London School of Economics (London), Jones Graduate School of Business at Rice University (Houston), INFORMS Annual Meeting (Houston), INQUIRE Europe (Montreaux), UCL School of Management (London), CORE/Louvain Finance Econometric/Finance Seminar (Louvain-la-Neuve).
- 2016 Norwich Business School, London Business School, Imperial College Business School, INET Econometric Seminar Series (Oxford), Citi Global Quant Research Conference, 30th Annual Seminar of the London Quant Group, Universitat Pompeu Fabra (Barcelona).
- 2015 International Symposium on Mathematical Programming (Pittsburgh), INFORMS Annual Meeting (Philadelphia), University of Edinburgh (Edinburgh).
- 2014 Keynote talk at Computational Management Science Conference (Lisbon), Plenary talk at London Optimization Workshop (London), Universidade Nova de Lisboa (Lisbon), Deutsche Bank Global Quantitative Strategy Conference (London), INFORMS Annual Meeting (San Francisco).

- 2013 Semi-plenary talk at International Conference on Continuous Optimization (Lisbon), 2013 MSOM SIG Conference in Supply Chain Operations (INSEAD), Imperial College (London).
- 2012 London School of Economics, European School of Management and Technology (Berlin), Computational Management Science Conference (London), 2012 MSOM Conference (New York), International Symposium on Mathematical Programming (Berlin).
- 2009-11 Western Finance Association Annual Meeting (Victoria), Fuqua School of Business at Duke University, 2009 MSOM Conference (Boston), Zaragoza Logistics Center (Spain), 20th International Symposium on Mathematical Programming (Chicago), 2009 INFORMS Annual Meeting, 2010 INFORMS Annual Meeting (Austin), 2011 AFA Meeting (Denver), 2011 INFORMS Annual Meeting (Charlotte).
- 2008 AFA Meeting (New Orleans), SIAM Conference on Optimization (Boston), Bachelier Finance Society Fifth World Congress (London), ETJE08 Meeting (Spain), INFORMS Annual Meeting (DC), University of Chicago GSB.
- 2007 INFORMS Revenue Management and Pricing Conference (Barcelona), International Conference on Continuous Optimization (Hamilton), Tepper School of Business at Carnegie Mellon University (Pittsburgh), Stern School of Business at NYU (New York), Johnson School of Business at Cornell University, Workshop on Optimization in Finance (Coimbra), INFORMS Annual Meeting (Seattle).
- 2006 Operations Research Center at MIT (Boston), INFORMS Annual Meeting (Pittsburgh), University of Illinois at Urbana Champaign (Illinois), University of Edinburgh (Edinburgh), Institute for Quantitative Investment Research Conference (Bristol), 19th International Symposium on Mathematical Programming (Rio de Janeiro), NBER Summer Institute Asset Pricing Workshop (Boston), Kellogg School of Management at Northwestern University (Evanston), Columbia University (New York), London School of Economics (London), Southampton University (Southampton).
- 2005 INFORMS Annual Meeting (San Francisco), Workshop on Optimization in Finance (Coimbra), Western Finance Association (Portland), INFORMS Revenue Management and Pricing Section Conference (Boston), SIAM Conference on Optimization (Stockholm), Judge Institute of Management at Cambridge University (Cambridge).
- 2004 Applied Mathematical Programming and Modelling (London), Western Finance Association (Vancouver), American Statistical Association (Alexandria), Judge Institute of Management at Cambridge University (Cambridge), European Finance Association (Holland), International Conference on Continuous Optimization (New York), Stochastic Programming Conference (Tucson, Arizona), INFORMS Annual Meeting (Denver), Rutherford Appleton Laboratory (Oxford).
- 2003 International Symposium on Mathematical Programming (Copenhagen), INFORMS Annual Meeting (Atlanta), Georgia Institute of Technology (Atlanta), Argonne National Laboratory (Illinois), Northwestern University (Evanston).
- 2002 Judge Business School (Cambridge), SIAM Conference on Optimization (Toronto), INFORMS Annual Meeting (San Jose), Stanford University (Stanford).
- 2000-01 Eighth AIAA/USAF/NASA/ISSMO Symposium on Multidisciplinary Analysis and Optimization (CA), Universidad Carlos III de Madrid, Instituto de Empresa (Madrid), London Business School (London), Universitat Pompeu Fabra (Barcelona), IESE School of Business (Barcelona), INFORMS International Conference (Hawaii), Optimization 2001 (Aveiro).

Professional Activities

Editorial positions

- 2019- Associate Editor, *Management Science*.
 2018- Associate Editor, *Operations Research*.

Referee for following journals

Journal of Econometrics; Journal of Finance; Journal of Financial and Quantitative Analysis; Management Science; Operations Research; Review of Finance; The Review of Financial Studies.

Advisory boards

- 2018-2021 Equity Factor Index Committee, Goldman Sachs.
 2018-2020 Scientific Advisory Board, SYZ Asset Management.

PhD students

- 2021–Now PhD supervisor for Milind Goel, London Business School.
 2019–Now PhD co-supervisor for Allen (Sicong) Li, London Business School.
 2016 PhD co-supervisor for Mei Xiaoling, Universidad Carlos III de Madrid.
Placement: Assistant Professor, Wang Yanan Institute for Studies in Economics, Xiamen U.
 2015 PhD co-supervisor for Woonam Hwang, London Business School.
Placement: Assistant Professor at HEC Paris.
Current: Assistant Professor at David Eccles School of Business (Utah).
 2013 PhD co-supervisor for Alberto Martin-Utrera, Universidad Carlos III de Madrid.
Placement: Lecturer at Lancaster University Management School.
Current: Assistant Professor at Ivy College of Business, Iowa State University.
 2009 PhD supervisor for Nishant Mishra, London Business School.
Placement: Assistant Professor at Rotterdam School of Management.

Grants and Awards

- 2021 Semifinalist for FMA Annual Meeting Best Paper Award for “Which Factors with Price-Impact Costs”, with PhD student Allen Li and A. Martin-Utrera, and “A Multifactor Perspective on Volatility-Managed Portfolios”, with A. Martin-Utrera and R. Uppal.
 2020 Nominated for INFORMS Finance Student Paper Award for “Which Factors with Price-Impact Costs”, with PhD student Allen Li and A. Martin-Utrera.
 2019 *INQUIRE-Europe Research Grant*, 10,000 euros to work on the project “Crowding and Liquidity Provision in Factor Investing”.
 2016 *Best Paper Award at the XXIV Finance Forum* for “A Portfolio Perspective on the Multitude of Firm Characteristics”.
 2016 *ETF Research Academy Grant of 10,000 euros* for “A Portfolio Perspective on the Multitude of Firm Characteristics”.
 2013 *Meritorious Service Award* from “*Operations Research*” editorial board.
 2011 *2010/2011 INQUIRE Third Prize* at the INQUIRE-Europe seminars for the paper “Improving Portfolio Selection Using Option-Implied Volatility and Skewness”.

- 2010-13 *Grant of Ministerio de Educación y Ciencia de España*, MTMMTM2010-16519. Joint with five other researchers.
- 2009-12 *Class of 2008 Term Associate Professorship* in Management Science and Operations at London Business School.
- 2007-10 *Grant of Ministerio de Educación y Ciencia de España*, MTM2007-63140. Joint with Francisco J. Nogales and Jose Niño Mora.
- 2007 *INQUIRE-UK Research Grant*, £16,000 to work on the project “Improving Performance By Constraining Portfolio Norms: A Generalized Approach to Portfolio Optimization”.
- 2005-06 *Research and Materials Development Fund* at London Business School, £10,000. Title: “Competition in Airline Network Revenue Management.”
- 2005 *Best Paper Award* at the 2005 seminars of INQUIRE-UK for the paper “How Inefficient is the 1/N Asset-Allocation Strategy?”.
- 2004-05 *Grant of Ministerio de Educación y Ciencia de España*, MTM2004-02334. Joint with Francisco J. Nogales and Jose Niño Mora.
- 2004 *AIM*, £2,000. Title: “Airline Revenue Management with Correlated Demand and Multistage Stochastic Programming.”
- 2003-04 *Research and Materials Development Fund* at London Business School, £10,000. Title: “Airline Revenue Management with Multistage Stochastic Programming.”
- 2001-02 *Research and Materials Development Fund* at London Business School, £10,000. Title: “Portfolio Investment with the Exact Tax Basis via Nonlinear Programming.”
- 1997-99 *La Caixa Fellowship*, \$ 80,000. Fellowship granted to 40 Spanish students per year to pursue graduate studies in the USA.
- 1997 *Fulbright Fellowship*. Declined in lieu of the La Caixa Fellowship.
- 1996 *National Award* to the top ranked Industrial Engineering graduate in 1996 in Spain.

Teaching

Courses

- 2018- *Business Analytics*. Firms nowadays have easy access to detailed data about their customers, products, and markets. Some organizations exploit these data to make better decisions and improve their performance. This course provides the tools and frameworks necessary to go from data to decisions, and use analytics to build a competitive advantage. Modelling techniques such as Monte Carlo simulation, decision tree analysis, and optimization are applied to a variety of contexts including online dating, online advertising, airline overbooking, and portfolio selection.
- 2011- *Decision Analytics*. Executive education module for Advanced Development Programme at LBS. Topics covered include intuition versus analysis, the process of decision making, resource allocation, risk analysis, decision analysis, value of information, and risk attitudes.
- 2008- *Financial Analytics*. Elective MBA course that covers the frameworks and tools necessary to build advanced quantitative models for financial decision making. Financial models covered include portfolio management and estimation, term structure estimation, capital budgeting, risk measurement, risk analysis in discounted cash flow models, and financial and real option pricing.
- 2018-21 *Normative Decision Making*. Executive education module for Decision Making Strategies for Leaders Programme at LBS. Topics covered include the process of decision making, risk analysis, decision analysis, and risk attitudes.

- 2001-17 *Decision and Risk Analysis*. Core course for full-time, executive, and global executive MBA programmes at LBS. Teaching is case driven. Subjects covered include Monte Carlo simulation, decision tree analysis, and optimization modeling. PC-based-software is used to illustrate how to apply the methodologies introduced.
- 2002-05 *Decision Making for Leaders*. ExecEd module for Emerging Leaders Programme at LBS.
- 2003-06 *Optimization Theory and Applications*. PhD programme at LBS. Theoretical foundations of optimization modeling as well as its applications to portfolio selection, equilibrium modeling, and stochastic optimization.

Teaching awards

- 2015 Runner-up for *Best Executive MBA Teacher Award*, London Business School.
- 2009 Received 2008/2009 *Outstanding Core Course Teaching Award*, London Business School.
- 2004 Received *Junior Faculty Teaching Award*, London Business School.
- 2003 Short-listed for *Junior Faculty Teaching Award*, London Business School.
- 2002 Short-listed for *Junior Faculty Teaching Award*, London Business School.

Internal Service at London Business School

- 2021-22 Member of two promotional review subcommittees.
- 2022- Member of EMBA Programme curriculum committee.
- 2021-22 Member of EMBA Programme Review Committee.
- 2019-21 Member of REF Research Output Committee.
- 2021 Member of PhD transfer committee for one student.
- 2020 Chair of review committee for five full professors and one professor of management practice.
- 2019-20 Co-led faculty recruitment committee for Management Science and Operations.
- 2019 Member of PhD committee.
- 2019-20 Member of Sub-Committee of Appointments Committee.
- 2018-2019 Member of EMBA programme review learning outcomes and curriculum committee.
- 2017 Member of two promotional review subcommittees.
- 2014-17 Chair, Management Science and Operations Faculty.
- 2014-17 Member, Research Centre Review Committee.
- 2017 Member of two tenure review subcommittees.
- 2016 Lecture at Executive Education 50th Anniversary Event.
- 2014 Member of Sub-committee for two third year reviews.
- 2013 Member of Internal Review Group for the curriculum review of Executive MBA.
- 2013 Member of Review Committee for the General Management programmes of Executive Education.
- 2013 Sum Acting Subject Area Chair for Management Science and Operations.
- 2012 Member of Sub-committee for third year reviews of Vasiliki Kostami and Alex Yang.
- 2012 Lecture at LBS Alumni Reunion.
- 2012-13 Member of appointments subcommittee.
- 2011-13 Member of diversity working group.

- 2012-13 Member of two academic appeal committees.
- 2011-12 MSO junior recruitment committee, member of internal review group for elective portfolio review, speaker at 2012 alumni reunion.
- 2011 Seminar to LBS faculty on PhD student supervision, member of two academic appeal committees.
- 2009-10 MSO junior recruitment committee, member of three-year performance review committee for three Assistant Professors.
- 2009 EMBA curriculum internal review panel.
- 2007-08 MSO junior recruitment committee.
- 2002-05 Member of the PhD committee.
- 2003- Three Info Sessions for EMBA programme recruiting.
- 2002- Speaker at faculty induction day in five occasions.
- 2001- Supervised second year projects of around 20 MBA students.

Biographical sketch

Victor DeMiguel is a Professor at London Business School, which he joined in 2001 after earning a PhD in Management Science and Engineering from Stanford University and an MS in Industrial Engineering from Universidad Politécnica de Madrid.

Victor's main research interest is portfolio selection and asset pricing in the presence of parameter uncertainty and market frictions. His papers have been published in top journals such as *Management Science*, *Operations Research*, and *The Review of Financial Studies*. One of his most popular papers is "Optimal Versus Naive Diversification: How Inefficient is the 1/N Portfolio Strategy", which received the Best Paper Award from the Institute for Quantitative Investment Research and has more than 3,000 citations in Google Scholar. Victor serves as an Associate Editor of the journals *Management Science* and *Operations Research* and an external consultant to asset-management firms such as SYZ and Goldman Sachs.

Victor teaches MBA courses on *Financial Analytics* and *Business Analytics* as well as in several Executive Education programmes such as the Accelerated Development Programme. He is the recipient of the *Junior Faculty Teaching Award* and the *Outstanding Core Course Teaching Award* at London Business School.