

Bert De Reyck

Résumé

Academic Appointments

2021 – Present

Dean

Lee Kong Chian School of Business
Singapore Management University, *Singapore*

2015 – 2021

Professor and Founding Director

UCL School of Management
University College London, *London, UK*

2011 – 2018

Visiting Professor

London Business School, *London, UK*

2011 – 2017

Visiting Professor

University of Ghent, *Ghent, Belgium*

2009 – 2015

Professor and Head of Department

Department of Management Science & Innovation
University College London, *London, UK*

2009 – 2011

Adjunct Professor

Department of Management Science & Operations
London Business School, *London, UK*

2007 – 2009

Associate Professor

Department of Management Science & Innovation
University College London, *London, UK*

2007 – 2009

Adjunct Associate Professor

Department of Management Science & Operations
London Business School, *London, UK*

2001 – 2007

Associate Professor

Department of Decision Sciences
London Business School, *London, UK*

2005 – 2006

Visiting Associate Professor

Department of Managerial Economics and Decision
Sciences
Kellogg Graduate School of Management
Northwestern University, *Evanston, IL*

1999 – 2001

Assistant Professor

Department of Decision Sciences
London Business School, *London, UK*

1998 – 1999

Assistant Professor

Department of Management of Technology
& Innovation
Rotterdam School of Management
Erasmus University, *Rotterdam, The Netherlands*

Education

1992 – 1998

PhD Business Economics

University of Leuven, *Leuven, Belgium*

1991 – 1992

MSc Business Information Systems

University of Leuven, *Leuven, Belgium*

1988 – 1991

BSc Business Engineering

University of Leuven, *Leuven, Belgium*

Teaching Honours & Awards

2007, 2008, 2013

MBA Teaching Award

London Business School

2010, 2011

MSc Entrepreneurship Teaching Award

University College London

2001, 2003, 2006

Faculty Teaching Award

London Business School

2004, 2006, 2008

Case Competition Award

INFORMS

with “Project Portfolio Management at Novartis
Pharma” and “Phytopharm plc”

Runner-up with “Towards a Single European Sky”

Research Honours & Awards

2019 – M&SOM Practice-Based Research Competition

INFORMS

Finalist with “Forecasting airport transfer passenger flow using real-time data and machine learning”

2019 – Daniel H. Wagner Prize for Excellence in Operations Research Practice

INFORMS

Finalist with “London Heathrow Airport Uses Real-Time Analytics for Improving Operations”

2016 – Daniel H. Wagner Prize for Excellence in Operations Research Practice

INFORMS

Finalist with “Vungle Inc. improves monetization using big-data analytics”

2014 – 4* REF Case Study

Research Evaluation Framework

“An integrated decision– making framework for improving European air traffic management”

2014 – Daniel H. Wagner Prize for Excellence in Operations Research Practice

INFORMS

Finalist with “Optimizing Maritime Transshipment Operations for the Noble Group”

2013 – Best Publication Award

Decision Analysis Society

For contributing “Valuation of risky projects and other illiquid investments using portfolio selection models” to *Portfolio Decision Analysis*, International Series in Operations Research and Management Science, Springer, 2011.

2010 – Best Paper Award

IEEE Engineering Management Society

Finalist with “The effect of activity duration variability on the eNPV of projects that allow for alternative technologies in uncertain environments”

2011 – Top 10 most-cited article of all time

Computers and Operations Research

“Resource – constrained project scheduling — A survey of recent developments”

2008 – Best Paper Award

IEEE Engineering Management Society

“Project scheduling for maximum net present value with variable activity durations and uncertain activity outcomes”

2008 – Daniel H. Wagner Prize for Excellence in Operations Research Practice

INFORMS

Finalist with “Towards a single European sky”

2007 – Decision Analysis Society Practice Award

INFORMS

Finalist with “An integrated decision– making approach for improving European air traffic management”

2003 – Excellence in Practice Award

EURO

Finalist with “Broadcast scheduling for mobile advertising”

1999 – Fellow

Royal Netherlands Academy of Arts and Sciences

Industry Sponsorship & Projects

(Amounts not disclosed)

2018 – 2020

nPlan

Machine learning for project management

2015 – 2016

Eurocontrol and Heathrow Airport

Big – data collaborative decision making support for the Airport Operations Centre

2014 – 2016

Great Ormond Street Hospital

Decision support for epilepsy diagnosis and surgery in children

2013 – 2016

Department for Transport

Forecasting costs for major infrastructure projects

2012 – 2015

Network Rail

Analysis of optimism bias in UK rail projects

2013 – 2014

Vungle

Recommendation engine development for mobile advertising

2014

Merck Serono

Pharmaceutical project portfolio management

2012 – 2013

Noble Group

Optimization of transshipment operations in Indonesia

2006

Eaton Aerospace

Project management for F – 35 Joint Strike Fighter

2005 – 2006

EuroControl

European air traffic control system selection and optimization

2004

Dunlop Aerospace

Project management for Boeing 787

2004

Phytopharm

Pharmaceutical R&D project valuation and licensing negotiations support

Research Grants

2010 – 2012

Technology Strategy Board, £1,199,575

Regenerative Medicine Programme: Value System and Business Models, Co – Investigator

2000 – 2008

London Business School Research & Materials Development Fund, £53,600

2008

Resource Allocation in Project Management
Principal Investigator, £4,800

2008

Resource Allocation in Project Management
Principal Investigator, £4,800

2006

R&D Project Valuation
Principal Investigator, £11,600

2005

Project Valuation in Mixed Asset Portfolio Selection
Principal Investigator, £14,000

2004

Project Portfolio Management at Novartis Pharma
Principal Investigator, £5,200

2002

The Aftermath of the World Trade Center Collapse
Principal Investigator, £8,000

2001

New Methods for Resource Allocation in Projects
Principal Investigator, £5,000

2000

Cases on Monte-Carlo and Discrete-Event Simulation
Principal Investigator, £5,000

Professional Activities

Member

Institute for Operations Research and Management Science, *INFORMS*

Editorial Board

2012 – 2016

Journal of Decision Processes, *EURO*

2009

Wickham Skinner Awards, *POMS*

2005

INFORMS Case Competition Award, *INFORMS*

Ad-hoc Reviewer

Management Science

Operations Research

Manufacturing and Services Operations Management

Marketing Science

University Committees

2014 – 2021

China Steering Committee

University College London

2009 – 2021

Engineering Faculty Leadership Forum

University College London

2019 – 2020

Finance Transformer Project Board

University College London

2014

Learning and Teaching Review Committee

Cambridge Judge Business School

2012 – 2013

UCL Senior Promotions Committee

University College London

2013

Chair Engineering Management Review Committee

Melbourne University

2001 – 2006

MBA Curriculum Committee

London Business School

Teaching Activities

Project Management

2000 – 2018

MBA, Executive MBA, Masters in Finance

London Business School

2008 – 2010

MSc Technology Entrepreneurship

University College London

2011

DIMP

China Europe International Business School

2006

MBA and MMM

Kellogg Graduate School of Management

Northwestern University

Executive Education

PwC

Lloyd's

Diageo

Merck

Roche

Sanofi-Pasteur MSD

Shire

United Health Group

Sberbank

Oman Oil

Continental

Decision Models

2005 – 2010

Global Executive MBA – Americas & Europe

London/Columbia Business School

2011 – 2013

Global Executive MBA – Asia

London/Columbia/Hong Kong University Business

School

Decision & Risk Analysis

2007 – 2010

MSc Management

University College London

2007 – 2010

MSc Technology Entrepreneurship

University College London

1999 – 2007

MBA

London Business School

PhD Supervision

Supervisor

2018 – present

Xingyi Li

UCL School of Management

2013 – 2020

Xiaojia Guo

UCL School of Management

“Probabilistic forecasting in decision making: New methods and applications”

Currently Assistant Professor at Robert H. Smith School of Business, University of Maryland

2008 – 2014

Ioannis Fragkos

UCL School of Management

“Large – scale optimisation in operations management: Algorithms and applications”

Currently Associate Professor at Rotterdam School of Management, Erasmus University Rotterdam

2003 – 2009

Yael Grushka – Cockayne

London Business School

“Introduction of technological innovations: Valuation, selection and timing”

Currently Professor and Senior Associate Dean at Darden School of Business, University of Virginia

2002 – 2007

Pascale Crama

London Business School

“Designing licensing contracts for research and development projects”

Currently Associate Professor at Lee Kong Chian School of Business, Singapore Management University

2nd Supervisor & Committee Member

2014 – 2018

Verena Vickovic

University College London

“Equilibrium analysis of carbon emissions caps in regional electricity markets”

2010 – 2016

Yufei Hang

UCL School of Management

“New product introduction and sales”

2010 – 2016

Emmanouil Avgerinos

UCL School of Management

“Team and task dynamics in healthcare and professional service operations”

2009 – 2014

Lajos Horvat

University College London

“Decision making under uncertainty and competition for sustainable energy technologies”

2008 – 2013

Sebastiano Massaro

UCL School of Management

“Cognitive and affective features of interpersonal dynamics in knowledge – intensive organizations”

2008 – 2013

Chia – Yu Kou

UCL School of Management

“Understanding implicit assumptions in learning: role of motivation and formal structure”

2008 – 2011

Songsong Liu

University College London

“Supply chain management for the process industry”

2007 – 2011

Michail Chronopoulos

University College London

“Optimal decision making under risk aversion and uncertainty”

2006 – 2009

Janne Kettunen

Helsinki University of Technology

“Stochastic optimization in the management of market uncertainties”

2004 – 2008

Toni Jarimo

Helsinki University of Technology

“Optimal design of collaborative innovation networks”

2004 – 2008

Jade Herbots

University of Leuven

“Capacity allocation in project portfolio management”

2003 – 2005

Janne Gustafsson

Helsinki University of Technology

“Contingent portfolio programming for the management of risky projects”

2002 – 2006

Mohammad Ranjbar

Sharif University of Technology

“Heuristics for resource – constrained project planning”

1998 – 2003

Roel Leus

University of Leuven

“The generation of stable project plans: Complexity and exact algorithms”

1996 – 2001

Mario Vanhoucke

University of Leuven

“Exact algorithms for various types of project scheduling problems”

Selected Publications

Citations

Google Scholar 4,500 citations; h-index 27

Select Top Journals

"Forecasting airport transfer passenger flow using real-time data and machine learning", *Manufacturing & Services Operations Management*, 2021, forthcoming (with X. Guo and Y. Grushka-Cockayne).

"Licensing contracts: Control rights, options and timing", *Management Science*, 2017, 63(4), 1131-1149 (with P. Crama and N. Taneri).

"A Horizon Decomposition approach for the Capacitated Lot Sizing Problem with Setup Times", *INFORMS Journal on Computing*, 2016, 28, 465 – 482 (with Z. Degraeve and I. Fragkos).

"Period decompositions for the capacitated lot size problem with setup times", *INFORMS Journal on Computing*, 2016, 28 (4), 431 - 448 (with S. A. de Araujo, Z. Degraeve, I. Fragkos, R. Jans).

"An integrated decision– making approach for improving European air traffic management", *Management Science*, 2008, 54 (8), 1395 – 1409 (with Z. Degraeve and Y. Grushka– Cockayne).

"Milestone payments or royalties? Contract design for R&D licensing", *Operations Research*, 2008, 56 (6), 1539– 1552 (with P. Crama and Z. Degraeve).

"Broadcast scheduling for mobile advertising", *Operations Research*, 2003, 51 (4), 509 – 517 (with Z. Degraeve).

Select Practitioner Journals

"London Heathrow Airport Uses Real-Time Analytics for Improving Operations", *Inform Journal on Applied Analytics*, 2020, 50 (5), 325-339 (with X. Guo, Y. Grushka-Cockayne)

"Vungle Inc. improves monetization using big-data analytics", *Inform Journal on Applied Analytics*, 2017, 47(5), 454-466 (with I. Fragkos, Y. Grushka-Cockayne, C. Lichtendahl, H. Guerin, A. Kritzer)

"On improving the maritime transshipment operations at the Noble Group", *Inform Journal on Applied Analytics*, 2016, 46 (3), 203-217 (with I. Fragkos).

"Towards a Single European Sky", *Inform Journal on Applied Analytics*, 2009, 39, 400 – 414 (with Y. Grushka– Cockayne).

"R&D project valuation and licensing negotiations at Phytopharm Ltd.", *Inform Journal on Applied Analytics*, 2007, 37 (5), 472–487 (with P. Crama, Z. Degraeve and W. Chong).

High–Quality Journals

"Optimal Selection of Distributed Energy Resources under Uncertainty and Risk Aversion," *IEEE Transactions on Engineering Management*, 2016, 63(4), 462-474 (with L. Maurovich-Horvat, P. Rocha, and A. Siddiqui).

"New product development flexibility in a competitive environment", *European Journal of Operational Research*, 2015, 244 (3), 892–904 (with J. Kettunen, Y. Grushka– Cockayne, Z. Degraeve).

"Project planning with alternative technologies in uncertain environments", *European Journal of Operational Research*, 2015, 242 (2), 465–476 (with S. Creemers and R. Leus).

"Duopolistic competition under risk aversion and uncertainty", *European Journal of Operational Research*, 2014, 236, 643 – 656 (with A. Siddiqui and M. Chronopoulos).

"The value of capacity sizing under risk aversion and operational flexibility", *IEEE Transactions on Engineering Management*, 2013, 60 (2), 272 – 288 (with M. Chronopoulos and A. Siddiqui).

"Step by step. The benefits of stage– based R&D licensing contracts" *European Journal of Operational Research*, 2013, 224 (3), 572 – 582 (with P. Crama and Z. Degraeve).

"Effective project planning: making the most of project planning tools", *Production & Inventory Management*, 2011, 46 (2), 10 – 25

"Optimal investment and operational decision making under risk aversion and uncertainty", *European Journal of Operational Research*, 2011, 213 (1), 221 – 237 (with A. Siddiqui and M. Chronopoulos).

"A hybrid Scatter Search and Path Relinking algorithm for the discrete time/resource trade– off problem in project scheduling", *European Journal of Operational Research*, 2009, 193 (1), 35 – 48 (with M. Ranjbar and F. Kianfar).

"R&D project scheduling when activities may fail", *IIE Transactions*, 2008, 40 (4), 367 – 384 (with R. Leus).

"Project options valuation using Net Present Value and Decision Tree Analysis", *European Journal of Operational Research*, 2008, 184 (1), 341 – 355 (with Z. Degraeve and R. Vandendorpe).

"MABS: Spreadsheet– based decision support for precision marketing", *European Journal of Operational Research*, 2006, 171 (3), 935 – 950, feature issue for the Excellence in Practice Award of the Association of European Operational Research Societies (with Z. Degraeve).

"A hybrid Scatter Search / Electromagnetism meta– heuristic for project scheduling", *European Journal of Operational Research*, 2006, 169 (2), 638 – 653 (with D. Debels, R. Leus and M. Vanhoucke).

"On 'Investment decisions in the theory of finance: some antinomies and inconsistencies'", *European Journal of Operational Research*, 2005, 161(2), 499 – 504.

"The impact of project portfolio management on information technology projects", *International Journal of Project Management*, 2005, 23 (7), 524 – 537 (with S. Calderini, Y. Grushka– Cockayne, M. Lockett, M. Moura and A. Sloper).

"On the paper 'Resource– constrained project scheduling: notation, classification, models and

methods' by Brucker et al.", *European Journal of Operational Research*, 2001, 128, 679 – 688 (with W. Herroelen and E. Demeulemeester).

"The discrete time/resource trade– off problem in project networks – A branch– and– bound approach", *IIE Transactions*, 2000, 32, 1059 – 1069 (with E. Demeulemeester and W. Herroelen).

"The multi– mode resource– constrained project scheduling problem with generalized precedence relations", *European Journal of Operational Research*, 1999, 119 (2), 538 – 556 (with W. Herroelen).

"Phase transitions in project scheduling", *Journal of the Operational Research Society*, 1999, 50 (2), 148 – 156 (with W. Herroelen).

"Local search methods for the discrete time/resource trade– off problem in project networks", *Naval Research Logistics*, 1998, 45, 553 – 578 (with E. Demeulemeester and W. Herroelen).

"A branch – and – bound algorithm for the resource– constrained project scheduling problem with generalized precedence relations", *European Journal of Operational Research*, 1998, 111 (1), 152 – 174 (with W. Herroelen).

"An optimal procedure for the resource – constrained project scheduling problem with discounted cash flows and generalized precedence relations", *Computers and Operations Research*, 1998, 25 (1), 1 – 17 (with W. Herroelen).

"Resource – constrained project scheduling – A survey of recent developments", *Computers and Operations Research*, 1998, 25 (4), 279 – 302 (with W. Herroelen and E. Demeulemeester).

"New computational results for the discrete time/ cost trade–off problem in project networks", *Journal of the Operational Research Society*, 1998, 49 (11), 1153– 1163 (with E. Demeulemeester, B. Foubert, W. Herroelen and M. Vanhoucke).

"On the use of the complexity index as a measure of complexity in activity networks", *European Journal of Operational Research*, 1996, 91, 347–366 (with W. Herroelen).

Book Chapters (Refereed)

"Valuation of risky projects and other illiquid investments using portfolio selection models", *Portfolio Decision Analysis*, International Series in Operations Research and Management Science, Ed. F. S. Hillier, Springer, 2011 (with J. Gustafsson, Z. Degraeve, A. Salo).

"Using decision analysis to value R&D projects", in *QFinance*, Bloomsbury Publishing, 2009.

"A classification scheme for project scheduling problems", Chapter 1 in Weglarz, J. (Ed.), *Project Scheduling – Recent Models, Algorithms and*

Applications, Kluwer International Series in Operations Research and Management Science, 1998, Vol. 14, 1 – 26, Kluwer Academic Publishers (with W. Herroelen and E. Demeulemeester).

"Algorithms for scheduling projects with generalized precedence relations", Chapter 4 in Weglarz, J. (Ed.), *Project Scheduling – Recent Models, Algorithms and Applications*, Kluwer International Series in Operations Research and Management Science, 1998, Vol. 14, 77 – 106, Kluwer Academic Publishers (with E. Demeulemeester and W. Herroelen).

"Resource – constrained project scheduling – A survey of recent developments", in Zimmerman, U., Derigs, U., Gaul, W. Möhring, R.H. and Schuster, K.P., *Operations Research Proceedings*, Springer, Heidelberg, 1997, 197 – 202 (with W. Herroelen and E. Demeulemeester).

Magazines & Newspapers

"Decisions more important than Results", *Business Strategy Review*, 2010 (with Z. Degraeve).

"Managing project portfolios", *Business Strategy Review*, 2008.

"Tools to keep projects on the rails", *Financial Times*, 9 September 2005.

Cases

"A/B testing at Vungle"

"Agile project management at CA"

"Microsoft's Xbox 360 and the battle of the consoles"

"Toward a single European sky"

Finalist for 2007 *INFORMS Case Competition Award*

"Phytopharm plc."

Winner of 2006 *INFORMS Case Competition Award*

"Project portfolio management at Novartis Pharma"

Winner of 2004 *INFORMS Case Competition Award*

"The aftermath of the World Trade Center collapse"

Conferences

More than 100 papers presented at the following conferences:

INFORMS Annual Meeting

INFORMS International Meeting

POMS Annual Conference

IEEE Conference on Industrial Engineering and Engineering Management

IFORS Triennial Conference

EURO Annual Conference

EURO – PMS

MSOM Annual Meeting

MISTA

DSI Annual Meeting