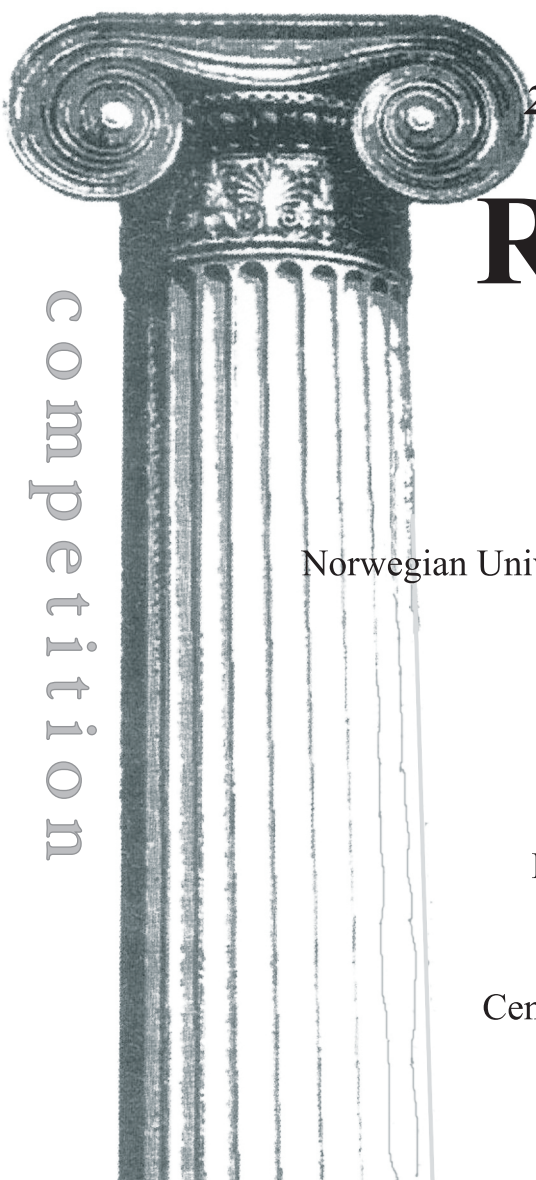


expand
valuing
flexibility

competition

risk management strategy



20th Annual International Conference

Real Options

Theory Meets Practice

Organized by

Real Options Group

University of Oslo

Norwegian University of Science and Technology (NTNU)

In cooperation with

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Northwestern University and

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NTNU

June 15 - 18, 2016

Oslo & Trondheim, Norway

Program Sessions Summary Guide

DAY 0 - WEDNESDAY, JUNE 15 (MANAGERIAL CONFERENCE, OSLO)

6:00-8:00 pm Holmenkollen Ski Museum and Reception
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DAY 1 - THURSDAY, JUNE 16 (OSLO)

Track I	Track II
8:15-8:55 Registration/coffee & President's Welcome	
9:00-10:15 Energy & Resource Applications	9:00-10:15 Energy Policy & Subsidies
10:45-12:00 Energy Infrastructure Investment	10:45-12:00 Resource & Environmental Policy
12:00-12:40 Managerial Keynote Address (Kuno Huisman)	
2:00-8:45 pm Train to Trondheim	

DAY 2 - FRIDAY, JUNE 17 (TRONDHEIM)

Track I	Track II
8:45-9:00 Registration	
9:00-10:15 Stochastic Processes & Modeling	9:00-10:15 Energy Games Applications
10:45-12:00 Valuing and Managing Storable Resources	10:45-12:00 Competition & Strategy
12:00-2:00 Luncheon	
2:00-3:15 Shutdown & Replacement Decisions	2:00-3:15 Option Games Applications
3:45-5:00 Empirical Evidence: Firm Growth & Performance	3:45-5:00 Option Games & Other Applications
5:00-5:40 Academic Keynote Address (Peter Kort)	
7:00-9:00 pm Gala Dinner	

DAY 3 - SATURDAY, JUNE 18 (TRONDHEIM)

Track I	Track II
9:00-10:15 Contractual Options & Guarantees	9:00-10:15 Innovation & Investment Timing
10:45-12:00 Entrepreneurship, Innovation and Infrastructure (Best Student Papers)	
12:00-1:00 Panel Discussion: Current State, Challenges and Future Prospects	
2:00-6:00 pm Boat Trip to Munkholmen Island	

Program Sessions

DAY 0 - WEDNESDAY, JUNE 15 (SEE MANAGERIAL CONFERENCE PROGRAM)
6:00-8:00PM HOLMENKOLLEN SKI MUSEUM AND RECEPTION

DAY 1 – Thursday, June 16 (Oslo)

8:15-8:45 REGISTRATION & COFFEE

8:45-8:55 PRESIDENT'S WELCOME

9:00-10.15 TRACK I

ENERGY & RESOURCE APPLICATIONS

Chairperson: Diderik Lund (U. of Oslo, Norway)

Do Flexible "Smart" Grids Boost Investment in Photovoltaics?

The Prosumer Investment Decision Applied to the Italian Energy Market

C. D'Alpaos, M. Bertolini and M. Moretto (U. of Padova, Italy)

Thermal Power Portfolio Valuation: A Fuzzy Real Options Application in Brazil

W.J. Damasceno do Nascimento (PUC-Rio), M.A.G. Dias (Petrobras) and

M.A. Pacheco (PUC-Rio, Brazil)

Optimal Natural Resource Extraction with Production Target: An Application in Mining

W. Chen, N. Langrené and T. Tarnopolskaya (Commonwealth Scientific and

Industrial Research Organisation, Australia)

9:00-10.15 TRACK II

ENERGY POLICY & SUBSIDIES

Chairperson: Kristin Linnerud (CICERO, Norway)

Investment Criteria for Subsidizing Energy Facilities

D. Paxson (Manchester Business School) and R. Adkins (Bradford U., UK)

Renewable Energy Investment Policy with Support Scheme Uncertainty

T. Boomsma (U. of Copenhagen, Denmark) and K. Linnerud (CICERO, Norway)

Subsidised Capacity Investment under Uncertainty

P. Kort, X. Wen (Tilburg U., Netherlands) and V. Hagspiel (NTNU, Norway)

10:15-10:45 MORNING COFFEE BREAK

10:45-12:00 TRACK I

ENERGY INFRASTRUCTURE INVESTMENT

Chairperson: Kjell Arne Brekke (U. of Oslo, Norway)

Optimal Energy Transmission Infrastructure Investment Between Regions

K.A. Brekke (U. of Oslo, Norway)

Valuing Natural Gas Pipeline Expansion: An Application in Mexico

R. Massa and M. Reyna (EGADE Business School, Tecnológico de Monterrey, Mexico)

The Impact of Uncertain Revenues and Costs on Time-to-Build in Energy Infrastructure Investment

L. Kauppinen, A. Salo (Aalto U., Finland) and A. Siddiqui (University College London, UK)

10:45-12:00 TRACK II

RESOURCE & ENVIRONMENTAL POLICY

Chairperson: Motoh Tsujimura (Doshisha U., Japan)

Environmental Regulation and Entry-Exit Decisions

M. Goto (Hokkaido U.), R. Takashima (Tokyo U. of Science) and

M. Tsujimura (Doshisha U., Japan)

Optimal Resource Rent Taxation Policy under Credit Constraints

D. Lund (U. of Oslo, Norway)

Can Complementary Investments Reduce the Impact of Uncertainty? CO₂ Enhanced Oil Recovery

T. Compernelle (Hasselt U., Belgium), K. Huisman, P. Kort (Tilburg U., Netherlands),

K. Piessens, K. Welkenhuysen (Royal Belgian Institute of Natural Sciences, Belgium)

12:00-12:40 MANAGERIAL KEYNOTE ADDRESS

Twenty Years of Real Options: From Theory to Practice and Back

Kuno Huisman (Tilburg U., Netherlands)

12:45 CLOSING REMARKS

2:00-8:45 PM TRAIN TO TRONDHEIM (ACADEMIC CONFERENCE CONTINUES)

DAY 2 – Friday, June 17 (Trondheim)

9:00-10.15 TRACK I

STOCHASTIC PROCESSES & MODELING APPROACHES

Chairperson: Elizabeth Whalley (U. of Warwick, UK)

Choice of Stochastic Processes for Real Option Valuation Problems

C. Bastian-Pinto, L. Ozorio (IBMEC Business School) and L. Brandão (PUC-Rio, Brazil)

Disease Control with Future Disease Progression Uncertainty: What a Difference a Stochastic Process Makes in Epidemiology

C. Dangerfield, C. Gilligan (U. of Cambridge), N. Hanley (U. of St Andrews) and E. Whalley (U. of Warwick, UK)

The Impact of Technological Uncertainty on Project Scale

K. Oshikoji (Norwegian School of Economics, Norway)

9:00-10.15 TRACK II

ENERGY GAMES APPLICATIONS

Chairperson: Artur Rodrigues (U. of Minho, Portugal)

Urban Infrastructure Investments: Strategic Interactions in UK District Heating Networks

S. Maier and J. Polak (Imperial College London, UK)

Transmission Planning and Power Generation Investment under Uncertainty

V. Hagspiel, N. Midttun, J. Sletten (NTNU, Norway) and A. Siddiqui (UCL, UK)

Renewable Energy Policy: Feed-in Tariffs with Minimum Price Guarantees

L. Barbosa, P. Ferrão, A. Sardinha (U. of Lisbon) and A. Rodrigues (U. of Minho, Portugal)

10:15-10:45 MORNING COFFEE BREAK

10:45-12.00 TRACK I

VALUING AND MANAGING STORABLE RESOURCES

Chairperson: Yuri Lawryshyn (U. of Toronto, Canada)

A Stochastic Supply/Demand Model for Storable Commodity Prices

A. Bashiri and Y. Lawryshyn (U. of Toronto, Canada)

Natural Gas Storage using Mean Reverting Jump Diffusion

S. Borovkova, B. Henke (Free U. of Amsterdam, Netherlands) and K. Støre (Nord U., Norway)

Optimal Utilization of Multiple Stored Media in Flexible Storage Facilities:

An Application in Intermittent Electricity Production Using Salt Caverns

X. de Graaf and R. Madlener (RWTH Aachen U., Germany)

10:45-12.00 TRACK II

COMPETITION & STRATEGY

Chairperson: Richard Ruble (EMLYON Business School, France)

Never Make a Move Too Soon: Commitment and Flexibility in Staged Investment

R. Ruble (EMLYON Business School, France)

Strategic Investment and Acquisitions in a Duopoly Patent Race

A. Kyle (U. of Maryland, USA) and R. Meng (U. of Hong Kong)

Predatory Pricing in a Duopoly under Financing Constraints

M. Lavrutich (Tilburg U., Netherlands) and J. Thijssen (U. of York, UK)

12:00-2.00 LUNCHEON

2:00-3.15 TRACK I

SHUTDOWN & REPLACEMENT DECISIONS

Chairperson: Dean Paxson (Manchester Business School, UK)

Nordic Nugget: Mossin and Dixit Motbballing Models

D. Paxson (Manchester Business School, UK)

Valuing Replaceable Deteriorating Assets

R. Adkins (U. of Bradford) and D. Paxson (Manchester Business School, UK)

Optimal Strategy for Equipment Replacement: An Application in Korea

D.-J. Lee, K.-T. Kim (Kyung Hee U.) and S.-J. Park (KnowledgeWorks, South Korea)

2:00-3.15 TRACK II

OPTION GAMES APPLICATIONS

Chairperson: Paulo J. Pereira (U. of Porto, Portugal)

Deciding on Greenfield Investment or Acquisition of a (Hidden) Competitor

P.J. Pereira (U. of Porto, Portugal) and E. Lukas (Otto-von-Guericke U., Germany)

Strategic Market Entry with Production Flexibility in Oligopoly

B. Chevalier-Roignant (BCR, France), C.M. Flath (JMU Würzburg, Germany) and L. Trigeorgis (U. of Cyprus and King's College London)

Buy-to-Let Tax Policy: UK Landlord Strategic Default and Negotiation Options

M. Flanagan (Manchester Metropolitan U.) and D. Paxson (U. of Manchester, UK)

3:15-3.45 AFTERNOON COFFEE BREAK

3:45-5.00 TRACK I

EMPIRICAL EVIDENCE: FIRM GROWTH & PERFORMANCE

Chairperson: Lenos Trigeorgis (U. of Cyprus & KCL)

Real Options-based Industry and Firm-level Effects on Firm Performance

O. Adetunji and A. Owolabi (Lagos Business School, Pan-Atlantic U., Nigeria)

Growth Options, Incentives, and Pay-for-Performance

S. Gryglewicz (Erasmus U. Rotterdam, Netherlands) and B. Hartman-Glaser (UCLA, USA)

Related Stock Market Anomalies: Growth, Distress and Skewness

L. Trigeorgis (U. of Cyprus and King's College London), N. Lambertides (Cyprus U. of Technology) and L. Del Viva (ESADE Business School, Spain)

3:45-5.00 TRACK II

OPTION GAMES AND OTHER APPLICATIONS

Chairperson: Jacco Thijssen (U. of York, UK)

Be Quick or Persistent? Feedback Effects between First and Second Mover Advantages in Switch Markets

J-H. Steg (U. of Bielefeld, Germany) and J. Thijssen (U. of York, UK)

Funding Entrepreneurial Investment Options under Adverse Selection and Moral Hazard

G. Zwart (U. of Groningen, Netherlands)

Corporate Financing Policy, Debt Redemption and Default in Leveraged Buyouts

A. Lahmann, M. Schreiter and B. Schwetzler (HHL Leipzig GSM, Germany)

5:00-5:40 ACADEMIC KEYNOTE ADDRESS

Capacity Choice in (Strategic) Real Options Models

Peter Kort (Tilburg U., Netherlands)

7:00-9:00 PM GALA DINNER

Sponsored by Research Council of Norway, NTNU and CenSES

DAY 3 – Saturday, June 18 (Trondheim)

9:00-10.15 TRACK I

CONTRACTUAL OPTIONS & GUARANTEES

Chairperson: Luiz Brandão (PUC-Rio, Brazil)

Contractual Win-win Option Positions: Application of Customized Assets in the Oil Sector in Brazil

R. Silva, L. Brandão (PUC-Rio) and C. Bastian-Pinto (IBMEC, Brazil)

Infrastructure Investment with Real Collar Options: Revenue Guarantees and Ceilings

R. Adkins (U. of Bradford) and D. Paxson (Manchester Business School, UK)

Non-Competition Covenants in Employment Contracts with Litigation Uncertainty

A. Azevedo (U. of Hull), P. Pereira (U. of Porto) and A. Rodrigues (U. of Minho, Portugal)

9:00-10.15 TRACK II

INNOVATION & INVESTMENT TIMING

Chairperson: Arkadiy Sakbartov (Wharton School, U. of Pennsylvania, USA)

Valuing Early Stage Investments with Market Timing Risk

M. Davison (U. of Western Ontario) and Y. Lawryshyn (U. of Toronto, Canada)

Technology Adoption and Investment under Risk Aversion and Rivalry

L. Sendstad (NHH, Norway) and M. Chronopoulos (U. of Brighton, UK)

Time (In)consistent Behavior and Investment Timing

J. Schosser (U. of Passau, Germany)

10:15-10:45 MORNING COFFEE BREAK

10:45-12.00

ENTREPRENEURSHIP, INNOVATION AND INFRASTRUCTURE DECISIONS (BEST STUDENT PAPERS SESSION)

Chairperson: Afzal Siddiqui (University College London, UK)

Entrepreneurial Financing Decisions and Contingent Payment Mechanisms

M.T. Gärtner, P.J. Pereira and E. Brandão (U. of Porto, Portugal)

Innovation and Optimal Timing of Technology Adoption: War of Attrition vs. Preemption Games

N.F.D. Huberts (Tilburg U., Netherlands)

Strategic Investment Decisions in Mobile TV Infrastructure: Real Options and Coalition Games

T. Chahed, A.A. Razzac, L. Salahaldin (Institut Mines Telecom),
S.E. Elayoubi (Orange Labs) and Y. Hayel (U. of Avignon, France)

12:00-1:00 PANEL DISCUSSION

CURRENT STATE, CHALLENGES AND FUTURE PROSPECTS

Moderators: Dean Paxson (Manchester Business School, UK) and Luiz Brandão (PUC-Rio, Brazil)

Panelists Include:

Stein-Erik Fleten (NTNU, Norway)

Kuno Huisman (Tilburg U, Netherlands)

Yuri Lawryshyn (U. of Toronto, Canada)

Diderik Lund (U. of Oslo, Norway)

Artur Rodrigues (U. of Minho, Portugal)

Arkadiy Sakbartov (Wharton School, U. of Pennsylvania, USA)

Afzal Siddiqui (University College London, UK)

Jacco Thissen (U. of York, UK)

Elizabeth Whalley (U. of Warwick, UK)

1:00 BEST STUDENT PAPER AWARD & CLOSING REMARKS

1:10-1:40 COFFEE

2:00-6:00 PM BOAT TRIP TO MUNKHOLMEN ISLAND (1.3 KM)

CONFERENCE CONCLUDES

Conference Venue and Logistics

Venue The conference on June 15 and 16 is hosted at the University of Oslo Blindern campus, Georg Sverdrup Building, Moltke Moes vei 39, Oslo.

Map: <http://www.uio.no/om/finn-fram/omrader/blindern/>

Then on Thursday June 16 at 2 pm participants will move all together to Trondheim (500 km away) by train arriving at 8.45 pm. The conference will continue on June 17 and 18 (at 8.30 am) in Trondheim at the Norwegian University of Science and Technology (NTNU) Gloschaugen campus, Realfagbygget Building. Map: <http://s.mazemap.com/1LNUPfi>

A boat trip to Munkholmen Island is planned on Saturday 2-6 pm.

Fees & Registration Fees are €420 (for both Academic and Managerial conferences) if register by April 18. Registration fees go up by 20% to €500 afterwards. Fees entitle participants to both the Managerial and the Academic parts of the conference. Registration should be made online via the conference website www.realoptions.org

Important Administrative Information Registration fees include the conference programs, coffee breaks, lunches, a visit to Holmenkollen Ski Museum with a reception, a Gala dinner on Friday and a boat trip to Munkholmen Island on Saturday (lunch not included). The train trip Oslo-Trondheim is extra (€75 ticket + €25 for lunch p.p.) one way. Reservation and payment can be made with the conference registration form. The lunch option on Thursday is a cold lunch packet served on the train upon departure. Travel arrangements from Trondheim are up to each individual. Cancellations made in writing by May 15 can be refunded, except for a 15% service charge. Only registrations paid by April 18 are guaranteed and included on the list of participants. For registration and other general-type conference-related inquiries contact Eugenia at e-mail conference.registration@realoptions.org, tel +357 22893605. For information on local logistics regarding U. of Oslo or Oslo contact Prof. Diderik Lund at diderik.lund@econ.uio.no, tel +47 90561682. For local logistics regarding NTNU or Trondheim contact Prof. Stein-Erik Fleten at stein-erik.fleten@iot.ntnu.no, tel +47 46694793; or Verena Hagspiel at verena.hagspiel@iot.ntnu.no, tel +47 91897783.

Hotels, Airport, Transport and Visa For information about recommended hotels/accommodation in Oslo and in Trondheim, conference group rates and reservation for the hotels, transportation from the airport(s) to hotels or from hotels to the conference venues see the conference website at www.realoptions.org/venue2016/index.html
Norway is part of the Schengen area so no visa is required for citizens of Schengen, EU/EEA (EFTA). Otherwise please make advance provisions to obtain a timely visa.

Organizers Lenos Trigeorgis (U. of Cyprus, King's College London & ROG), Diderik Lund (U. of Oslo) and Stein-Erik Fleten (NTNU, Norway). VPs Planning: Kristin Linnerud (U. of Oslo) and Verena Hagspiel (NTNU part); VP Program: G. Sick (U. Calgary, Canada).

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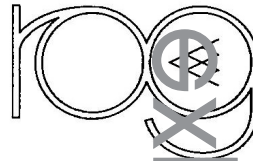
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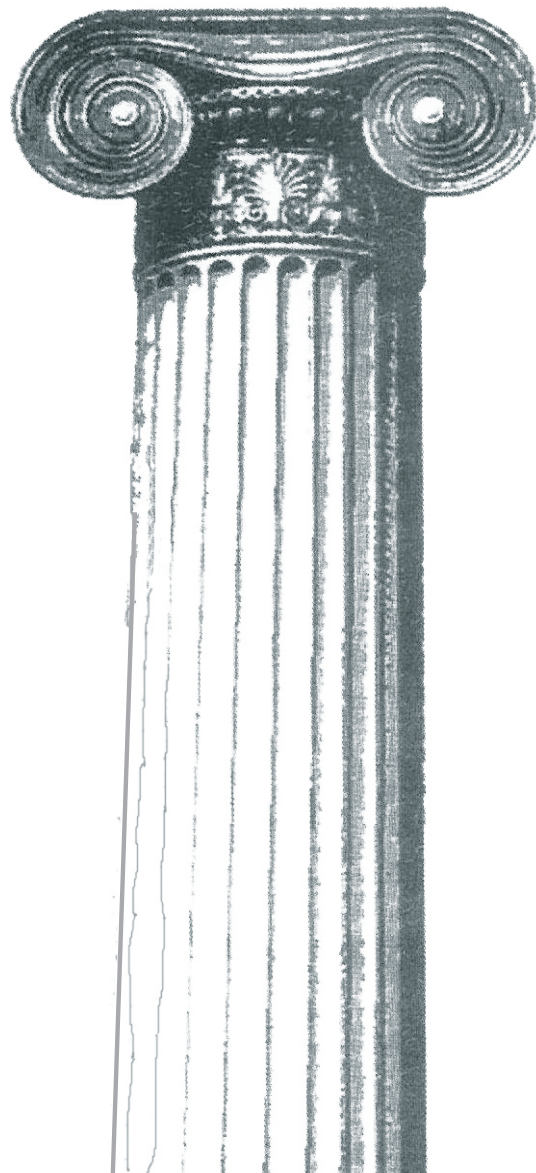
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