

## Annual Report 2020 Department of Business and Management Science

Management	Head Jarle Møen, Deputy Head Iver Bragelien, Adm. Manager Kristin Reichel Teigland
Affiliated	83 persons – 20 Professors, 11 Associate Professors, 8 Post Doctorate Fellows/Assistant Professors, 1 Researcher, 19 PhD Research Scholars, 3 PhD Students with other funding, 6 Adjunct Professors, 11 Adjunct Associate Professors, 5 Professor Emeriti, 1 Scientific Assistant, 1 Administration Manager, 2 Senior Executive Officers, 1 Higher Executive Officer, 1 Executive Officer
Man-years	68,6 man-years – Faculty 44,6; PhD Research Scholars 19,0; Administrative Staff 5,0
Gender balance	13 % women in tenured faculty positions, 38 % in non-tenured faculty positions, 36 % in PhD Research Scholar positions and 12 % in adjunct faculty positions
Publication points	60,7 (58,1 in 2019, 69,2 in 2018, 74,1 in 2017)

### Hirings and promotions

- Malin Arve was appointed Vice Rector for Academic Affairs
- Geir Drage Berentsen was hired as Associate Professor in Business Economics with specialization in Applied Statistics and Econometrics
- Julio César Góez was hired as Associate Professor in Operations Research with specialization in Shipping and Logistics
- Håkon Otneim was hired as Associate Professor in Business Economics with specialization in Applied Statistics and Econometrics
- Øyvind Thomassen was hired as Associate Professor in Business Economics with specialization in Applied Statistics and Econometrics
- Mario Blázquez de Paz was hired as Assistant Professor in Energy Economics
- Aysil Emirmahmutoglu was hired as Assistant Professor in Business Economics with specialization in Risk Management
- Isabel Hovdahl was hired as Assistant Professor in Business Economics with specialization in Tax and Environmental Economics
- Ondrej Osicka was hired as Assistant Professor in Optimization and Logistics
- Paul Pelzl was hired as Assistant Professor in Business Economics with specialization in Risk Management
- Simon Flatebø Selle was hired as Researcher in Business Taxation and Aquaculture Economics
- Six new PhD Research Scholars were hired; Rasmus Noss Bang, Paulo de Azevedo Jr., David Murphy, Benjamin Sylta Narum, Cosku Can Orhan and Yue Shi
- Natalia Flórez Mejía was promoted to Senior Executive Officer
- Charlotte Vårdal Rundhovde was promoted to Higher Executive Officer
- Torill Anthun was hired in a temporary position as Executive Officer

### Awards

- Jan Ubøe was the first NHH faculty member to be awarded the title Excellent Teacher Practitioner
- Geir Drage Berentsen and Håkon Otneim were awarded the NHH Student Association's Teaching Award "Bronsesvampen" ("The Bronze Sponge") for the Autumn Semester 2020
- Evelina Gavrilova-Zoutman and Floris Zoutman were awarded The Austin Robinson Memorial Prize for 2019, for the best paper published in *The Economic Journal* by scientists who are within five years of receiving their PhDs
- Mario Guajardo was a finalist of the Daniel H. Wagner Prize for Excellence in the Practice of Advanced Analytics and Operations Research, 2020
- Gabriel Fuentes headed an international research team to second place in the UNs programming competition "AIS Big Data Hackathon"
- Benjamin Sylta Narum was awarded the Norwegian Operations Research Society Best Master Thesis Prize in Operations Research for 2019-2020
- Aysil Emirmahmutoglu was granted NHHs publication bonus for an article in *Operations Research*
- Mohammed Mardan was granted NHHs publication bonus for an article in *The RAND Journal of Economics*
- Trond Olsen was granted NHHs publication bonus for an article in *American Economic Review*
- Maximilian Todtenhaupt was granted NHHs publication bonus for an article in *Journal of Financial Economics*
- Mario Guajardo has published a scientific article on ABS level 4 in *European Journal of Operational Research*
- Håkon Otneim has published a scientific article on ABS level 4 in *Journal of Econometrics*
- Stein Ivar Steinshamn has published a scientific article on ABS level 4 in *European Journal of Operational Research*

### Research

- The Department profiles its research in six main thematic areas: (i) *Incentives, Contracts and Firm Behaviour*; (ii) *Investments, Insurance and Household Finance*; (iii) *Business Taxation*; (iv) *Energy Markets, Resource Management and Sustainability*; (v) *Shipping, Logistics and Operations Management* and (vi) *Data Science and Analytics*

- The Department's faculty members have published 49 articles in scientific journals and 1 chapter in a scientific anthology. This corresponds to 60,7 publication points, of which 64 % are classified on level 2 in University Norway's (UHR's) publication scheme, 66 % are on ABS level 3 or higher (22 % on level 4/4\* and 44 % on level 3).
- The Department's total project grants from competition arenas are NOK 4,7 million (4,3 in 2019, 3,15 in 2018, 6,8 in 2017). Of this, 3,2 million comes from the Research Council of Norway and 1,5 million from the EU. In addition, the Department has an annual grant funding of a professorship in shipping economics of 1 million from the Bergen Shipowners' Association and the Neptun Bergen Foundation
- The Department's faculty members also carry out project work for SNF – Centre for Applied Research at NHH. The gross turnover in this business is 5,2 million (4,7 in 2019, 3,9 in 2018, 2,0 in 2017)
- 15 papers were published in the Department's Discussion Paper series (17 in 2019, 19 in 2018, 16 in 2017)
- 17 faculty seminars have been held
- The Department's faculty members contribute heavily in four of NHH's research centres
  - *Centre for Business Economics* is co-headed by Malin Arve, together with Kurt Brekke at the Department of Economics (Brekke replaced Eirik G. Kristiansen in August)
  - *Centre for Energy, Natural Resources and Environment – ENE* is headed by Leif K. Sandal and Gunnar S. Eskeland (deputy head)
  - *Centre for Shipping and Logistics* is headed by Stein W. Wallace and Roar Os Ådland (deputy head)
  - *Norwegian Center for Taxation* is headed by Guttorm Schjelderup and Jarle Møen (deputy head)
- In 2020, *Climate Futures* gained status as a Centre for Research-Based Innovation (SFI) at NORCE. NHH is a partner with Roar Os Ådland as leader of the research group «Smart Shipping» and coordinator for NHH's activities. The centre will do research on new solutions to predict and manage climate risk from 10 days to 10 years ahead. Geir Drage Berentsen, Håkon Otneim and Stein W. Wallace are affiliated with the centre. Two Post Doctorate Fellows and two PhD Research Scholars will be employed. The Department's efforts are linked to risk management in shipping, aquaculture and insurance.
- NHH is a partner in *Norwegian Centre for Energy Transition Strategies* (NTRANS), research centre for environmentally friendly energy (FME) at NTNU. Mette Bjørndal is deputy head and research director. Gunnar S. Eskeland is a member of the management group responsible for dissemination.
- The Department's faculty members have external funding for new research projects from both Norwegian and European competition arenas
  - Maximilian Todtenhaupt has been awarded a prestigious Marie Curie Research Fellowship from the EU – for the project «TAXGLOBAL - Understanding the global effect of corporate tax reforms».
  - Malin Arve and Evelina Gavrilova-Zoutman have received support from the Research Council of Norway under the scheme «Support for Networking to Promote Gender Balance in Norwegian Research», which belongs to the Research Council's BALANCE program, to the two-year project «CHALLENGE: Meeting the Challenge to Change the Culture at NHH».
  - Christian Braathen has received support from the Research Council of Norway under the scheme «STUD-ENT» (where students in collaboration with higher education institutions can apply for project support for student-run business ideas)

### Doctoral dissertations

- Evangelos Toumasatos (June): Essays on game theory and fisheries management
- Lisa Maria Assmann (September): Forecasting, Efficiency and Speed in Maritime Shipping
- Ondrej Osicka (October): Topics in cooperative game theory and logistics

### Scientific conferences

- The Department's faculty members regularly contribute to international scientific conferences and other professional meeting places. 43 conference contributions and academic presentations have been registered in the research database Cristin (121 in 2019, 116 in 2018, 108 in 2017). NHH's fund has awarded the department's employees 7 travel grants (38 in 2019, 32 in 2018, 23 in 2017). The decline in activity is due to the Covid19 pandemic.
- *Fagkonferanse i bedriftsøkonomiske emner* (FIBE XXXVII) was as usual hosted at NHH in early January, with Trond M. Døskeland as a member of the organizing committee. This year's theme was *Making Money in a Sustainable Future*.
- Malin Arve was a member of the Scientific Committee for the BECCLE conference Bergen Competition Policy Conference, which was to be held in April. The conference had to be canceled due to the Covid19 pandemic.
- Stein W. Wallace was a member of the Scientific Committee for the TSL Conference in Washington DC in May, LOGMS 2020 in London and ECSO-CMS 2020 in Venice. All three were canceled or postponed due to the Covid19 pandemic.
- Arnt Ove Hopland, Mohammed Mardan, Guttorm Schjelderup and Maximilian Todtenhaupt were members of the Scientific Committee for the Norwegian Tax Accounting Symposium, which was to be held in Bergen in June. The conference had to be canceled due to Covid19 pandemic.
- Malin Arve took part in the organizing of *Anskaffelsesakademiets F&U dag innen offentlige anskaffelser* (The Procurement Academy's R&D day in public procurement – digitally) in November

### Editors in scientific journals

- Malin Arve is on the Editorial Board of *Journal of Industry, Competition and Trade*

- Mario Guajardo is on the Editorial Board of *International Transactions in Operational Research*
- Guttorm Schjelderup is on the Editorial Board of *International Tax and Public Finance*
- Stein W. Wallace is on the Editorial Board of *Computational Management Science*, *EURO Journal on Transportation and Logistics* and *International Journal of Inventory Research*
- Roar Os Ådland is an Associate Editor of *Multinational Finance Journal* and on the Editorial Board of *Maritime Business Review* and in *Maritime Policy & Management*

### Teaching

- The Department has the main responsibility for the Methods Courses in the Bachelor Programme and is responsible for the course sequence in Business Economics, together with the Department of Accounting, Auditing and Law. During the year, the Department offered 16 courses in the Bachelor Programme, including 2 new courses
- The Department is a central provider of courses in the master profiles in Financial Economics (FIE), Business Analysis and Performance Management (BUS), Business Analytics (BAN), Economic Analysis (ECO) and Energy, Natural Resources and the Environment (ENE). During the year, the Department offered 51 course sequences in the Master Programme, including 6 new courses
- The Department works purposefully to support NHH's commitment to technology-related courses and is responsible for 15 of the 35 courses included in NHH's measurement indicator for following up the strategy in this area. The Department also has course responsibility for five courses with a focus on sustainability, another strategic priority area
- The Department is responsible for the specialization Business and Management Science in the PhD Programme. During the year, the Department offered 6 courses
- The Department provides teaching in many executive education programmes offered by NHH Executive. The following employees participate: Malin Arve (Fintech), Iver Bragelien (Programme Director MØST, contributions to MASTRA, Fintech and NHH Executive Online), Trond Døskeland (Specialization study in portfolio management), Svein Gjedrem (MØST), Øystein Gjerde (AFA, MTM, MØST), Ole-Petter Moe Hansen (MØST), Joachim Høegh-Krohn (MØST), Steffen Juraneck (Fintech) and Frode Sættem (MØST, MASTRA)

### Dissemination

- 41 feature articles and opinion pieces were published in national newspapers (32 in 2019, 21 in 2018, 25 in 2017)
- Malin Arve, Trond Døskeland, Gunnar S. Eskeland, Øystein Foros, Jarle Møen and Guttorm Schjelderup have been particularly active participants in the public debate.
- NHH yearly hosts a number of conferences where department employees are important contributors - either in the form of programme management or by giving presentations. Due to the Covid19 pandemic, a number of conferences in 2020 had to be canceled. This applied to *Vårkonferansen*, where Iver Bragelien was in the programme committee, NHH's shipping conference *LeaderShip 2020*, which was to be hosted in collaboration with the Bergen Shipowners' Association, with Roar Os Ådland as head of the organizing committee, and *CFO Forum*, which was to be held in Oslo, with Øystein Foros and Natalia Flórez Mejía in the organizing committee.
- Christian Braathen participated in *Forsker Grand Prix Bergen 2020* during *Forskningsdagene*
- Frode Sættem is an Associate Editor of the journal *Praktisk økonomi & finans*

### External positions and society assignments

- Malin Arve is a member of the Swedish Competition Authority's council for research issues, chair of the board of the Procurement Academy (*Anskaffelsesakademiet*), a member of the board of the SNF Foundation and the board of SNF AS and a member of the local organizing committee for EARIE 2021
- Endre Bjørndal is a member of *UHR-ØA*
- Mette Bjørndal is chair of the board of the School of Economics and Business at the Norwegian University of Life Sciences (NMBU), a member of the board of *Finanstilsynet* (The Financial Supervisory Authority of Norway), a member of the Petroleum Price Board, a member of an expert council that resolves disputes for the gas transport system and a member of *Teknisk beregningsutvalg for klima*
- Trond Døskeland is a member of the board of the Finance Market Fund, a regularly attending alternate of the board of *Folketrygdfondet* (the National Insurance Scheme Fund) and chair of the Risk Committee (Risikoutvalget) in *Folketrygdfondet*
- Gunnar S. Eskeland is a deputy member of the board of *Energiomstilling Vest* (the knowledge hub on sustainable energy)
- Julio C. Góez is chair of the executive board of the Norwegian Operations Research Society - and represents Norway in the International Federation of Operational Research Societies and in the Association of European Operational Research Societies
- Arnt Ove Hopland is a member of The Statistical Reports Committee for county and municipal government finance (*Teknisk beregningsutvalg for kommunal og fylkeskommunal økonomi*)
- Per Manne is the leader of *Nasjonalt fagorgan for metodefag in UHR-ØA*
- Jarle Møen is a member of The Nordic Tax Research Council
- Trond E. Olsen is a member of the local organizing committee for EARIE 2021
- Leif K. Sandal is a member of the board of Norwegian Marine University Consortium, CMU (part of European Marine Board), a member of the board of *Energiomstilling Vest* (the knowledge hub on sustainable energy), a member of *NPU-Samfunn* and leader of *UHR-ØA publiseringsutvalg*

- Guttorm Schjelderup is a member of the Scientific Advisory Board at MannheimTaxation (MaTax) ScienceCampus, University of Mannheim, and a Research Fellow at CESifo, Munich
- Stein Ivar Steinshamn is a member of the Resource Group Knowledge in the Seafood Innovation Cluster and a member of *Meklingsnemnda for minstepriser i pelagisk sektor*
- Stein W. Wallace is a member of the board of EURO Working Group on Stochastic Programming, a member of Symposium Advisory Committee (SAC) of the Mathematical Optimization Society's conference in 2024, and represents Norway in The Association of European Operational Research Societies
- Roar Os Ådland is a deputy member of the board of SNF AS