The Research Council of Norway

Evaluation of the Social Sciences in Norway

Report from Panel 2 – Economics

Evaluation
Division for Science and the Research System

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Foreword

In 2017, the Research Council of Norway (RCN) appointed six panels to undertake a wide-ranging field evaluation of Social Sciences research in Norway. The panels comprised independent social scientists from a range of European countries. Each panel covered a specific research area within the social sciences. The panels worked from April 2017 until April 2018.

The Research Council commissioned the Nordic Institute for Studies in Innovation, Research and Higher Education (NIFU), Oslo, Norway, to provide scientific and project management support for all six panels. The NIFU team consisted of Mari Elken, Inge Ramberg, Vera Schwach and Silje Maria Tellmann, with Schwach as the head of the team.

Panel number 2 was responsible for assessing the research area of economics. It included eight members: Panel chair: Professor Eva Liljeblom, Hanken School of Economics, Finland; Professor Alfons Oude Lansink, Wageningen University & Research, Netherlands; Professor Tor Eriksson, Aarhus University, Denmark; Professor Tilman Brück, International Security and Development Center, Berlin, Germany; Professor Andreas Lange, University of Hamburg, Germany; Professor Christian Schultz, University of Copenhagen, Denmark; Professor Katharine Rockett, University of Essex, United Kingdom and Professor Thorvaldur Gylfason, University of Iceland, Iceland.

The panel was assisted by a scientific secretary, Research Professor Vera Schwach, NIFU.

Executive summary

Eighteen institutions were included in the evaluation of Economics; 14 of these units submitted a total of 23 research groups for review. The evaluation included university departments as well as researchers in Economics from independent research centres.

Research in Economics is conducted at a large number of units in Norway. There is considerable diversity in terms of both the size of the research groups and the conditions for conducting research. The panel found that the overall level of scientific production within the discipline in Norway is very good and well placed on the international stage.[1] Research quality in general is at a good or very good level, with some cases of outstanding performance. The increased focus on higher quality is a trend that pervades at all the institutions. The typical outlet is an international refereed journal, and a large part of these publications are co-authored with international researchers. Field journals are still the dominant outlet, but several institutions also frequently reach top-five journals in Economics or Finance. While the average quality of the output was good or better than good, in many cases, it was strongly skewed towards a few extremely productive researchers.

Recommendations from earlier evaluations have typically concerned raising the quality of academic research, improving recruitment policies and enhancing the structure and degree of formalisation of the PhD programme. Compared to previous evaluations, the panel found that the institutions seem to have addressed these recommendations remarkably well. Despite this progress, the panel still finds room for improvement in many smaller institutions as regards these issues; that is, research quality and productivity, the effectiveness and international attractiveness of the PhD programme, and international recruitment. Some, typically bigger institutions, were fully on a par with international recruitment policies (i.e. they regularly attend the international job markets to interview and hire new academic staff), whereas many only passively advertise positions internationally. Gender balance was an area of consistent concern in the reports, and the panel also typically found a sometimes severe imbalance in the units. Fortunately, gender balance appears to some extent to be a legacy issue, as evidenced by the typically better situation among younger researchers. The panel also found several cases of skewed age structures.

The panel notes that, to a much larger extent than the universities, the research institutes rely on external funding. This may affect their ability to carry out basic economic research of high quality. For smaller universities, the trade-off between teaching and research may have the same effect. Some institutions / research groups lack critical mass, which affects research quality and the quality of their PhD programmes.

[1] The aggregate bibliometric data show that, in terms of field-normalised citation scores, the research in Economics in the units in this evaluation during a recent time period (2014 to 2016) is on a par with corresponding research in the Nordic region, and 11 per cent above the OECD average.

Sammendrag

Evalueringen av faget samfunnsøkonomi omfattet 18 institusjoner. 14 institusjoner meldte til sammen inn 23 forskningsgrupper. Evalueringen omfattet institutter på universitene så vel som forskere i samfunnsøkonomi ved uavhengige forskningsinstitusjoner.

I Norge utføres samfunnsøkonomisk forskning ved mange enheter, noe som gir en betydelig variasjon i størrelsen på forskningsgruppene og i vilkårene for gjennomføring av forskningen. Panelet fastslo at den vitenskapelige produksjonen i faget samlet sett i Norge er svært høy og godt synlig internasjonalt.[2] Forskningskvaliteten er generelt god eller svært god, i enkelte tilfeller fremragende. Det økte fokuset på høyere kvalitet er en gjennomgående trend i alle institusjonene. Den typiske publiseringskanalen er et internasjonalt fagfellevurdert tidsskrift, og en stor del av disse publikasjonene er skrevet i samarbeid med internasjonale forskere. Selv om fagtidsskrifter fortsatt er den dominerende publikasjonskanalen, når mange institusjoner figurerer ofte opp til de fem viktigste tidsskriftene innen samfunnsøkonomi eller finans. Den gjennomsnittlige kvaliteten på publikasjonene var god eller mer enn god, men i mange tilfeller sto noen få, svært produktive forskere for en uforholdsmessig stor andel av publikasjonene.

Typiske anbefalinger fra tidligere evalueringer har dreid seg om å øke kvaliteten på akademisk forskning, forbedre rekrutteringspolitikken og styrke strukturen og graden av formalisering av ph.d.-programmet. Sammenlignet med tidligere evalueringer fastslo panelet at institusjonene ser ut til å ha tatt hensyn til anbefalingene i svært høy grad. Til tross for framdriften ser panelet at mange typisk mindre institusjoner fortsatt har forbedringspotensial, blant annet når det gjelder forskningskvalitet og produktivitet, ph.d.-programmets effektivitet og internasjonale tiltrekningskraft, så vel som internasjonal rekruttering. Enkelte typisk større institusjoner var fullt på høyde med internasjonal rekrutteringspraksis (altså at de regelmessig går aktivt ut på det internasjonale jobbmarkedet for å finne nye forskere), mens mange bare passivt utlyser stillinger internasjonalt. Kjønnsbalanse var en stadig tilbakevendende bekymring i rapportene, og panelet fant også at det typisk fantes en ubalanse, i noen tilfeller stor, i enhetene. Heldigvis ser kjønnsbalanse i noen grad ut til å være en tilbakelagt problemstilling, noe den gjennomgående bedre situasjonen blant yngre forskere viser. Panelet fant også flere tilfeller av skjev aldersstruktur.

Panelet legger merke til at forskningsinstituttene i mye større grad enn universitetene er avhengige av finansiering utenfra. Dette kan påvirke evnen til å gjennomføre grunnleggende samfunnsøkonomisk forskning av høy kvalitet. For mindre universiteter kan avveiningen mellom undervisning og forskning ha samme effekt. Enkelte institusjoner/forskningsgrupper mangler en kritisk masse, noe som påvirker forskningskvaliteten og kvaliteten på ph.d.-programmene deres.

[2] Aggregerte bibliometriske data viser at siteringsindeksen (fagfeltnormalisert) i for eksempel perioden 2014–2016 for den samfunnsøkonomiske forskningen i enhetene denne evalueringen omfatter, ligger på nivå med tilsvarende forskning i Norden og 11 prosent over OECD-gjennomsnittet.

1 Scope and scale of the evaluation

According to its mandate one of the central tasks assigned to the Research Council of Norway is to conduct field evaluations of Norwegian research, that is, reviews of how entire fields, disciplines/research areas and academic institutions are performing in the national and international context. They provide an outsider's view of the research area under evaluation, and provide feedback on its strengths and weaknesses. The conclusions form the basis for recommendations on the future development of the research under evaluation, and provide input on national research policy and funding schemes in Norway. Moreover, they are expected to provide insight, advice and recommendations that the institutions can use to enhance their own research standards.

This evaluation of Social Sciences (SAMEVAL) aims to:

- Review the present state of social science research in Norway.
- Form the basis for recommendations on the future development of research within the various fields of the social sciences in Norway.
- Provide insight, advice and recommendations for the institutions evaluated that can be used to enhance their own research standards.
- Expand the knowledge base used to develop funding instruments in the Research Council
- Provide input on research policy to the Norwegian Government.

This evaluation of the social sciences comprises six research areas: geography, economics, political science, sociology, social anthropology and economic-administrative research. The practice of field evaluation is long established in Norway. The Research Council has previously undertaken national, subject-specific evaluations of all nearly all research areas involved in the current evaluation, with one exception: economic-administrative research. This is the first time this area has been singled out as a separate subject for evaluation.

As a point of departure, to identify, select and classify the relevant research social science areas and the researchers involved in each of the areas, the Research Council of Norway categorised the areas of social sciences using the definitions used in the Norwegian Centre for Research Data's (NSD's) register of scientific publication channels. All institutions with social science research as part of their activities were invited to take part. The Research Council sent each institution an overview of the researchers' publication data (2013–2016) from CRIStin (Current Research Information System In Norway). The institutions made the final decision to include researchers in the evaluation, and to which research area panel. The Research Council decided that research groups in all research areas had to consist of at least five members. The researchers had to be employed by the institution as of 1 October 2016, and they could not be listed if they were included in other ongoing evaluations.

This evaluation is more extensive than previous subject-specific evaluations, both with regard to the number of research fields and researchers to be evaluated, and with regard to the breadth of source material to be taken into account. The evaluation includes a total of 3,005 social scientists. It involves 42 institutions in the social sciences, 27 of which are faculties /departments at the universities and university colleges, and 15 are units at publicly financed social science research institutes (see Appendix B). The review also comprises 136 research groups.

The current undertaking is more than a mere update of earlier reviews in the field of social sciences. It spearheads a new practice of field evaluation, taking the recent evaluation of the Humanities as its model. In doing so, it includes three new and innovative features. Firstly, in addition to assessing research areas at the national and institutional level, the evaluation includes reviews of formalised research groups. Societal relevance is a second new dimension, while the third new dimension is the interplay between research, teaching and education.

1.1 Terms of reference

According to the terms of reference from the Research Council (Appendix A), the overall aims of the evaluation of the research panels are to:

- review the scientific quality of Norwegian research in the social sciences in an international context;
- provide a critical review of the strength and weaknesses of the fields of research nationally, at the institutional level and for a number of designated research groups;
- identify the research groups that have achieved a high international level in their research
- assess the role of organisational strategies and leadership in promoting the quality of research, education and knowledge exchange;
- assess the extent to which previous evaluations have been used by the institutions in their strategic planning;
- investigate the extent of interdisciplinary research at the institutions and in the research groups;
- investigate the relevance and social impact of social sciences research in Norway in general and in particular its potential to address targeted societal challenges as defined in the Norwegian Government's Long-term plan for research and higher education;[3]
- review the role of the Research Council of Norway in funding research activities in the social sciences.

1.2 A comprehensive evaluation

The Research Council has undertaken national, subject-specific evaluations of nearly all research areas in the social sciences since the turn of the millennium. The evaluations have usually confined themselves to one or a limited number of institutions, disciplines or fields. An evaluation of *social anthropology* was carried out in 2011, covering a total of 9 units and 88 researchers. G*eographical research* was also evaluated in the same year, in 2011, based on an assessment of seven research environments including 57 researchers. *Sociological research* was evaluated in 2010, comprising 13 research units and 177 researchers. In 2007, the evaluation of *economic research* comprised 20 units selected by the Research Council, and encompassed a total of 345 persons. Finally, a review of *political science research* was conducted in 2002, comprising 19 units and 164 researchers.

Since 2010, the Research Council has launched evaluations that cover larger research fields. An earlier example of what can been seen as a new tendency was the comprehensive evaluation of the scientific fields of biology, medicine and healthcare in 2011.[4] This was followed by a broad review of the fundamental engineering sciences,[5] and, a few years later, the social science research institutes.[6] In

[3] Kunnskapsdepartementet (2014).
[4] RCN (2011).
[5] RCN (2015).
[6] RCN (2017d).

the context of the social sciences, the novel design for the evaluation of the Humanities is an important model for a new practice. A broad evaluation of the field of the Humanities in Norway started in 2016, and was finalised in June 2017.[7] As mentioned, the set-up for the present assessment of social sciences follows the design from the Humanities evaluation, where an assessment of the humanities' societal relevance and impact of research, and the interplay between research and education were new features.

1.2.1 Societal impact of the social sciences

The terms of reference for this evaluation expressly combine established practice with new practice. The requirement to assess the societal relevance and impact of research in their area is a novel assessment practice. It calls for explorative searches for the various forms and channels through which knowledge from social science research may be seen to impact on activities in various spheres and areas of society. In a broader perspective, this is a response to concern about the need to enhance the impact research has on society.

In addition to a general search for demonstrated societal impact of scientific activity, the terms of reference for the evaluation of social sciences were to be viewed in the context of the five thematic priority areas and one scientific ambition set out in the Norwegian Government's Long-term plan for research and higher education from 2014.[8]

The six priorities are:

- seas and oceans;
- climate, environment and clean energy;
- public sector renewal, better and more effective welfare, health and care services;
- enabling technologies;
- innovative and adaptable industry;
- world-leading academic groups.

The definition of, and model for, societal impact in the Research Council's evaluations is derived from the 2014 Research Excellence Framework (REF) in the United Kingdom. In the REF, societal impact is defined as: 'any effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia' (Research Excellence Framework (REF), United Kingdom, 2014).

1.2.2 The interplay between research and education

This evaluation includes another new feature in that it also investigates the links between research and education. This follows up an objective stressed in the above-mentioned Norwegian Long-term plan for research and higher education. The Long-term plan states that interaction between research, teaching and education should be taken more strongly into account in the policy for research and higher education. In line with this political objective, this evaluation of social sciences has focused actively on the connection between research and education. The political backdrop to this initiative was that the Norwegian Ministry for Education and Research had in 2014 encouraged the Norwegian Agency for Quality Assurance in Education, (hereafter NOKUT)[9] to explore possibilities for joint assessments of education and research.[10]

[7] RCN (2017).
[8] Kunnskapsdepartementet (2014).
[9] NOKUT (Nasjonalt organ for kvalitet i utdanningen) is an independent expert body under the Royal Norwegian Ministry of Education and Research.
[10] Kunnskapsdepartementet (2014b).

This political initiative has been followed up in two ways in the social sciences evaluation. Firstly, all the six research area panels were asked to take into account the interplay between research and education, including the impact of research on teaching. Secondly, three of the six research areas, namely sociology, political science and economics, were subjected to a 'pilot' evaluation, with a view to testing useful strategies and methods for an integrated education-research evaluation.

1.3 The overall evaluation process of the social sciences

The complete evaluation of the social sciences consisted of four elements: 1) three education panels, 2) six research panels, 3) an interplay panel for the combined evaluation of research and education, and finally, 4) a principal evaluation committee for the evaluation of all six social science research areas.

The work was divided into three phases, which partly overlapped.

In the first phase, the Research Council and NOKUT assumed responsibility for the research and education evaluations, respectively. Six research panels and three education panels worked independently. Each panel wrote an assessment report.

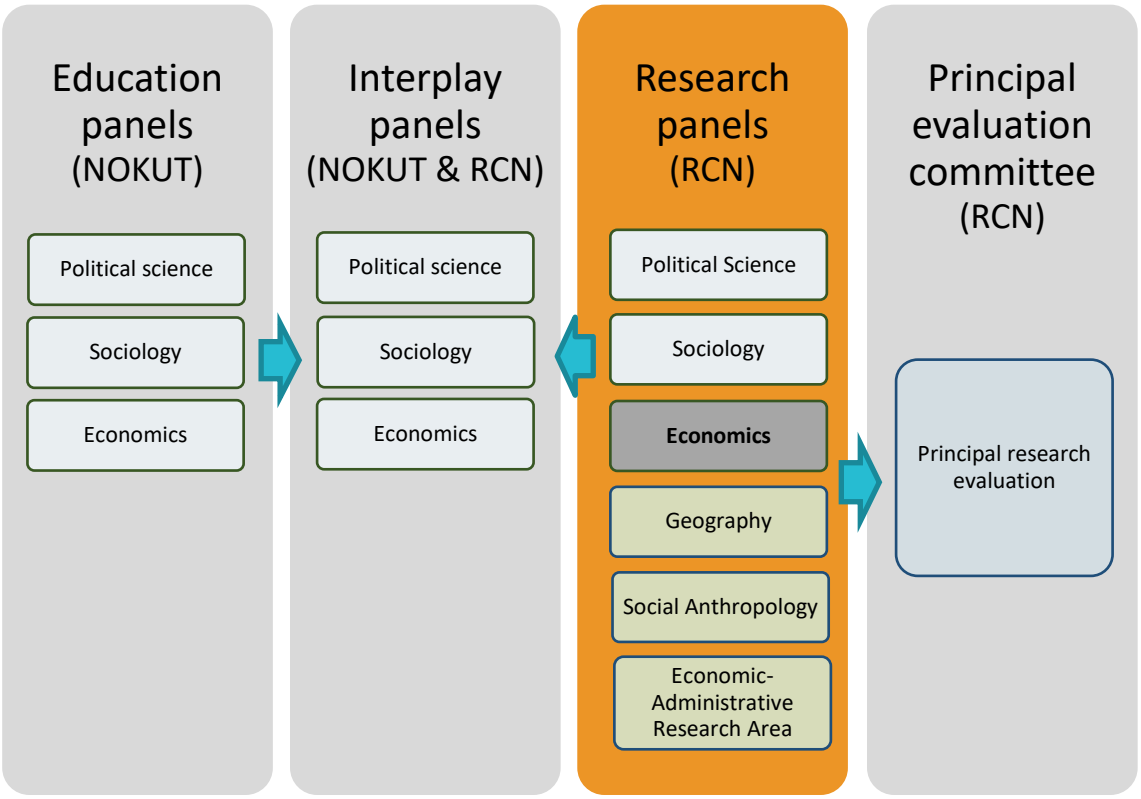
The six research areas were:
Panel 1: Geography
Panel 2: Economics
Panel 3: Political Science
Panel 4: Sociology
Panel 5: Social Anthropology
Panel 6: Economic-Administrative Research Area

In the second phase, NOKUT, in cooperation with the Research Council, took responsibility for a mixed education and research evaluation within three of the six research areas: sociology, political science and economics. The evaluation took the form of three different interplay panels: education and research in sociology, in political science and economics, respectively. Each panel consisted of two members.

In the third phase, the Research Council asked the chairs of the six research panels to form a general evaluation panel, this being the principal committee tasked with reviewing the six social science research areas as a whole. The panel wrote an assessment report.

Figure 1 visualises the overall structure of the evaluation of research and education in the social sciences.

Figure 1 Evaluation of social sciences in Norway, sections and work process



1.3.1 The six research areas: panels and process

Panels of international experts, mainly from the Nordic countries and Northern Europe, carried out the evaluations. Each research panel had from six to nine members; all the panels had the same terms of reference, and they used identical approaches and templates in their assessments. A common denominator for all the reviewers was the aim of evaluating research with respect to its scientific quality and relevance in the broad sense. The panels were put together to cover different sub-fields within each research area.

Panel

The eight members of the economics panel were:

- Panel chair: Professor Eva Liljeblom, Hanken School of Economics, Finland;
- Professor Alfons Oude Lansink, Wageningen University & Research, Netherlands;
- Professor Tor Eriksson, Aarhus University, Denmark;
- Professor Tilman Brück, International Security and Development Center, Berlin, Germany;
- Professor Andreas Lange, University of Hamburg, Germany;
- Professor Christian Schultz, University of Copenhagen, Denmark;
- Professor Katharine Rockett, University of Essex, United Kingdom;
- Professor Thorvaldur Gylfason, University of Iceland, Iceland.

1.3.2 The organisational units and entities

The evaluation of the six research areas embraced four levels as listed below and shown in Figure 2.

Please note that the primary objects of this evaluation are the researchers and their research groups. They constituted the research area within each institution, and are the primary object of assessment, not the institutions as such.

National research area

An overall national review of the state-of-the-art in the research area was a goal for the evaluation. Hence, the evaluation at the national level includes comparing the quality of Norwegian research with international scientific quality. In order to conclude on the national level, the panel drew on their evaluations of institutions, research areas within the institutions and research groups.

Institution

Institution refers to either an independent research institution/research institute or to the faculty level of a higher education institution (cf. Institutional self-assessment, p. 1, Appendix C). The aims of the reviews at the institutional level were to assess how the research area was constituted and organised at the institution, also including the institutional strategies pursued with a view to developing research performance and scientific quality.

Research area within the institution

A research area is defined as a research discipline corresponding to the area covered by a panel (cf. Institutional self-assessment, p. 4, Appendix C). The examination of research performance and scientific quality was intended to review the state-of-the-art and encourage further development of research and scientific quality. In addition, the evaluation of ongoing individual and collective work was intended to provide a national overview of the research field. This level will in several cases cut across organisational units, but the rationale is to highlight each discipline corresponding to the relevant panel (Ibid. p.1).

Research groups

The intention of including research groups was to enable peer reviews of research topics and scientific quality, and to evaluate the interaction between researchers who form a topical /theoretical/methodical-based group and the institutional level (i.e. the research area within the institution/institute).

In order to be defined as a research group in the evaluation of social sciences, the number of researchers had to fulfil four specified criteria. In addition to common work on a joint topic, the Research Council required: 1) that the group should perform research at a high level internationally, and be able to document it through a set of sub-criteria; 2) the group should have at least five members at least three of whom had to employed at the institution, and at least two of whom had to hold a tenured position; 3) the group had to have a specific intention/aim and an organisational structure, and it had to describe it according to the specifications listed in the matrix for the self-assessment report (cf. Research group self-assessment, Appendix E); and 4) the group should be registered in CRIStin (the Current Research Information System in Norway).[11] For more details, please see SAMEVAL. *Innmelding av forskergrupper* [in Norwegian], Appendix D, see also Research group self-assessment, Appendix E.

[11] CRIStin is a common, national system for registering scientific results and research activities. The members of CRIStin are the public research institutes, the universities and university colleges, and the public health trusts: www.cristin.no.

Figure 2 The organisational units and entities in the evaluation of social sciences

1.3.3 Criteria for the assessment

All six panels based their work on a uniform set of criteria against which they reported their findings.

National research area

- Organisation, leadership and strategy
- Follow-up of earlier evaluations
- Research cooperation/networking (nationally and internationally)
- Research personnel: including recruitment, training, gender balance and mobility
- Research production and scientific quality
- Interplay between research and education: impact on teaching
- Balance between teaching and research
- Societal relevance and impact
- Profile, strengths and weaknesses

Institution

- Organisation, leadership and strategy
- Institutional follow-up of previous evaluations
- Research environment
- Resources and infrastructure
- Research personnel, including recruitment, training, gender balance and mobility
- Research production and scientific quality
- Interplay between research and education
- Societal relevance and impact

The research area within the institution

- Organisation, leadership and strategy
- Institutional follow-up of previous evaluations

- Research environment (i.e. seminars, summer schools, guest lectures etc.)
- Resources and infrastructure
- Research personnel, including recruitment, training, gender balance and mobility
- Research production and scientific quality
- Interplay between research and education (including impact on teaching)
- Societal relevance and impact

Research groups

- Organisation, leadership and strategies
- Research personnel, including recruitment, training, gender balance and mobility
- Research production and scientific quality
- Networking
- Interplay between research and education: (if relevant) impact on teaching
- Societal relevance and impact: (if relevant) exchange of knowledge / cooperation with other private and public sector actors.

See Appendix J for information on how the criteria were implemented.

1.4 Data and review process

The evaluation draws on a comprehensive set of data. The Social Anthropology panel based its assessment on the written self-assessments submitted by the institutions and a qualitative assessment of the submitted publications. Further bibliometric data from the analysis by Damvad Analytics, Denmark commissioned by the Research Council, and further data on the funding of social science were used to contextualise and/or confirm the panel's qualitative evaluation. The panel chair met with the institutions, primarily to supplement and clarify information provided in the self-assessments.

Building from the bottom, the assessments of individual scientific output fed into the evaluations of the research groups and research area, while the self-assessment reports for the research groups fed into the institutional research evaluation and the assessment of the research area. The self-assessments from the institutions contributed to the assessment of the research area within the institution. The report on personnel and bibliometrics (publications) was considered at the research group level, the institutional level and national research area level. Societal impact cases were considered at the group and area level. The research area evaluations were used by the field panels to build a picture of national performance within the research field covered by the panel reports.

The panels also based their assessment on data on funding and personnel, as well as information from earlier institutional and disciplinary evaluations from the Research Council and policy documents from the Government.

See Appendix H for information on time frames for assessments and bibliometric data.

Institutional self-assessment reports

Reports were submitted by all the research-performing units. They included quantitative and qualitative information at the institutional level (called level 1 in the self-assessment template), and at the level of the disciplines/research areas corresponding to the panels (called level 2 in the self-assessment template).

The following were enclosed with the self-assessments report from each unit:

- A list of the 10 most important publications for each research area;
- A list of 10 dissemination activities;
- Societal impact cases for each discipline showing important dissemination and knowledge exchange results, (the impact cases were optional);
- An analysis of **s**trengths, **w**eaknesses, **o**pportunities and **t**hreats (a SWOT analysis)
- A form (number 2): Target audience for scientific publications;
- A form (number 3): Research matching the priorities set out in the Norwegian Government's Long-term plan for research and higher education and in other relevant policy documents;
- An overview of study programmes.

The templates for institutional self-assessments and publications are attached to the report as Appendices C and J.

Self-assessment reports for research groups

The institutions were given an opportunity to include research groups in the evaluation. The reviews by the research panels were based on self-assessments and other documentation. The data included quantitative data on group members and funding, qualitative information on various aspects of the research activities and CVs for all the members of the groups. In addition, each group had the option of submitting one copy of a scientific publication for each member included in the evaluation, as well as case studies of the societal impact of their research.

The template for research groups is attached to the report as Appendices E and K.

Societal impact cases

Reflecting the novel approach of including societal impact in the evaluation (cf.1.2.1), the institutions were invited to include case studies documenting a broader non-academic, societal impact of their research. Participation was optional.

Bibliometric report

The Research Council of Norway (RCN) commissioned an analysis of publications and personnel dedicated to social science research for the evaluation, https://www.damvad.com/uploads/Publications/Report%20%20Social%20Science%20in%20Norway%20v2.3.pdf.

DAMVAD Analytics conducted the analysis, mainly basing its work on data from the following sources: the Norwegian Centre for Research Data (NSD); the Current Research Information System in Norway (CRIStin) and the National Researcher Register for which NIFU is responsible. DAMVAD Analytics added bibliometric data from Elsevier's Scopus database and Google Scholar to enhance the analysis of the internationally published scientific material.

The RCN defined the framework for Damvad's analysis, and decided to include the following elements:

- The total scientific output within social science for Norway;
- The institutions involved in social science in Norway;
- The research personnel engaged in social science in Norway.

For an overview of the publishing in economics, please see appendix F: Damvad Fact sheet for economics.

Funding data

Data and information on financial resources and funding (cf. 2.2) are based on:

- Report on Science and Technology Indicators for Norway: (Norges forskningsråd, Det norske forsknings- og innovasjonssystemet – statistikk og indikatorer, Norges forskningsråd, Lysaker, 2016; https://www.forskningsradet.no/prognett-indikatorrapporten/Home_page/1224698172612
- NIFU, Norwegian Research and Development (R&D) statistics and indicators, https://www.nifu.no/en/statistics-indicators/nokkeltall/
- Research Council of Norway, The Project Databank, https://www.forskningsradet.no/prosjektbanken/#/Sprak=en.
- The Research Council of Norway, Social sciences research in Norway 2010–2016: Funding streams and funding instruments. Report submitted to the principal committee for the Research Council's evaluation of the Social Sciences (SAMEVAL), report for internal use by SAMEVAL evaluators (ref. page 1, first section) unpublished report, undated (2017): 11 pages.

In addition, section 2.2 draws on:

- The Research Council of Norway, *Report on Science and Technology Indicators for Norway 2017*, The Research Council of Norway, Lysaker, 2017; https://www.forskningsradet.no/prognett-indikatorrapporten/Science_and_Technology_2017/1254031943643

Other relevant publications provided by the Research Council

Earlier evaluations commissioned by the Research Council

- Relevant disciplinary evaluations (please see the reference list for details)
- The Research Council of Norway: *Evaluation of the Humanities in Norway. Reports from the panels and the principal evaluation committee.*
- *Evaluation of the Social Science Institutes. Panel Report, January 2017*, the Research Council of Norway, Lysaker.

National plans and strategies for research policy

- The Research Council of Norway, *Research for Innovation and Sustainability. Strategy for the Research Council of Norway 2015–2020*, 2015.
- Kunnskapsdepartementet, *Meld. St. 7 (2014–2015), Langtidsplan for forskning og høyere utdanning 2015–2024*, [The Royal Norwegian Ministry for Research and Higher Education, Long-term plan for research and higher education 2015–2024], 2015, [in Norwegian].

Official reports on the status of higher education:

- Kunnskapsdepartementet, Meld. St. 18 (2014–2015). *Melding til Stortinget*. *Konsentrasjon for kvalitet. Strukturreform i universitets- og høyskolesektoren*, 2015 [White paper, no. 18 (2014–2015), Concentration for quality. Structural reforms across the universities and university colleges, The Royal Norwegian Ministry for Research and Education, Oslo 2015] [in Norwegian].
- Kunnskapsdepartementet, *Tilstandsrapport for høyere utdanning 2017*, Rapport, 2017 [The Royal Norwegian Ministry for Research and Education, Status Report for Higher Education, Report, 2017] [in Norwegian].

1.4.1 Process and assessment tools

The Research Council set up 'SharePoint' (a Microsoft Office 365 program), and all background material and other data and documents were deposited there. The panel shared files and work in progress in SharePoint.

The Research Council commissioned Nordic Institute for Studies in Innovation, Research and Higher Education (NIFU), Oslo, Norway to provide scientific and project management support to the panels. Research Professor Vera Schwach acted as scientific secretary for the economics panel.

Panel meetings and work

The economics panel held three one-day meetings: in May and September 2017, and in January 2018. In addition, the panel chair of economics joined the other panel chairs for two one-day panel chair meetings, held in April and September 2017.

The chair carried out the interviews with the 18 institutions on behalf of panel during four days in late October 2017 (see section, meeting with the insitutions). The scientific secretary wrote minutes from the interviews. In between the meetings, the members were in contact through emails.

The panel divided the assessments and writing among the members. The secretariat took the main responsibility for providing fact sheets, as well as chapter one and chapter two of the report.

Assessment tools

In order to ensure that all the dimensions were covered, and to ensure a uniform evaluation across the six different research areas, the secretariat at NIFU provided the panels with assessment tools.

These were:

- A template for research and scientific quality: numerical grading, see Table 1 below;
- A template for assessments of the units: institutions and research groups, see Appendix I;
- A template for assessment of the ten most important publications listed by the institutions, see Appendix J;
- A template for assessment of the publications of listed members of research groups, see Appendix K.
- The panels used the following description as the basis for their scoring of scientific quality.

Table 1 Scientific quality, numerical scale

Scale	Criteria
5 Excellent	Original research at the international forefront. The unit has a very high productivity. The unit [the institution /research group] undertakes excellent, original research, and publishes it in outstanding international channels for scientific and scholarly publications. Its researchers present ongoing research regularly at recognised, international scientific conferences.
4 Very good	Research with a high degree of originality, and a scientific profile with a high degree of publications in high quality channels for scientific and scholarly publications. The unit has a high productivity. The researchers participate habitually at international scientific conferences. The research is decisively very relevant to the knowledge production in the field internationally.

3 Good	Research of a good international standard. The unit has an acceptable productivity, and contributes to the development within its field. The researchers participate at scientific conferences.
2 Fair	Research of an acceptable, but moderate standard. The productivity at the unit is modest, and with few original contributions to the field internationally.
1 Weak	Research of insufficient quality and with a meagre scientific publication profile. The productivity is low.

Meetings with the institutions

The panels supplemented the written documentation and data with information provided by the institutions in interviews. The meetings took place at Hotel Park Inn within walking distance of Gardermoen Airport, Oslo. The six panel chairs conducted the interviews. Each institution was interviewed individually. The panels had prepared the questions beforehand and sent the list to the institutions two weeks in advance. The lists contained both general and panel-specific questions. The interviews allowed for elaboration and discussion of issues of importance to the panel's assessments. The panel's secretaries took extensive minutes of the meetings. The minutes were shared with all panel members.

Fact checking by institutions

Institutions were given the opportunity to provide a fact check of the assessment texts after the panels assessments were completed. The check did not include the grades or final evaluations, as the institutions were asked only to correct any factual errors. New and updated information was not included.

1.5 The panel's comments on the evaluation

The panel wishes to give the following feedback on the design and organisation of this evaluation task:

On background material, data and process

Based on the material available and the way the interviews were conducted – at the institutional level, for many panels simultaneously, and with no site visits – the research groups were especially hard to evaluate.

The evaluation was largely based on publication data and the self-assessments; additional information such as citation measures would have improved the evaluation task. The late arrival of the bibliometric information means that it has not necessarily been fully utilised.

Bibliometrics

The panel notes the absence of comparable bibliometric and academic productivity data across institutions and research groups on a per capita basis over time. This absence of comparable data has made it harder to calibrate the grading of the institutions and research groups.

Furthermore, the panel notes that the bibliometric data provided concern the impact factors of the publication outlets, not the individual publications themselves. This is of some importance since there is no one-to-one correspondence between the average impact of a journal and the impact of the individual articles published in them. Citations, which are widely available, but which were not at hand here, are the standard measure for the impact of an individual researcher's research.

Societal impact

There is a need to clarify how to approach and measure societal impact. The panel appreciates the new attention given to societal impact, but notes that a definition and a corresponding measure of societal impact are not readily available. This panel therefore focused on the evaluation of academic impact, subject to the limitations noted above. The panel recommends that a future evaluation address the issue of the societal impact of the discipline of Economics in Norway. To be fruitful, however, this would require significant preparatory work by the economics community in Norway.

The evaluation of interdisciplinary research

For a disciplinary panel like this one, the evaluation of interdisciplinary work is difficult. Clear criteria for the evaluation of interdisciplinary research and/or a different composition of the panel would be needed to perform this task.

2 The context: Social Sciences and Economics in Norway

2.1 The research system

The Norwegian research and innovation system is divided into three levels: the political, the strategic and the performing level. At the political level, the system is characterised by notable pluralism, as all the ministries are in principle responsible for financing long-term and short-term public research and experimental development activity (R&D) within their areas of responsibility. This governing principle for responsibility is called the 'sector principle'. In practice, the R&D budgets are concentrated, as five ministries account for 85 per cent of public R&D expenditure. The Ministry of Education and Research alone allocates around 50 per cent of the total funding, and it is also responsible for coordinating national funding.

The second level is the strategic level, which includes the Research Council of Norway (and also an innovation agency, Innovation Norway); see more below. The Research Council fulfils functions that in many other countries are shared between a range of institutions at the second level. The same applies to the national innovation agency.

The third, performing level in the area of social sciences consists of a variety of institutions: universities, specialised universities and university colleges, as well as some private higher education institutions and nominally independent, public and private institutes. The institute sector is a common term for this group of units that is relatively heterogeneous in terms of institute size, profile and legal status. Overall, there are around 100 research institutions, about half of which are commonly referred to as research institutes. The group includes public oriented institutes and institutes that focus on private enterprise and carry out contract research for Norwegian and foreign companies, museums and hospitals (with the exception of university hospitals). The institute sector accounts for 23 per cent of the total national R&D. The institutions fall into three groups. First, the majority of the units (appr. 40) fall under the guidelines for governmental funding of research institutes and receive their core funding from the Research Council of Norway. With one exception, all the research institutes in this evaluation receive their core funding from the Research Council (for details see 2.1.1.). The second group consists of a few government research institutes, that receive their basic funding directly from a ministry. None of these government institutes is represented in this evaluation. The third group of institutions in the institute sector comprises about 40 private and public institutions, which to a greater or lesser extent perform R&D as part of their activity. Only one institution in this category is included in the evaluation of social sciences – the Norwegian Institute of Public Health (Folkehelseinstituttet).

The fifteen social research institutes included in this evaluation are mainly thematically oriented towards public management.[12] Their activities can be roughly divided into four thematic, partly overlapping areas: 1) international affairs and foreign relations; 2) environmental policy; 3) the economic foundation, structure and development of the welfare state, and 4) regionally based issues.

[12] RCN (2017): 37; https://www.forskningsradet.no/prognett-indikatorrapporten/Science_and_Technology_2017/1254031943643; For an extensive account of the social science institute sector, see RCN (2017b): 18–32.

2.1.1 National funding streams and instruments

The main funding streams of relevance to the evaluation of social sciences are: 1) funding for universities and university colleges with an integrated R&D component, and 2) funds allocated via the Research Council of Norway (see below).

The universities and university colleges receive a substantial proportion of their R&D budgets as core funding from the government ('general university funds'). The funding is closely linked to student numbers and teaching positions. In this, the growth of social sciences in the higher education sector reflects the large number of students taking subjects such as economics and education. The social sciences and humanities receive the highest percentage of basic funding among the research fields. In 2015, social sciences received around 76 per cent of their R&D expenditure as core funding, whereas the fields of engineering and technology and natural sciences received just below 60 per cent as basic funding in the same year.[13] Other sources of income include funding from the Research Council, the EU and other (national, Nordic and international) competitive funding bodies.

Research Council: core funding for public research institutes[14]

Unlike the universities, the research institutes rely heavily on a high share of external funding, through commissioned research and open competitions. As mentioned in section 2.1., the majority of these institutes fall under the guidelines for government funding of research institutes and receive their core funding from the Research Council. The Research Council administers the government core funding for all the 12 research institutes involved in this evaluation. The level of core funding varies from 6 per cent of turnover at the lowest, to 21 percent. On average, the funding is around 13 per cent for the units taking part in this evaluation.[15] The core grant consists of two parts: a fixed amount, and an amount determined by performance. To qualify for a core grant, the unit must:

- Undertake research of interest to Norwegian business and industry, government or society at large;
- Maintain disciplinary and scientific competence, demonstrated through scientific publications;
- Conduct research activities on a sufficient scale to permit the development of significant competence and research capacity within the organisation;
- Have a variety of sources of research income and compete in open national and international competitions for research funding;
- Not pay dividends or provide, either directly or indirectly, benefits to the owner or close stakeholders.

The performance-based part of the core grant is aimed at achieving a sound balance between scientific quality and societal relevance. The distribution of this part of the grant is based on four performance indicators, weighted on the basis of a relevance component:

- Commission-based income from national sources (45 per cent)
- Scientific publications, expressed as the number and level of scientific publications registered in the CRIStin database (30 per cent);
- Income from international sources (20 per cent);

[13] NIFU, FoU-statistikkbanken (NIFU, R&D statistics bank), 'Field of science. Source of funding. R&D expenditure, in million NOK, 2015; http://www.foustatistikkbanken.no.

[14] Technical term: Basic allocation to research institutes, cf. www.forskningsradet.no/eng, read 13.12.2017; Forskningsrådet, prosjektbanken.no, the core funding for all social research institutes was NOK 261.9 million in 2016, www.forskningsradet.no/prosjektbanken, read 14.12.2017.

[15] NIFU, FoU-statistikkbanken, (NIFU, R&D statistics bank), «Key figures for research institutes, Current income by category of funds», 2016, http://www.foustatistikkbanken.no

- The number of doctoral degrees awarded to staff or students who are funded more than fifty per cent by the institute (5 per cent).[16]

The Research Council and the competition for national funding

The research institutes rely heavily on external funding. A substantial part of their income is commission-based funding, mainly from the public administration, such as ministries and government agencies at the national level. In addition, the institutes and the universities compete for the same financial support from national (and Nordic) sources, and funding from the Research Council plays a significant role in the institutes' knowledge production. The Research Council provides funding for a wide range of activities, ranging from research infrastructure and networks to programmes, projects and centres of excellence. Here, the focus will be on selected funding schemes of general importance to the social sciences: networking, centres of excellence, independent projects (FRIPRO)/ basic research programmes; policy-oriented programmes ('handlingsrettede programmer') and large-scale programmes ('store programmer'). Compared with natural science, technology and medicine, the humanities and social sciences display a more stable pattern in terms of funding schemes.

Since 2002, research groups have been selected for funding for up to ten years through a targeted centres scheme. The first round concerned general, disciplinary and interdisciplinary centres of excellence. Subsequently, new types of thematic, specialised, targeted centres have been established., All the centres have the same aim, however: to promote research of high scientific quality. Social scientists have been part of some of these centres and many of the groups have been interdisciplinary within the social sciences, but also across other fields of science.[17] ESOP at the University of Oslo is one example. A spin-off effect has been the institutional initiatives, whereby universities have targeted existing research groups and established their own local groups and centres of excellence.

According to the RCN, there seems to have been a tendency recently to increase funding through large-scale programmes, especially in the fields of climate and energy research.[18] The large-scale programmes are important for the social sciences as a whole. The thematic programmes are the RCN's response to the government's, long-term political priorities: the seas and oceans; climate, environment and clean energy; public sector renewal, better and more effective welfare, health and care services; enabling technologies; innovative and adaptable industry, and world-leading academic groups (cf. 1.2.1).[19]

In 2016, social scientists at units in Norway received NOK 989 million from the Research Council (excluding core funding of the institutes);[20] 55.8 per cent (NOK 698.9 million) of the RCN support

[16] Research Council of Norway, "Public basic funding for research institutes", read 11.12.2018; https://www.forskningsradet.no/en/Public_basic_funding/1254010731867; NIFU, FoU-statistikkbanken, nøkkeltall for forskningsinstitutter [in Norwegian], www.nifu.no.

[17] Research Council of Norway, centres of excellence: https://www.forskningsradet.no/prognett-sff/SFF_I/1253978073056; https://www.forskningsradet.no/prognett-sff/SFF_II/1253978083956; https://www.forskningsradet.no/prognett-sff/SFF_III/1253978083961; https://www.forskningsradet.no/prognett-sff/Nyheter/Ti_nye_sentre_for_fremragende_forskning/1254025392105/p1224067001855: Centres for environment friendly Energy Research (FME), https://www.forskningsradet.no/prognett-energisenter/Om_sentrene/1222932140880.

[18] The Research Council of Norway, Social sciences research in Norway 2010–2016, unpublished report, undated (2017): 11 pages

[19] Kunnskapsdepartementet (2014).

[20] This description is an overview and includes funding for all areas and units defined as social sciences in Norway. It thus encompasses institutions and researchers not listed for this evaluation.

concerned programmes, while 11.5 per cent (143.7 million NOK) went to independent projects (FRIPRO). Researchers at the research institutes were involved in policy-oriented programmes to a larger extent than their peers at the universities, with 54 per cent (NOK 377.6 million) going to the research institutes, and 42.5 per cent (NOK 297 million) to the universities. A similar difference applies in relation to involvement in large-scale programmes: social scientists at the research institutes participated more often in large-scale programmes with national priority, especially in the fields of energy, climate, health and fish farming, than did their colleagues at the universities.

On the other hand, the universities received more funding from independent projects, NOK 77.7 million compared with NOK 45.5 million for the research institutes.

2.1.2 Internationalisation and international funding

The main sources of funding for research activities in Norway are national sources, but international funding has become more important in recent decades. This development is linked to a general trend towards internationalisation, which has been a hallmark of the Norwegian R&D system since the mid-1990s. Internationalisation is currently a notable dimension of the domestic R&D system. The indicators supporting this statement are many: at present, more than two-thirds of Norwegian scientific articles have a non-Norwegian co-author, compared with 17 per cent in the early 1980s. The number of Norwegian exchange students abroad has doubled since the mid-1990s, and the number of PhD students from abroad reflects the same trend. Twenty years ago, 10 per cent of doctoral degrees were awarded to foreign candidates, while in 2017 the percentage was 38.

From the mid-2000s, there has been a noteworthy increase in foreign R&D funding and strengthening of European research cooperation. In this context, the EU's research programmes have been an influential force. Until the Seventh Framework Programme (2007), the EU programmes were generally of limited scope, with the main emphasis on technology and applied research. Since 2007, budgets have increased significantly, due to the portfolio of programmes and a support mechanism that has embraced a wider set of topics and goals. The EU's programmes now include a broader range of research-performing units and areas – also social sciences. Hence, at present, the EU Framework Programme is an importance source of funding for many countries, Norway included. At the domestic level, a number of measures have been put in place to strengthen Norway's participation in the programmes. By June 2017, 1.81 per cent of the funds announced in Horizon 2020 (H2020) were awarded to researchers and institutions in Norway. The success rate is slightly below the official target of 2 per cent of total EU funding.

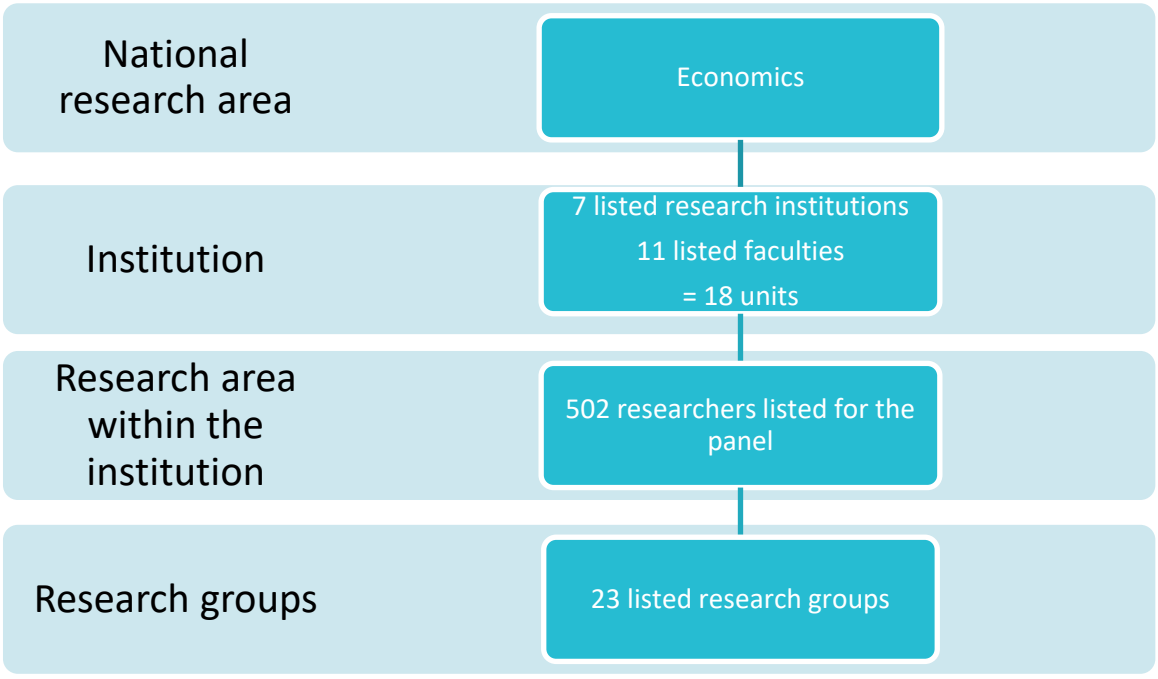
Among the seven Societal Challenges targeted by H2020, the fields most relevant to social scientists are the challenges: 'Europe in a changing world' (SC6) and 'Secure Societies' (SC7). In addition, challenges related to health and demographic change and to climate and environment are of relevance to social scientists. Within H2020, efforts are made to mobilise the disciplines of social sciences and humanities across the framework programme. The reason for this is that the perspectives of social sciences and humanities are seen as valuable in the development of interdisciplinary approaches to the European and global challenges. The Norwegian success rate within Societal Challenges was above the 2 per cent target. In June 2016, the success rate reached 2.6 per cent. According to the RCN, above average success rates in SC6 and SC7 indicate a clear engagement on the part of Norwegian social scientists in relation to these parts of the Societal Challenges. The results for the H2020 excellence schemes are below average, however.

2.2 The research area of economics

2.2.1 Institutions and numbers

Eighteen institutions are included in the evaluation of Economics; 14 of these units submitted a total of 23 research groups for review. See Figure 3, Table 2 and fact sheets for more information.

Figure 3 The units and numbers in economics



Institution	*Type of institution*	*Research groups*
BI Norwegian Business School	University	• Asset Pricing and Investor Behavior
Cicero - Center for International Climate Research	Research institute	
CMI Chr. Michelsen Institute	Research institute	• Poverty
Frisch Centre	Research institute	• Energy and Environmental Economics • Labour Economics
Institute for Social Research	Research institute	• Arbeid og velferd [Work and Welfare]
NHH Norwegian School of Economics	University	• Centre for Empirical Labour Economics • Law and Economics of Markets and Organisations and Centre for Industrial Organisation • Macroeconomics and Natural Resources • The Choice Lab
NINA Norwegian Institute for Nature Research	Research institute	
Nord University Business School	University	Forskningsgruppe i logistikk og transport ved Handelshøgskolen Nord universitet, [Transport and Logistics Research Group]
Norwegian University of Life Sciences, Faculty of Landscape and Society	University	• Environmental Governance
Norwegian University of Life Sciences, School of Economics and Business	University	• Food Economics and Policy • Development, Land and Climate • Energy and Environment
Norwegian University of Science and Technology, Faculty of Economics and Management	University	• Public Economics
NUPI Norwegian Institute of International affairs	Research institute	
UiT – The Arctic University of Norway, Faculty of Biosciences, Fisheries and Economics	University	Economics at BFE
Uni Research Rokkan Centre	Research institute	Welfare and Health Economics
University of Agder, School of Business and Law	University	
University of Bergen, Faculty of Social Science	University	• Competition and Finance • Health Economics • Labour, Social Insurance and Family
University of Oslo, Faculty of Social Science	University	• Equality, Social Organisation and Performance • Oslo Fiscal Studies
University of Stavanger, Faculty of Social Science	University	• Laboratory for Research on Learning and motivation

3 BI Norwegian Business School

BI Norwegian Business School was launched as an evening school in 1943. It developed into a comprehensive academic institution for business economics and management in the next decades. The school was certified as a specialised university institution in 2008, and was renamed BI Norwegian Business School in 2011.

BI Norwegian Business School

Units included in the evaluation of economics	- Dept. of Economics - Dept. of Finance
Other units of the institution	Dept. of Marketing, Dept. of Strategy and Entrepreneurship, Dept. of Leadership and organisational behaviour, Dept. of Communication and Culture, Dept. of Accounting, Auditing and Buisness Analytics, Dept. of Law and Governance

R&D expenditures and sources of funding (1000 NOK)

	2014	**2015**	**2016**
Funding of the institution			
Total expenditures	1 406 971	1 451 342	1 531 834
Types of funding			
Core funding from the Norwegian gov.	258 078	263 916	277 504
External funding, RCN	13 485	11 052	9 407
External funding EU	0	212	159
External funding, other sources	23 640	22 469	19 847

Listed researchers	42
Listed research groups	1
No. of researchers in listed research groups	7

Training, recruitment and academic positions

	2014	**2015**	**2016**
No. of PhD graduated at the institution per year			
Male/Female	3/1	1/1	2/1
Total per year	4	2	3
No. of positions announced / No. of qualified applicants per year			
PhD positions	12/243	12/19	17/348
Post.doc positions	3/5	0/0	3/9
Permanent positions	17/141	12/43	11/191

Education

Study programmes BA level
- Finance
- Siviløkonom

Study programmes MA level
- Finance
- Siviløkonom: Macroeconomics

Other
- MM in Financial Strategy
- Phd Programe in Finance

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

3.1 Economics at the institutional level

BI Norwegian Business School is an internationally accredited 'Triple Crown' business school with approximately 20,000 students (2017) and an academic staff of 400. Within the area of Economics, 42 researchers at BI are included in the evaluation. The ten most important publications, and ten most important dissemination and knowledge exchange results during the last 5–10 years have been listed, but no explicit impact case is included.

3.1.1 Organisation, leadership and strategy

BI has separate departments for Economics and Finance, where the researchers subject to evaluation by this panel are presumably located. BI has a board, an international advisory board, a president, and heads of departments, i.e. a typical business school structure. There are also several centres associated with BI. BI's strategy is quality-driven and one of its stated goals is that at least four academic disciplines should be ranked among the top five in Europe. Instruments for reaching this are targeted work on recruitment and publication in highly ranked journals. The strategic plan requires a shift towards publication in journals on the ABS list in the next few years. BI also endeavours to be a preferred knowledge partner for business and the public sector, and a partnership programme has been launched in connection with this goal. The leadership structure seems to be strong, and the goals are clear and ambitious. Having 20,000 students and relying to a great extent on students' tuition fees while aiming to be a top European research institution is not an easy combination.

3.1.2 Institutional follow-up of previous evaluations

N/A due to lack of information from the institution.

3.1.3 Resources and infrastructure

BI's total R&D expenditure has been around NOK 1,400–1,500 million in the last three years. BI has a unique position in Norway in that it mainly relies on tuition fees to fund its basic activities. External funding constitutes around 2 per cent of its total expenditure (with very little from international sources). The infrastructure provided by the university seems to be very good, including a tailor-made building built in 2005. The databases are excellent and the Economics and Finance group also utilises a new experimental lab.

3.1.4 Research environment

Workshops are organised, and research visits are supported. The research group Asset Pricing and Investor Behavior organises many activities, especially through a centre in that research area. The research environment seems to be quite good.

3.1.5 Research personnel

The SWOT analysis for BI lists internationally leading researchers within some disciplines, such as finance, as one of its strengths. It is also stated that BI is increasingly competitive on the international labour market at postdoc and assistant professor levels. In Economics and Finance, the job markets organised in connection with international conferences are used for junior positions in particular, while senior academics are recruited internationally. Recruitment is research-driven, especially in Finance. The great focus on and success in recruitment is clearly a strength of this institution. BI seems to have the ability to pay more internationally competitive salaries as well, especially for top people in Finance, and a tenure track system is in place despite some regulatory obstacles. The age structure at the unit is also good.

BI has several separate PhD programmes, two of which are in Economics and Finance, respectively. PhD recruitment and the students' progress in the programmes seem to be very good. The candidates aim for international academic positions, as well as for positions in research institutions and financial institutions.

Approximately fifty per cent of the working hours of academic staff at BI are allocated for R&D activities. There are also positions that are devoted 100 per cent to teaching. The department heads can accept deviations from this, and the workload seems reasonable with respect to the time allocation for research. All full-time employees in scientific positions are entitled to apply for a one-year sabbatical every six years. Participation in competence development courses is encouraged, workshops are organised and research visits supported. There are incentives in place for publishing in high-level journals, using BI's own journal quality ranking, which is more restrictive than the national Norwegian one. These conditions and incentives appear to be very good.

BI has focused on increasing the proportion of female professors, and the trend is good. About 36 per cent of the PhDs who have graduated from the business school during the last three years have been female. Of research personnel (42) in Economics and Finance, however, only five are female. The panel encourages the unit to work harder towards a better gender balance, despite a poor supply of qualified female applicants, especially in areas such as Finance. Gender research is conducted at the unit.

3.1.6 Research production and scientific quality

The research areas of the group in Economics and Finance include labour markets, game theory, political economy, corporate governance and asset pricing, as well as methodological issues. The group is involved in a number of RCN and company-funded projects. In 2016, the group produced 53 scientific articles and gave 47 scientific presentations. During the years 2014 to 2016, according to the bibliometrics, the group has produced 62 Level 2 publications (1.45 per person), which is a very high number. The top-ten listed publications from the past 5–10 years include 6–7 papers dealing with financial topics, including five publications in the top-3 finance journals.

The research output appears to be rather unevenly distributed. The researchers in Economics have higher and more stable productivity in terms of quantity, and, with some exceptions, mainly publish in top field journals. The researchers in Finance, on the other hand, often publish in top journals, but have more uneven productivity in terms of quantity across researchers and over time. In both subjects, there are many researchers who have not published for quite some time. The strong focus on only top publications is a risky strategy that can bring success, but also failure, and may result in low overall productivity in such case. This is a risky strategy for young researchers in particular.

Assessment of scientific quality: 4 - very good

3.1.7 Interplay between research and education

All of BI's educational programmes are multidisciplinary and, a lot of research work is utilised in the courses that this unit participates in delivering. Students are engaged as assistants and used in lab experiments. The interplay seems to be at a good level.

3.1.8 Societal relevance and impact

At the business school level, only 39 per cent of the publications target an international academic audience. This seems not to be the case in Economics and Finance, where the focus is on the international research community, and where international publications dominate the CVs. Since the impact on the national academic audience is low, the group is seeking to improve its impact on

business and society through committee work, as well as participation in domestic seminars and conferences.

No impact case is included, but the examples that are provided and the knowledge dissemination listed in the self-evaluation indicate that a good amount of research of practical relevance is being conducted.

3.1.9 Overall assessment

Research production in general is on a very good level, and even excellent in certain areas, but it is unevenly distributed across individuals.

3.1.10 Feedback

- The institution is encouraged to take actions to reduce the heterogeneity of research production among its academic staff, and to work harder to achieve a better gender balance, despite the poor supply of qualified female candidates, especially in areas such as Finance.

3.2 Research group: Asset Pricing and Investor Behavior

3.2.1 Organisation, leadership, strategies and resources

The research group Asset Pricing and Investor Behavior grew organically based on a shared strength in publishing in top journals within the research area. A centre has been established to promote the area. There are eight members of this group. It has an informal structure, but the centre has a director who coordinates budgets and events. The goal is to publish leading-edge research in the very best scientific journals. The group mainly relies on internal funds from BI, which are at a good level. The self-assessment states that endeavours to secure external funding have not met with great success. However, the statistics show that a number of projects have obtained funding from either the RCN or private sources in Norway.

3.2.2 Research personnel

The group is actively involved in recruitment, selecting and interviewing candidates at international job markets. All recruitment is international, including the recruitment of PhD students. All PhD students are encouraged to spend six months to a year abroad, which they seem to do. Postdocs are encouraged to make shorter international stays. The aim is that all graduates from the PhD programme will be competitive in the international academic job market and find jobs in academia. Placement help is available.

The age structure of the research group is good, but the gender balance (no female) leaves room for improvement. The international dimension is excellent (five international researchers of eight).

3.2.3 Research production and scientific quality

The research group conducts research in the areas its members are interested in (a bottom-up approach), and it works on both theoretical and empirical finance. The research output is excellent in terms of both quantity and quality: all researchers have had a good publication record since 2007, and half of them report (among the three most important publications) publications in up to three top-3 Finance journals.

3.2.4 Networking

The group organises conferences and workshops to which international academics are invited. BI provides good funding for such purposes. Industry seminars are also organised. Individual researchers have networks of co-authors outside Norway. There is no formal collaboration with non-academic groups.

3.2.5 Interplay between research and education

The research group's members are actively involved in teaching courses in Finance, and have the same teaching duties as other researchers at BI.

3.2.6 Societal relevance and impact

As examples of knowledge dissemination, the institution's report mentions popular science publications, books, reports, media contributions etc. on asset pricing, but there is nothing more specific about this, and nothing explicitly about societal impact in the research group's report.

3.2.7 Overall assessment

The research is of an excellent international standard in terms of both quantity and quality.

Assessment of research group: 5 - excellent

3.2.8 Feedback

- The gender balance in the research group leaves room for improvement. The group should also consider taking a more systematic approach to societal impact.

4 CICERO Center for International Climate and Environmental Research

CICERO Center for International Climate and Environment Research was established in 1990. Cicero's mission is to conduct research and provide reports, information and expert advice about issues related to global climate change and international climate policy. It is an interdisciplinary institute with a focus on climate-related global environmental issues and international climate policy. The centre is located at Oslo Science Park.[21]

CICERO Center for International Climate Research

Units included in the evaluation of economics	- CICERO Center for International Climate Research
Other units of the institution	

R&D expenditures and sources of funding (1000 NOK)			
	2014	**2015**	**2016**
Funding of the institution			
Total expenditures	75 991	79 460	78 824
Types of funding			
Core funding from the RCN	11 026	11 414	11 923
External funding, RCN	36 832	43 351	47 652

Listed researchers	13
Listed research groups	0
No. of researchers in listed research groups	0

Training, recruitment and academic positions			
	2014	**2015**	**2016**
No. of PhD graduated at the institution per year			
Male/Female	0/0	0/0	0/0
Total per year	0	0	0
No. of positions announced / No. of qualified applicants per year			
PhD positions	0/0	0/0	0/0
Post.doc positions	0/0	0/0	0/0
Permanent positions	0/0	1/21	0/0
Education			
Study programmes BA level			
-			

[21] NIFU, Instituttkatalogen [Norwegian Institute Directory), version, October 2017, 2017: 17–18. https://www.nifu.no/publikasjoner/institute-katalog.

External funding EU	6 320	4 199	455	**Study programmes MA level** -
External funding, other sources	20 746	22 526	21 734	**Other** Number of positions: CICERO had a total of 13 PhD's in 2012 of 69 man-years, therefore there has not been any new announcements in this period. In the beginning of 2017 we have a total of 4 PhD- students finalizing their PhD's, and will announce one this year, but no new announcements in economics.

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

4.1 Economics at the institutional level

CICERO is a project-based, interdisciplinary research institute whose social science researchers from political science, geography, sociology, social anthropology and economics mostly specialise in Climate Economics, Climate Transition, and Climate Policy. Cicero has about 70 employees, and 13 researchers were listed for the evaluation of Economics.

4.1.1 Organisation, leadership and strategy

CICERO´s mandate is to produce and disseminate high-quality interdisciplinary research on climate change and climate policy through effective domestic and foreign partnerships with academics, as well as decision-makers in politics, government ministries, trade and industry, and civil society. CICERO is currently undergoing a reorganisation aimed, inter alia, at strengthening the thematic focus of its research, and it has responded well to earlier evaluations.

4.1.2 Institutional follow-up of previous evaluations

CICERO has responded to prior evaluations, e.g. by trying to increase its research collaboration with other institutions, and by trying to overcome the obstacles to researchers making longer international visits. CICERO is also endeavouring to further strengthen its international network. Thus, the response to previous evaluations seems to be good.

4.1.3 Resources and infrastructure

As a research institute without any students to teach, CICERO offers its staff an excellent research environment. Funded mostly by the Research Council of Norway (RCN), CICERO also attracts direct funding from the State as well as from the EU and other national and international funding sources. CICERO owns and operates high-performance computing equipment that is used for supercomputing in the natural sciences.

4.1.4 Research environment

CICERO´s research staff are engaged in extensive collaboration with highly regarded international researchers and research institutes across Europe, North America and other regions. Collaborative research is the norm. The overall research environment seems to be good.

4.1.5 Research personnel

Good mobility and career paths are in place. The career paths provide incentives for publishing in good journals, and are under further revision in 2017. Although there is no specific policy for international

recruitment, CICERO has recruited researchers from both Norwegian and international institutions. Although CICERO is not a PhD-granting institution, there are often PhD students among the staff, working both on their theses and on projects at CICERO (25% of their working time). The gender balance is well taken care of.

4.1.6 Research production and scientific quality

CICERO researchers publish in field journals in climate-related fields. Publication in leading environmental economics journals appears to be the exception. As such – and this is consistent with earlier recommendations – further strengthening of outlet quality might be possible, but this could also involve a trade-off against the applied outreach nature of the centre. The selection of research topics is reasonable, and CICERO has expertise in climate finance, policy instruments, adaptation, and climate-relevant behaviour. While none of this is unique at the international level, CICERO is well positioned to contribute to leading research in all these fields. Further focus on linking diverse climate policies to adaptation, as well as empirical work, are areas where outreach demands can be met and scientific quality can be strengthened. The bibliometric analysis indicates that the economists at CICERO produced 17 Level 2 journal articles (1.18 per person) from 2014 to 2016.

Assessment of scientific quality: 3 - good

4.1.7 Interplay between research and education

CICERO has no teaching programme. Even so, CICERO employs doctoral candidates who benefit from collaboration with CICERO´s research staff and sometimes find continued employment at CICERO after completing their doctoral studies elsewhere.

4.1.8 Societal relevance and impact

CICERO has the specific goal of informing policymakers and the public, in particular on climate change. As such, it puts much more emphasis on external communication than other research institutes.

CICERO contributes to the IPCC, to the Climate / European Climate Services Research Agenda, but it also impacts the national discourse on climate change issues.

CICERO issues a widely read weekly newsletter and it is quite active in social media, aiming to contribute to ongoing debates about climate issues and climate change. This activity is certainly relevant, and has a significant potential for social impact, which is difficult to assess, however.

4.1.9 Overall assessment

Given its mission, CICERO's research in Economics is on a good level, although, given CICERO's good position and the interdisciplinarity present at the institute and in the networks, it could be possible to reach even higher.

4.1.10 Feedback

- Economists on the research staff may wish to publish more of their climate-related research in general economics journals, as well as in interdisciplinary and specialised journals.

5 CMI Chr. Michelsen Institute

CMI Chr. Michelsen Institute is an independent development research institute located in Bergen. The institute was one of the first private institutes in Norway. Established in 1930, it was initially tasked with conducting independent research in natural and social sciences. CMI's research focuses on local and global challenges and opportunities facing low- and middle-income countries and their citizens. The institute's geographic orientation is towards Africa, Asia, the Middle East and Latin America.

CMI Chr. Michelsen Institute

Units included in the evaluation of ecomomics	CMI Chr. Michelsen Institute
Other units of the institution	

R&D expenditures and sources of funding (1000 NOK)			
	2014	**2015**	**2016**
Funding of the institution			
Total expenditures	91 048	93 804	90 227
Types of funding			
Core funding from the Norwegian gov.	14 905	15 077	15 662
External funding, RCN	23 499	30 555	24 755
External funding EU	0	73	69
External funding, other sources	55 434	47 284	51 281

Listed researchers	15
Listed research groups	1
No. of researchers in listed research groups	9

Training, recruitment and academic positions			
	2014	**2015**	**2016**
No. of PhD graduated at the institution per year			
Male/Female	-/-	-/-	-/-
Total per year	0	0	0
No. of positions announced / No. of qualified applicants per year			
PhD positions	-/-	1/60	-/-
Post.doc positions	1/8-	-/-	-/-
Permanent positions	1/50	3/135	2/93

Education
Study programmes BA level
Study programmes MA level
Other: Many of the positions at CMI are open to several disciplines.

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

5.1 Economics at the institutional level

CMI is a multidisciplinary research institute dedicated to applied research on international development. CMI receives its core funding from the Norwegian Ministry of Foreign Affairs through the Research Council of Norway (RCN). About 15 per cent of its budget is core support. Research themes at CMI include anti-corruption, gender, governance, health, humanitarianism, development assistance, natural resources, poverty, private sector development, rights, and tax and public finances. Researchers at CMI are social scientists, primarily in the fields of anthropology, economics and political science. CMI employs appr. 70 people, 15 of whom are listed for the evaluation of Economics.

5.1.1 Organisation, leadership and strategy

As an independent institute, CMI has its own governance structure. It is led by a board, while day-to-day operations are headed by CMI's director. Internally, the institute currently has seven groups and one large donor-funded project on aid and corruption; these eight units are led by four research directors.

The institute's current five-year strategy is clearly formulated. It aims to be an internationally leading institute in its field, with a strong impact on policy and practice. The strategy does not state that the institute wishes to have an impact on the wider academic community.

5.1.2 Institutional follow-up of previous evaluations

The institute was evaluated in 2006 and in 2016/2017. These evaluations seem to have been positive for the institute, according to its own assessment in connection with the current review. The evaluations appear to have suggested further measures to raise the quality of academic output, which is something the institute appears to be taking seriously.

5.1.3 Resources and infrastructure

The institute is largely funded by external grants, which places a strong burden on academic staff. The self-assessment does not discuss issues relating to the internal division of the fundraising burden, but it does address the increased burden on staff who are reliant on a larger number of small projects.

The academic infrastructure appears to be sufficient, although strong concern is expressed by the institute about access to (online) publications. This is a structural concern that is probably shared by all small, independent research institutes in Norway and worth noting as a concern in the current overall evaluations. One immediate way to help overcome this constraint might be closer cooperation with Norwegian universities and, specifically, the use of students as research assistants (who are likely to have better online access than their institute-based supervisors).

Past evaluations and the current SWOT analysis of the institute suggest that its staff set store by its work environment. That is a valuable asset.

5.1.4 Research environment

The research environment at the institute is characterised by its topicality, its multidisciplinarity and its focus on Southern research partners. Another aspect is that, as an independent institute that does not award degrees, it does not a have basic source of income for its staff (in terms of teaching obligations). These factors all have implications for the business model and the performance of the institute.

5.1.5 Research personnel

Economics is one of several disciplines represented at the institute. In its own words, in Economics, the institute currently has 'eight full-time positions, one postdoc, one PhD student, and five part-time positions'. The largest research group employing Economists is the Poverty Group (see the separate report for that group). Recent hires in Economics have all been international, which has helped to increase diversity among the institute's economists.

5.1.6 Research production and scientific quality

The institute's economists publish in a range of journals, sometimes in leading field journals in development economics and development studies. There is some heterogeneity in the quality of the journals where papers are published, but, on average, the quality of economics papers is good to very good. (The top-ten papers presented by the institute were published in *Health Economics*, *International Business Review*, *Journal of Development Economics*, *Journal of Development Studies*, *Journal of Economic Behavior and Organization*, *Journal of Health Economics*, *Management Science, Science,* and *World Development*. The institute publishes relatively frequently in journals and almost exclusively in English. Its scientific impact relative to OECD countries is in line with the Norwegian average, as is its productivity in terms of Level 2 journal articles (with 0.64 Level 2 publications per researcher in Economics on average). From a narrow disciplinary Economics perspective, the quality of the research output is good by Norwegian standards. If this panel had judged the quality of the output from a 'development studies' perspective, we would have awarded a 4 (very good).

Assessment of scientific quality: 3 - good

5.1.7 Interplay between research and education

This does not really apply to the institute, although it does host some master's students. It seems that completing a master's thesis at the institute is an alternative entry route to standard employment at the institute, which may reduce the screening applied to such future staff.

5.1.8 Societal relevance and impact

The institute has an extremely relevant research agenda and it has a very high impact on the development debate in Norway and in the Global South. It is harder to judge whether it also has an impact on European or global policy debates – and whether it has an impact on the global research agenda among the community of scholars.

5.1.9 Overall assessment

The institute is a highly respected, independent research institute that pursues many interesting research questions, produces very good academic publications and has a well-known, strong societal impact through its work. In contrast to university-based research groups, however, its business model is more challenging. This will require constant attention to ensure that both the resource flow and the quality of its work remain in good shape.

5.1.10 Feedback

- These recommendations necessarily address the institute as a whole; it is nearly impossible to give strategic advice to a relatively small sub-group of staff at a relatively small research institute based on their disciplinary background.
- The institute has a topical research agenda, with a secondary emphasis on disciplinary orientation. This has some merits, especially as regards the relevance of the research agenda, but it may be risky in terms of maintaining disciplinary quality, especially as regards the

production of well-cited journal publications. Assuming that disciplinary excellence is a necessary (though not sufficient) condition for successful multidisciplinary work, it may be worthwhile to reconsider the structure of the institute's research agenda. One option would be to adopt a matrix structure with a 'topic-discipline' organisation. Matrix structures rarely work well in practice, however. Another option would be to aggregate the seven research groups into fewer but larger research areas, each with a topical, disciplinary and methodological alignment. The Economics group could then focus on livelihoods and well-being, which could easily include health (or health economics). It appears that dividing the management's attention between multiple teams and the resulting number of quite small teams could fail to generate the critical mass that is needed to secure substantial, long-term projects. Hence re-packaging the existing research agenda into a leaner structure could help to improve research and attract more research funds.

- Such an approach could also help to obtain research funds from outside the traditional 'development' sources. Climate change, migration, security, gender and other topics are all addressed at the institute and there are funding opportunities for them in Norway, in the EU and elsewhere, which do not require a primarily development lens.
- At the same time, the institute does not really seem to have a clear strategy concerning its methodological toolkit, including its data generation strategy. It may want to prioritise certain data collection activities, methods and approaches for its economists, facilitating strong internal learning and peer review.
- It is not very clear what the internal quality control procedures are – from internal peer review of draft publications to internal or external seminar series.
- Merging with other institutions in Norway or in Bergen would not solve any of the existing challenges. However, working more closely with local universities might help a lot. For example, it would be good to have more doctoral students based at the institute and to train them rigorously. The institute could also have a critical mass of staff to operate a paid master's programme, which would help to generate a flow of steady income.
- Staff selection should always be based on open competition and merit, including for students previously based at the institute. It is not clear if that is achieved in practice.
- Finally, there is a case to be made to national policymakers in Norway, namely that they should consider how to create a level playing field between university-based and institute-based research groups. The latter face a more uncertain and challenging funding environment despite their often highly relevant research agendas.

5.2 Research group: Poverty

The poverty group at CMI addresses drivers of (chronic) poverty and associated labour market and micro-finance topics. It is essentially an applied micro development economics group situated at a multidisciplinary topical research institute. Its leading peers include, for example, the Centre for the Study of African Economies in Oxford, IDS in Sussex, and the Center for Global Development in Washington, DC.

5.2.1 Organisation, leadership, strategies and resources

The poverty group at CMI was established in 2007 and appears to have been relatively stable in size and thematic orientation since then. During the period 2012–2016, the group's annual budget has averaged around NOK 5 million, all from external grants. The group does not appear to receive any core funding.

The group is a structural unit within CMI, with a leader who has scientific as well as personnel responsibility for the group. The group does not have any team-specific administrative or communications support, but draws on the common resources at CMI, like all units at CMI. The average grant size in the last five years has been around NOK 1 million, which is quite small.

5.2.2 Research personnel

The group includes about six economists and several part-time or affiliated researchers in economics and anthropology. One postdoc and one doctoral student are also part of the group. Of the six tenured staff, five are male, and five of the six tenured staff obtained their PhD degrees in Norway. There is some cross-group membership between the research group and other groups at CMI. There are clearly also fewer female researchers than male researchers affiliated to the poverty group overall. The gender balance of the team is thus poorer than the national average for Economics research in Norway.

5.2.3 Research production, scientific quality

The research agenda is clearly defined, but not overtly focused; it is quite a mainstream empirical research agenda in development economics with clear relevance to policy and practice.

The group meets monthly to discuss its work. The group states that it targets publication in leading field journals. The group mostly publishes in field journals, with some publications by its members being published in excellent development economics and development studies journals (e.g. *JDE, WD*). It seems likely that, with more attention to methodological foundations, the research output in development economics could be lifted to 4 (very good) in the long term.

Assessment of scientific quality: 3 - good

5.2.4 Networking

The group has various research partners in both the North and the South. A key strength is its long-term relationship with partners in the South, which can be very helpful in relation to both grant acquisition and research.

Locally and nationally, the group collaborates with other researchers at CMI (on interdisciplinary research) and with partners in Economics in Bergen and Norway. It is not quite clear how structured this cooperation is or if it is primarily based on personal relationships, but it involves joint projects, part-time positions, as well as joint research seminars at regular intervals.

5.2.5 Interplay between research and education

As CMI is not a degree-awarding institution, the main focus of teaching (or training) is on hosting and supervising master's students.

5.2.6 Societal relevance and impact

The work of the group is likely to be recognised by CMI's stakeholders in its partner countries, as the case study of Nepal indicates. In addition, CMI's reputation in the development field is likely to support the impact of research by this group. Since the research agenda of the group is externally funded, this should also help to generate impact. Beyond that, however, not much information is provided on how the group facilitates impact or how successful it has been.

5.2.7 Overall assessment

The poverty research group pursues an interesting and highly relevant research agenda around poverty and livelihoods, using applied economic methods. It has excellent networks in the Global

South. The group produces consistently good to very good research in journals and seems to make a valuable contribution to development discourses in Norway and in the countries where it conducts its research. The team is quite small and its focus on Economics at a multidisciplinary, mostly self-funded research institute is a strategic challenge. It is laudable that the group has recently focused its recruitment on increasing the diversity of its team.

5.2.8 Feedback

- To further strengthen the quality of the publications, and thereby also the societal impact of the work undertaken, it is suggested that the national and international research collaboration with excellent research partners in Norway and internationally be structured and deepened.
- The poverty team at CMI should have much to offer to other research partners; it should seek to increase its research exchanges with leading partner institutions (learning from the success of other social science institutes in Norway in this regard), to expand the number of international and female staff, to host more PhD students and to sharpen and deepen its methodological toolkit in applied development economics.
- To these ends, and recognising the small size of the team, the group may wish to formalise its local, national and international research and doctoral training collaborations, for example by joining an existing or jointly establishing a new PhD programme.
- Similarly, obtaining larger, more long-term research grants may help with the production of journal articles in higher-ranked journals in development economics.

6 Frisch Centre

The Ragnar Frisch Centre for Economic Research was established in 1999. It is an independent research institution founded by the University of Oslo. It conducts economic research in cooperation with the Department of Economics and other university departments, as well as with other research institutions. It supports education in Economics by financing and supervising students writing theses at master's and PhD level. Its research areas include labour market economics, the economics of education, environmental and energy economics, health economics and public economics.[22]

Frisch Centre

Units included in the evaluation of economics	- Frisch Centre
Other units of the institution	

R&D expenditures and sources of funding (1000 NOK)

	2014	**2015**	**2016**
Funding of the institution			
Total expenditures	38 562	47 373	35662
Types of funding			
Core funding from the RCN	1 348	1 816	2 295
External funding, RCN	29 706	35 166	28 711
External funding EU	1 449	979	80

Listed researchers	37
Listed research groups	2
No. of researchers in listed research groups	31

Training, recruitment and academic positions

	2014	**2015**	**2016**
No. of PhD graduated at the institution per year			
Male/Female	-/-	-/-	-/-
Total per year	-	-	-
No. of positions announced / No. of qualified applicants per year			
PhD positions	1/7	1/5	-/-
Post.doc positions	-/-	-/-	-/-
Permanent positions	-/-	1/11	-/-

Education

Study programmes BA level

-

Study programmes MA level

-

[22] NIFU, Instituttkatalogen [Norwegian Institute Directory), version, October 2017, 2017: 127–128. https://www.nifu.no/publikasjoner/institute-katalog.

External funding, other sources	6 363	5 343	5 306	**Other** The Frisch Centre is an independent research institute. As such, we do not offer a PhD education, but the centre does employ a substantial number of PhD students enrolled in PhD programs – typically at the Economics Department (UiO). The PhD positions are included in and largely financed by RCN grants, and centre researchers are typically either the main or secondary supervisor.

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

6.1 Economics at the institutional level

6.1.1 Organisation, leadership and strategy

The Frisch Centre has a flat organisational structure with all researchers (20 FTE) reporting directly to the director. Although the centre has three thematic fields, these are not formally organised as research groups, since researchers may work across different groups. Despite some advantages of this organisation, such as flexibility for researchers to work in different thematic fields, the current organisational form could cause a loss of coherence and coordination within and between the thematic fields, especially since the thematic fields differ rather widely in terms of their domain of application. Some form of academic leadership of the thematic fields could enhance coherence and provide an incentive for scientific innovation. The three themes help to hedge against variability in funding opportunities within each thematic area, letting the centre rebalance and align researcher resources with funding opportunities. The themes do, however, offer limited economies of scope in research. In that case, there is reason to question whether this mix of themes is the optimal one for the centre.

The Frisch Centre predominantly depends on RCN funding and is not very well represented in international research consortia, such as those funded by the EU or ERA-NET. The dependence on RCN funding is also acknowledged as a weakness, and the expiry of RCN programmes is seen as a threat. Hence, the centre could benefit from internationalising its funding sources and opening up its scope to include international research projects.

The centre has financial incentives for publishing in high-quality, international, peer-reviewed journals and claims that this policy has been successful, pointing to a growing share of publications in Level 2 journals. Nevertheless, the management of the centre could introduce a wider set of research quality measures in addition to financial incentives, and it could do more to avoid quality decisions being left to individual researchers.

The organisational structure clarifies that the Frisch Centre hosts the CREE centre and that a large part of the research has been placed under CREE's umbrella. The benefits of CREE are not outlined in the report.

6.1.2 Institutional follow-up of previous evaluations

The centre partly followed up on the recommendations from the previous peer review; the financial incentives for publication and hiring a researcher from Sweden are among the main changes.

6.1.3 Resources and infrastructure

IT resources are the main resources mentioned. It is not clear whether there is sufficient administrative support for the researchers to conduct their research. The document suggests that the main support comes from a part-time deputy director and three other (IT, secretary and financial) staff members.

6.1.4 Research environment

There are weekly research seminars at Frisch, and bigger annual ones as well. Researchers can receive funding for participation in international conferences and seminars. The research environment is good, although the international networks do not seem to be large or formalised.

6.1.5 Research personnel

Almost all staff (except one) at the Frisch Centre are economists. The gender and age structures are not well balanced, with a clear underrepresentation of younger, female researchers, an imbalance that recent recruitments have attempted to address.

The research domain of energy and natural resources gives opportunities for interdisciplinary research, which may require future staff to be multidisciplinary in nature, or stronger cross-disciplinary collaboration networks.

The Frisch Centre offers good mobility prospects for young researchers, as the career path for researchers is determined by publication credits and project leader experience.

Being a research institution, the centre cannot offer a PhD programme of its own, but it does finance, provide infrastructure for and supervise PhD researchers enrolled at the University of Oslo. The centre does not have a clear policy for PhD researchers, such as guidelines for supervision and a vision setting out learning objectives for PhD candidates.

International mobility among researchers is facilitated through a sabbatical programme, that, on average, has been utilised annually.

6.1.6 Research production and scientific quality

The research community is rather small, with around 20 full-time equivalents, (15 of which are permanent positions). The publications submitted at the institutional level show that the researchers publish in good and sometimes very good Economics journals and field journals, such as the *Journal of Public Economics*, *Journal of Econometrics*, *The Economic Journal*, *Journal of Labour Economics*, *European Economic Review*, *The Energy Journal,* and *Health Economics*. The institution has managed to increase the share of Level 2 publications from 26 per cent in the mid-2000s to 38 per cent during the period 2014 to 2016. Historically, the institution has also had a good average number of international journal publications per researcher, e.g. around 0.66 Level 2 publications per researcher during the period 2014–2016. However, the research productivity seems to be very unevenly distributed among individuals and relies heavily on some very productive researchers that publish in highly ranked journals.

Assessment of scientific quality: 4 - very good

6.1.7 Societal relevance and impact

The institution does not present a strategy for dissemination, user involvement and knowledge exchange. The activities undertaken are more the result of initiatives taken by individual researchers than a deliberate policy on the institution's part. Some of the user involvement is obligatory under the terms of external funding, and is also not a policy of the institution itself. Even so, several researchers

at the institution do interact with policymakers and relevant user groups, such as the welfare authorities, and write columns and other popular science contributions.

The two impact cases concern a very relevant contribution to two ongoing policy debates. The impact cases show clear benefits for the Norwegian economy and the wellbeing of society. They are both recent. The institution makes interesting contributions to policy debates, and individual researchers are pursuing activities that can achieve societal impact. However, the institution does not have a strategy for achieving societal impact.

6.1.8 Overall assessment

The research projects cover topics on a wide range of current policy issues, such as energy, retirement, climate change and social services. This suggests a good link with the policy agenda. The research productivity and quality are on a very good level overall, but seem to be unevenly distributed.

6.1.9 Feedback

- The institution should develop a strategy for achieving societal impact.
- The institution is encouraged to take actions to ensure a less uneven distribution of productivity among researchers.

6.2 Research group: Energy and Environmental Economics

6.2.1 Organisation, leadership, strategies and resources

As a small institution, the Frisch Centre does not have a formalised organisation with separate research group leaders, so all researchers in the Energy and Environmental Economics research group report directly to the Frisch Centre director. The research group was established to exploit comparative advantages of three research institutions (the Frisch Centre, the Economics Department at UiO, and Statistics Norway). The group constitutes the core of the CREE centre, which has its own administration and board. However, it remains somewhat unclear to what extent the group adopts its own strategy (or whether this is done at some other level).

The group almost exclusively makes use of external funding; nevertheless, almost all the funding comes from the RCN or other Norwegian sources, while a relatively small part of the funding is obtained from outside Norway.

The group seems to be well aligned with the goals of the Frisch Centre, which also uses financial incentives to enhance the productivity and quality of the research. Moreover, the centre provides administrative support to the units to help them to acquire funds and pursue research.

6.2.2 Research personnel

The Frisch Centre hires research staff in relation to its financial capacity, which is conditional on the funds obtained for research projects. This suggests a relatively slow throughput of personnel, and, in particular, a low rate of hiring new staff. This might be a disadvantage, since new ideas brought in by new personnel will also be introduced at a correspondingly low rate. The age structure of the group also shows a remarkable imbalance, as researchers below the age of 40 are underrepresented.

The group has had a number of PhD students. While the Frisch Centre is not an educational institution, the centre finances, provides infrastructure for and supervises PhD students enrolled at the University of Oslo. The material provided suggests that there is a mentoring system whereby senior researchers act as supervisors. The group makes funds available for young researchers to spend time abroad at

another academic institution. However, not being an educational institution, the group does not have a clear PhD policy, which would be evidenced by a course programme for PhD students and a clear vision for PhD supervision and learning goals for PhD trajectories.

6.2.3 Research production and scientific quality

Evaluated overall, the group members have mostly published between one and two publications per year during the period 2007–2016. The most important publications from the CVs are often taken from highly ranked journals in the Economics discipline. The publications mentioned in the CVs of the group and the group's themes suggest an absence of interdisciplinary research. Given the research domain of energy and environmental economics, this points to an underutilised potential for collaboration with the technical sciences.

The overall quality of the group's research is definitely at or close to the international frontier, while the productivity of the group is more modest.

6.2.4 Networking

The group is integrated with the CREE centre, where it collaborates with Statistics Norway and the Department of Economics, University of Oslo. The group also interacts with users, which is a requirement for RCN-funded projects. The self-assessment claims collaboration with other scientific disciplines, although this was not apparent from the publications submitted to the panel.

6.2.5 Interplay between research and education

The group does not have any educational duties. Nevertheless, several members of the group contribute to master's programmes and PhD courses.

6.2.6 Societal relevance and impact

The group interacts with users of its research, mainly through the CREE centre's activities (its user groups, workshops etc.). It has not been clarified what is achieved through these interactions, nor has it been clarified whether the research is expected to produce benefits beyond academia. The scientific goals and strategy of the group also suggest a focus on scientific rather than societal relevance.

6.2.7 Overall assessment

The overall quality of research by this group is very good, but the productivity is modest. There also seem to be unutilised opportunities for interdisciplinary research. The age structure of the researchers is skewed and will need attention in the future. A strategy for societal relevance could be useful.

Assessment of research group: 4 - very good

6.2.8 Feedback

- The quality of research in this group is very good, but its productivity could be improved. There seem to be opportunities to foster interdisciplinary research. The age structure of the researchers needs attention in the years to come. An explicit strategy for societal relevance could also be developed.

6.3 Research group: Labour Economics

A small research unit affiliated to the University of Oslo, the Frisch Centre employs 20 full-time researchers specialising in three areas: empirical labour market studies, energy/resource/climate studies, and public sector and health economics studies.

6.3.1 Organisation, leadership, strategies and resources

The Frisch Centre has a simple organisational structure whereby researchers at the centre serve as director and associate director under the supervision of a board and a council. The aim of the centre is to pursue basic as well as applied research, and to contribute to the education of new researchers at the University of Oslo. The focus of the centre´s strategy is on high-quality, theory-informed empirical research on topics of relevance to public policy, including labour economics, and to maintain close contact with users.

6.3.2 Research personnel

Recruiting is done for the most part in Norway. However, external funding secured by the researchers themselves, including funding from the EU, is the financial mainstay of the centre. Researchers have a strong financial incentive to publish and to publish well, as individual pay rates are set on the basis of the research output of each researcher, judged*,* inter alia, by the ranking and impact factors of journals. No information is available on the spread of remuneration among centre staff compared with other comparable workplaces. There do not seem to be any particular issues with regard to gender balance or mobility.

6.3.3 Research production and scientific quality

Members of the centre regularly publish their work in high-quality general journals as well as field journals. The application of state-of-the-art statistical methods to large databases is a strong feature of the research output. Four of the self-selected, top-ten publications from the centre are in the area of labour economics.

6.3.4 Networking

Collaboration on research projects is mostly local, including long-standing relations with the University of Oslo and Statistics Norway. There is some collaboration with researchers abroad, but this is relatively uncommon.

6.3.5 Interplay between research and education

As a research institute, the centre does not offer formal PhD education, but it employs a number of students enrolled in PhD programmes elsewhere, mostly at the University of Oslo.

6.3.6 Societal relevance and impact

The Frisch Centre aims to be relevant for policymakers and other stakeholders. More than half of the ten submitted top dissemination and knowledge exchange results from the last 5–10 years concerned labour economics. Two researchers publish regular columns in two of the leading Norwegian newspapers, *Aftenposten* and *Dagens Næringsliv*, where they discuss research from the Frisch Centre, among other things.

6.3.7 Overall assessment

In terms of economic theory and empirical content, the Frisch Centre's labour economics research output remains of consistently high quality and policy relevance.

Assessment of research group: 4 - very good

6.3.8 Feedback

- International collaboration is modest and could be improved.

7 Institute for Social Research

The Institute for Social Research (ISF) is an Oslo-based, independent, interdisciplinary research institute founded in 1950. The institute has played an important role in the establishment and expansion of domestic social research. Its core areas are research on society, politics and working life. ISF's mission is to contribute to knowledge about the structure of society and social changes, to further develop academic competence and develop social science methods. The institute has a staff of appr. 60, of whom 12 researchers are included in the evaluation of Economics.[23]

Institute for Social Research

Units included in the evaluation of economics	- Institute for social research
Other units of the institution	

R&D expenditures and sources of funding (1000 NOK)			
	2014	**2015**	**2016**
Funding of the institution			
Total expenditures	43 113	57 501	59 022
Types of funding			
Core funding from the RCN	10 587	10 577	10 977
External funding, RCN	33 378	40 854	43 844
External funding EU	751	2 423	2 515

Listed researchers	12
Listed research groups	1
No. of researchers in listed research groups	12

Training, recruitment and academic positions			
	2014	**2015**	**2016**
No. of PhD graduated at the institution per year			
Male/Female	-/-	-/-	-/-
Total per year	-	-	-
No. of positions announced / No. of qualified applicants per year			
PhD positions	1/17	-/-	-/-
Post.doc positions	-/-	-/-	-/-
Permanent positions	3/20	8/50	4/22

Education

Study programmes BA level

-

Study programmes MA level

-

[23] NIFU, Instituttkatalogen [Norwegian Institute Directory), version, October 2017, 2017: 35. https://www.nifu.no/publikasjoner/institute-katalog.

External funding, other sources	29 430	26 693	29 507	**Other:** The Institute for Social Research is not organised along disciplinary boundaries and does not have strategies for employment that differs across disciplines. The numbers of positions above is therefore identical across the three panels the institute reports to.

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

7.1 Economics at the institutional level

ISF is not an institution that grants degrees, but it has a handful of PhD students who are financed by external funds and supervised by ISF researchers. All researchers employed in a permanent position have a PhD degree.

7.1.1 Organisation, leadership and strategy

ISF has a board consisting of representatives of the Research Council of Norway and the University of Oslo, and of its own employees. There is a director, four research directors and two centre directors. Research is organised in four research groups, the themes of which are: work and welfare; equality, integration and migration; politics, democracy and civil society; welfare policy and politics. In addition, the institute has two cross-research groups, which receive basic funding from ministries and focus on gender equality and civil society and the voluntary sector, respectively.

Research is organised in projects, which can be carried out by one research group or span two or more groups. Projects vary in size and can be commissioned by ministries or directorates, but they can also be, and are, funded by the RCN or international research funds. The institute's overarching aim is to 'produce knowledge and understanding in areas that are significant for society'. Thus, the ambition is to combine social science research at a high level with societal impact. Striking a good balance between commissioned and research fund-financed research is important here. According to the October interview with the Institute, the current composition is roughly 50 per cent from the RCN, 12 per cent basic funding, and a third from commissioned work from ministries.

All economics researchers at ISF are organised in a single group: Work and Welfare, which carries out quantitative analyses of labour markets – broadly defined to also include education, welfare systems and migration – mostly based on rich Norwegian administrative registry (panel) data on firms and individuals. Furthermore, the group has been involved in developing and conducting large-scale surveys, such as the large and comprehensive workplace surveys that the group has conducted three times.

The themes covered by the research group are fairly broad and have changed over time, reflecting changes in the Norwegian labour market and labour and welfare policies. In addition to the traditional core themes – the functioning of labour markets and the consequences/effects of policies – active research topics include education, gender equality and migration.

The institute's strategy for 2016–19 emphasises the need to strengthen the international profile in terms of both publication and research funding. The three currently prioritised research areas are gender equality, civil society and migration. Since a considerable part of the activities is concerned with societal problems of special relevance to Norway and since, moreover, several projects are

commissioned by Norwegian ministries, this will to some extent reduce the possibility of recruiting researchers internationally.

7.1.2 Institutional follow-up of previous evaluations

In the past fifteen 15 years, ISF's research on social policy and sociology has been evaluated twice. In both cases, the evaluators expected to find more international publications on the work carried out. As a consequence, the number of internationally published articles and book chapters has steadily increased.

In addition, some larger and more specific research projects have been evaluated by their funding body: the RCN. However, it is not obvious that these evaluations have had a large impact on the institute as a whole, as the feedback received may have been project-specific.

7.1.3 Resources and infrastructure

In addition to conventional investments in infrastructure at social science research institutions, ISF has carried out several large-scale data collections, several of which concern political elections and candidates, voluntary organisations and participation therein, gender balance among executives, and extensive workplace surveys (similar to the British WERS).

7.1.4 Research environment

ISF collaborates with several external partners, and there is especially strong cooperation with the University of Oslo. Both partners have adjunct positions at each other's institution.

7.1.5 Research personnel

As mentioned above, researchers who have permanent positions, typically as senior researchers, all have a PhD degree. They can later apply for promotion to research professor according to rules and procedures developed by the Norwegian higher education authorities. These do not differ significantly from those used in promotion decisions at universities. Thus, the quantity and scientific quality of individual members' research production are important for their careers. It is worth noting that the institute has been quite successful in its implementation of a policy for gender balance among academic staff, 53 per cent of whom are female researchers.

7.1.6 Research production and scientific quality

Not all commissioned work will find its way into scientific publications, and that is not the intention. Which commissioned projects should lead to scientific publications is decided on a case-by-case basis. It is not clear from the self-assessment how much of the group's research is commissioned work and how much is basic or applied research funded by the RCN and other similar funding bodies. Thus, it is not a straightforward matter to judge the quantity of published research, since we do not have sufficient information about the time available to produce it. On the list of the ten most important publications from the group, most of the publications are from the last five years. This is presumably due to a recent increase in international publication. Another observation is that most of the top ten publications do not seem to be directly (sometimes, not even indirectly) related to commissioned work. The Economics group is relatively small, and could be vulnerable to employee turnover, especially among more senior researchers.

The average quality of the publication outlets is good; some of the more original papers are published in high-ranked journals and several of the articles containing applied welfare policy work have been published in *Scandinavian Journal of Economics*, which is a natural outlet. About 29 per cent of the publications are in Level 2 outlets, and the average number of Level 2 articles per person is 1.10.

Measuring the impact of the publications based on citations, we find, not unexpectedly, that the number of citations increases with seniority, and that the papers dealing with topics that are of interest beyond Norway's or Scandinavia's borders are cited significantly more often than the other papers. Research output from the gender equality research area has not been as successful in terms of its international publication record.

As an institute whose aims include carrying out research commissioned by ministries and informing national policymaking, a considerable part of the audience for its publications are not academics. In fact, ISF has two Norwegian language journals targeting a non-academic readership, one focusing on working life issues and another on social research more generally. The members of the Work and Welfare group have been active in editing the first of these journals, *Søkelys på arbeidsmarkedet*.

Assessment of scientific quality: 3 - good

7.1.7 Interplay between research and education

Not relevant because there are no teaching obligations.

7.1.8 Societal relevance and impact

The societal relevance and impact of the research performed by the economists at ISF is undoubtedly high. The case study on the influence of labour immigration on enrolment in vocational education programmes is a good example of this. Moreover, the survival of the group and the continuous flow of commissioned as well as Research Council-funded projects are further clear evidence of how the research group's work is valued by society. Competition in both 'markets' is strong and increasing.

7.1.9 Overall assessment

ISF shares with other largely government (RCN) funded institutes the problems associated with combining short-term funding with ambitions to produce high-quality research and to publish in highly competitive international outlets.

7.1.10 Feedback

- If higher research quality is the aim, the problem pointed out above needs to be addressed.

7.2 Research group: Work and Welfare

7.2.1 Organisation, leadership, strategies and resources

All Economics researchers at ISF are organised in a single group: Work and Welfare, which carries out quantitative analyses of labour markets – broadly defined to also include education, welfare systems and migration – mostly based on rich Norwegian administrative registry (panel) data on firms and individuals. Furthermore, the group has been involved in developing and conducting large-scale surveys, such as the large and comprehensive workplace surveys that have been carried out three times.

The themes covered by the research group are fairly broad and have changed over time, reflecting changes in the Norwegian labour market and labour and welfare policies. In addition to the traditional core themes – the functioning of labour markets and the consequences/effects of policies – active research topics include education, gender equality and migration.

7.2.2 Research personnel

Please see section 7.1.5 above.

7.2.3 Networking

As for ISF (ISF collaborates with several external partners).

7.2.4 Research production and scientific quality

Not all commissioned work will find its way into scientific publications, and that is not the intention. Which commissioned projects should lead to scientific publications is decided on a case-by-case basis. It is not clear from the self-assessment how much of the group's research is commissioned work and how much is basic or applied research funded by the RCN and other similar funding bodies. Thus, it is not a straightforward matter to judge the quantity of published research, since we do not have sufficient information about the time available to produce it. On the list of the ten most important publications from the group, most of the publications are from the last five years. This is presumably due to a recent increase in international publication. Another observation is that most of the top ten publications do not seem to be directly (sometimes, not even indirectly) related to commissioned work. The economics group is relatively small, and could be vulnerable to employee turnover, especially among more senior researchers.

The average quality of the publication outlets is good; some of the more original papers are published in high-ranked journals and several of the articles containing applied welfare policy work have been published in the *Scandinavian Journal of Economics*, which is a natural outlet. Measuring the impact of the publications based on citations, we find, not unexpectedly, that the number of citations increases with seniority and that the papers dealing with topics that are of interest beyond Norway's or Scandinavia's borders are cited significantly more often than the other papers. The gender equality research has not been as successful in terms of international publication.

As an institute that aims to carry out research commissioned by ministries and to inform local policymaking, a considerable part of the audience for its publications are not academics. In fact, ISF has two Norwegian-language journals targeting a non-academic readership, one focusing on working life issues and another on social research more generally. The members of the Work and Welfare group have been active in editing the first of these journals, *Søkelys på arbeidslivet*.

7.2.5 Societal relevance and impact

The societal relevance and impact of the research performed by the economists at ISF is undoubtedly good. The case study on the influence of labour immigration on enrolment in vocational education programmes is a good example of this. Moreover, the survival of the group and the continuous flow of commissioned as well as Research Council-funded projects are further clear evidence of how the research group's work is valued by society. Competition in both 'markets' is strong and increasing.

7.2.6 Overall assessment

The average quality of research by the research group is good – especially when the topic is international – as is its societal impact.

Assessment of scientific quality: 3 - good

7.2.7 Feedback

The gender equality part of this research group has not been as successful in terms of international publication as other parts of the group, and may need strengthening.

8 NHH Norwegian School of Economics

NHH Norwegian School of Economics is a business school inaugurated in Bergen in 1938. NHH was Norway's first business school, and, since its establishment, it has been a teaching and research institution with a focus on business administration.[24] Today, the school offers degrees at master's and doctoral levels, and although business administration remains a focal point, the school integrates broader economic perspectives in its teaching and research, partly with an emphasis on microeconomics.

NHH Norwegian School of Economics							
Units included in the evaluation of economics	- Dept. of Economics			Listed researchers		71	
				Listed research groups		4	
				No. of researchers in listed research groups		61	
Other units of the institution	- Dept. of Accounting, Auditing and Law - Dept. of Business and Management Science - Dept. of Finance - Dept. of Professional and Intercultural Communication - Dept. of Strategy and Management			***Training, recruitment and academic positions***			
					2014	**2015**	**2016**
				No. of PhD graduated at the institution per year			
				Male/Female	2/3	2/5	2/4
R&D expenditures and sources of funding (1000 NOK)				Total per year	5	7	6
	2014	**2015**	**2016**	***No. of positions announced / No. of qualified applicants per year[25]***			
Funding of the institution				PhD positions	4-5/15 (152)	4-5/9 (82)	4-5/13 (127)
Total expenditures	190 597	195 561	227 960	Post.doc positions	4/38 (181)	4/66 (454)	4- 5/13 (127)
Types of funding				Permanent positions	0/0	1/1	0/0
Core funding from the Norwegian gov.	160 738	161 481	188 064	***Education***			
				Study programmes BA level - Economics and Business Administration			

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

[24] Bjørsvik, Elisabeth and Yngve Nilsen; *Norges handelshøyskole i 75 år, «En læreanstalt av høieste rang»*, Bergen, (Fagbokforlaget), 2011.

[25] NHH has defined shortlisted applicants as qualified applicants. The number of formally qualified applicants is higher.

8.1 Economics at the institutional level

8.1.1 Organisation, leadership and strategy

NHH Norwegian School of Economics is a large, publicly financed, specialised university (business school). Its resources are organised under six departments, two of which are Economics and Finance. Altogether, 71 researchers conduct research that is subject to evaluation by this panel. Six impact case studies, and 10 important publications from the last 5–10 years have been listed.

8.1.2 Institutional follow-up of previous evaluations

The institution has undergone considerable reorganisation since the last research evaluation. New systems that provide opportunities to improve and an annual review to monitor performance are joint methods of ensuring quality and a productivity floor. The main shortfalls in the previous report were PhD training, which has been followed up, but which is described very briefly and is thus difficult to evaluate, and recruitment, which has been addressed in two ways: funding supplements, and a networking strategy that appears to be succeeding in improving the visibility of the organisation.

NHH has an action plan for improving the gender balance, and there is evidence that, at junior levels, the balance is better. However, no women hold head/dean posts at NHH. The allocation, structure, and advertising of such posts could be investigated. There is a dedicated individual focus on gender equality, and incentives and recruitment have been adjusted, which has led to a modest increase to 30 per cent female members of the academic staff. The distance left to travel is significant, however.

8.1.3 Resources and infrastructure

Funding is stable, with some positive movement from some sources. Funding is being used directly to address identified shortfalls in recruitment, including a series of endowed professorships funded by the private sector. This is an excellent example of linking resources directly to challenges. Teaching and administrative workloads appear to be low, so that academic staff have a lot of time for research. Workflow and the grouping of work over the year to maximise 'quality' research time could help make the most of limited resources. There is evidence of diversity in funding sources, including the executive education spin-off funds. Excellent databases are available for use.

8.1.4 Research environment

Both NHH and the department provide financial support for the organisation of conferences and workshops, conference participation, travel to visit co-authors and stays abroad during research leave. There are seminars at both the departmental and research group level, with international researchers participating. The research environment seems to be very good in this sense.

8.1.5 Research personnel

The methods NHH uses to recruit internationally include not just advertising posts internationally, but also attending major international meetings (ASSA). The number of applicants per position is good. NHH mainly carries out internationalisation through networking. Adjunct scholars visit from abroad and are integrated into the department via co-authorship arrangements, co-supervision of PhD students, and kindergarten support for their children.

Research leave and well-developed opportunities to visit/collaborate abroad for staff at all levels (PhD to professor) are used to promote networking. Individual leadership structures are less clearly described than organisational structures, although these need to be linked in order to be effective. For example, while workloads are reduced for juniors, it is not clear how much direction is given to them

during this time; internal workshops are clearly detailed, but co-reading of grant applications and output is not.

External funding is used to support adjunct/associate professors and endowed chairs, since salary levels are identified as a major stumbling block to international recruitment. Non-salary support aimed at improving recruitment, such as dedicated research assistants, is not discussed. There are plans to implement the European Charter.

8.1.6 Research production and scientific quality

The quality of the output submitted to the review is excellent and represents the whole spectrum from theory to applied econometrics. experimental work and software.

The SWOT analysis identifies unevenness in productivity as a weakness and, indeed, not all members of staff feature in the listed output. The criteria for research leave and the time required to achieve a permanent post have been changed recently, and various quality incentives have been introduced, but the structure of mentoring, monitoring and PhD interactions are not detailed enough to judge whether all avenues of support and encouragement have been utilised.

Although the research groups and strategic priorities are broad and enable interdisciplinary work, interdisciplinarity is only modestly reflected in the output submitted and in the impact case studies. Rather, the overall output suggests that economics tools are being brought to bear on traditionally non-economic questions or institutions. The bibliometric analysis indicates that, from 2014 to 2016, the researchers in Economics produced 49 publications in Level 2 journals (0.79 publications per researcher).

Assessment of scientific quality: 5 - excellent

8.1.7 Interplay between research and education

The educational/administrative workload balance and level are good in the international context and should not be a barrier to recruitment. The PhD programme has many positive elements; however, there is little information on formal job market training and little detail about PhD graduates' career paths.

8.1.8 Societal relevance and impact

The quality of the impact case studies is varied, from summarising applied and potentially impactful work ('Girl Power'), to contributing to large bodies of literature that shape debate ('Early'), to well-defined but early work ('Tax Compliance'), to direct and measurable effects alongside a sound research base ('Fiscal', 'Media', and possibly 'SKS Tankers'). 'Media' is probably the most comprehensive and developed case study. The level of the submission shows a high overall level of impact for the institution.

There is a clear channel of impact, since a wide range of individual scholars take on non-academic offices and advisory roles, and some have close ties to the private sector. It would be interesting to see more information on how this involvement affects the education offered.

The research reflects the Norwegian Government's Long-term plan for research and higher education and H2020. It is clear from the impact case studies that members of staff are active contributors at conferences with varied audiences (such as the IEEE IEEM conference in the SKS Tankers case and the forums in the Media case, page 1). Seminars and networking also facilitate good dissemination.

8.1.9 Overall assessment

The quality of the institution is evident, in both output and impact. NHH has an action plan for improved gender balance and there is evidence that the balance is now better at junior levels; however, no females hold head/dean posts at NHH. The allocation, structure and advertising of such posts could be investigated. There is a dedicated individual focus on gender equality and efforts have been made in this area, but the distance left to travel is still significant.

8.1.10 Feedback

- The panel calls on the institution to continue its good work on addressing heterogeneity, to address the gender balance, and build structures and quality into the PhD programme.

8.2 Research group: Centre for Empirical Labour Economics

The Centre for Empirical Labour Economics (CELE) is a research group at NHH that has been growing gradually since the late 1990s. It started as a local group built around its current director, Kjell Salvanes, and some PhD students, and later developed by cooperating locally and gradually building up an international network of increasingly high quality. The research group consists of nine listed members, three of whom are PhD students, and nine affiliated researchers. Eighteen CVs and an impact case were included in the evaluation.

8.2.1 Organisation, leadership, strategies and resources

Originally, the idea was that CELE would apply microeconometric techniques to large panel data sets constructed from registers. Later, the focus was on labour markets, employees and firms. This was a quite broad agenda, and the breakthrough in international publishing came when the centre's members began to focus on two research themes: the impact of the family's human capital investments on offspring's labour market outcomes as adults, and the impact on productivity of restructuring firms and industries. CELE is a true success story of a research group built from the bottom up. CELE is currently led by a director.

CELE and its members have been very successful in obtaining external research funding, often including difficult-to-get funding for key infrastructure investments, such as the large data sets and their continuous improvement (servers, data engineers).

CELE is clearly one of the flagships at NHH, and it has consequently been chosen as one of its two Research Centres of Excellence. The centre is undoubtedly an important part of the school's strategy to be an internationally recognised research institution.

8.2.2 Research personnel

PhD students and junior researchers are essential inputs to the production of high-quality research. CELE has been successful in recruiting both these groups internationally, and they appear to be taken well care of. They are provided with very good resources and opportunities to become good researchers and develop their own research agendas. Doctoral students are encouraged to spend a year at one of the centre's excellent partner institutions, but they are not encouraged to cooperate with partners outside academia, which makes good sense, as this often narrows their scope and innovativeness.

8.2.3 Research production and scientific quality

The members of the centre have published over 20 articles in top general economics or top field journals, which is an excellent record for such a small research group. Many universities and research institutions have access to large longitudinal data sets, but cannot document corresponding success in international recognition of their work. One of the reasons for CELE's success is its use of a combination of administrative data and changes in institutions (including policies) to estimate the effects of changes during childhood or parental investments on the outcomes of the children during adulthood. Here, Salvanes and his co-authors have clearly been among the front-runners internationally. More recently, another innovative combination of administrative data and experimental data sets has generated additional research with considerable elements of novelty.

The research by CELE has not only found its way into internationally highly recognised journals, it has also, which is at least as important, been widely cited, which is evidence of its impact. Of the most cited papers by CELE in recent years, four have had more than 500 citations (and ten others have more than a 100 citations). The only potential weakness in the centre's publication record is that its distribution among members is heavily skewed; more precisely, papers with the director, Kjell Salvanes, as one of the key authors make up a large majority of the top publications (and citations). However, the group has been strengthened by one new senior position (Professor Katrine V Løken) and merged with The Choice Lab to form the FAIR Centre for Experimental Research on Fairness, Inequality and Rationality, which was awarded the status of Norwegian Centre of Excellence (SFF) in 2017.

8.2.4 Networking

Centre members participate actively in international conferences, workshops and on the boards of scientific organisations, and also spend time and resources on organising courses and workshops in Bergen (or elsewhere), mainly targeting doctoral students.

The group is still (at NHH) relatively small, but the centre has an equally large number of affiliated researchers, several of whom are internationally leading scholars in their sub-fields of labour economics and actively collaborate with the members of the centre. Cooperation with scholars at the University of Bergen has been extensive and fruitful.

8.2.5 Interplay between research and education

The members of the research group who hold regular positions at NHH teach at all levels, and the group has focused in particular on developing courses in labour economics. The interplay seems to be at a good level.

8.2.6 Societal relevance and impact

It goes without saying that the two research themes of the centre are among the key questions in social science. The research carried out by the members has attracted a lot of media attention, not only in Norway, but also in leading international newspapers and magazines, such as *The Economist*, *Newsweek* and *New York Times*. The case study provided, EARLY, is a case in point.

Furthermore, members of the centre have also been members of government committees, of the boards of Statistics Norway and Research Council of Norway, and have been invited to give advice to several Norwegian ministries.

8.2.7 Overall assessment

This is an excellent research group that also has a documented, excellent societal impact.

Assessment of research group: 5 - excellent

8.2.8 Feedback

- The research group relies heavily on the top publications of its leader. With respect to its continuation, its foundation needs to be broadened.

8.3 Research groups: Law and Economics of Markets and Organisations and Centre for Industrial Organisation

Law and Economics of Markets and Organisations (LEMO) and the Centre for Industrial Organisation (CIO) were established as formal research groups in 2014 to facilitate research collaboration, the organisation of conferences, seminars and teaching. Most members are joint members of the two groups, and the plan to strengthen ties and coordination further blurs the distinction between the groups. Each group has several focus areas. There are 21 listed members in all, and 7 affiliated members associated with other institutions in Norway and abroad.

8.3.1 Organisation, leadership, strategies and resources

Most members whose CVs are included identify their research group identity as both CIO and LEMO. The aims of the groups are classic and broad: excellence in teaching and research in their respective areas of expertise, where the areas of expertise of both groups are not only topical in the academic context, but also useful to policymakers and the business sector. The publications are published in mainstream economics outlets for the most part, with excellent international visibility and high-quality standards. The citations are not as numerous as one might hope, but this may be due to sub-specialty norms. The quality is somewhat varied, with some members producing at the very top of the profession and others publishing at a good field level.

The aims include the facilitation of research collaboration, organisation of conferences, seminars, and teaching in their areas of expertise. The groups' strategy is aligned with that of the institution. Law and Economics colleagues team up on selected outputs, evidencing interdisciplinarity, and membership extends to the disciplines of economics, management and finance. There is little evidence of a lack of intellectual cohesion, despite this spread.

Personal leadership is not as evident as the structures and (implicit) strategies in the report, although the quality of the core personnel is excellent and mentoring clearly takes place.

Norwegian sources contribute significantly to the groups' apparently good resourcing. There is no (explicit) resource strategy linked to the overall strategy, despite the importance of resources to the aims of the groups. The groups receive significant funding from private sources and the Norwegian Competition Authority, which gives it substantial means as well as diversifying funding sources. This information about funding is also indirect evidence of the impact of the work undertaken by the groups.

The main drivers of quality are ample and diverse: the time contributed by the institution to the groups, incentives to publish well (including bonuses), money to support international visits and collaboration, a critical mass of members at all levels, and an active teaching and conference portfolio. The groups have many channels of impact (advisory groups, government experts), some of them longstanding.

8.3.2 Research personnel

Private funding has been used to create an extra postdoc position and a professorship. This directly links funding and the aims of the groups, and is good practice: it enables the salary disadvantage that is usually faced by Europe to be overcome, at least in part. The university provides 40% of the positions for all permanent members except one (20%).

The groups have representatives across the age spectrum, so that mentoring and the longevity of the group are facilitated. On the other hand, all but two permanent members whose CVs were enclosed are male, with one female associate, one female PhD, and one female postdoc. There is little evidence of co-authoring of high-quality work with students (instead, this occurs with adjunct scholars) and little detail about mentoring arrangements. The groups have a significant international presence at all levels. PhDs, postdocs and academic staff are recruited internationally with some success. PhD students can be funded for stays abroad.

8.3.3 Research production and scientific quality

The research groups produce high-quality output; however, they also exhibit some heterogeneity. The quality of the outlets is evidence of the originality of the contributions, and the volume is relatively high for Economics. The groups communicate at many levels, from the highest international academic levels to policy and popular levels.

8.3.4 Networking

The groups exploit collaboration and internationalisation by inviting internationally renowned scholars to give seminars, conferences and workshops. Members also go on prolonged external stays to encourage co-authorship, of which there is ample evidence in the output. The benefit to students is not as clearly stated.

8.3.5 Interplay between research and education

The groups currently align teaching with their focus. Some members do not supervise or co-supervise PhD students, but most do. The courses listed are all in Economics, but many also integrate legal issues and institutions.

8.3.6 Societal relevance and impact

The intellectual focus of both groups is in an area of high public policy interest as well as academic interest, which is evident in the quality of the publication outlets as well as the number of non-academic posts held by members and the funding sources (such as businesses and the Norwegian Competition Authority). The case study (media) is of high quality, and provides evidence of a good level of achieved impact.

8.3.7 Overall assessment

These are two large groups, with a significant volume and quality of output.

Assessment of research groups: 4 - very good

8.3.8 Feedback

- The panel urges the groups to reflect on the spillovers from research to education;
- Remaining heterogeneity should be addressed;
- The gender balance should be addressed;
- The groups should reflect on the benefits of maintaining two separate identities, given the membership overlap.

8.4 Research group: Macroeconomics and Natural Resources

The research group Macroeconomics and Natural Resources (MACRO-RESOURCE) was started in 2015. Its main aim is to focus research, teaching and other activities on the analysis of macroeconomic performance, the management of natural resources, and the integration of natural resources sectors in the economy.

8.4.1 Organisation, leadership, strategies and resources

The research group has a leadership group comprising four members. Funding from the RCN and NHH has made it possible to recruit external postdocs as well as assistant professors to the group. The group also receives external funding from Statoil, which covers one full-time and two part-time positions. The main goal is to become a leading group in the research field of macroeconomics and natural resources, and to publish in leading general interest and top academic field journals. The group organises a regular seminar series featuring presentations by international researchers, as well as PhD workshops for students from the group and other Norwegian researchers.

8.4.2 Research personnel

A total of 15 NHH researchers, including PhD students, work in the field of macroeconomics and natural resources, one of four listed research groups in the Economics department. All four groups are of about the same size in terms of manpower. Recruiting is done internationally. There are a huge number of applicants for each PhD and postdoc position that becomes available. There do not seem to be any particular issues concerning the gender balance or mobility.

8.4.3 Research production and scientific quality

The members of the Macro Resource Group have produced several papers in top-rated journals; some of them are among the top ten publications by the institution, a sign of high quality. However, over the past few years under review, published research by members of the Macro Resource Group on macroeconomics and natural resources has perhaps not been as visible on the international research front as might be expected, given the importance of oil and hydroenergy to Norway and the worldwide admiration for Norway´s singularly efficient and egalitarian management of its natural resources from the outset. Even so, research and training appear to be closely connected in that the courses taught are infused with the research of the academic staff, who regularly hire postgraduate students as research assistants and occasionally co-author papers with them.

8.4.4 Networking

The research staff are well connected with high-quality collaborators across Europe and the United States. The group has co-hosted workshops, e.g. at the World Bank, with researchers from top universities presenting papers.

8.4.5 Interplay between research and education

The group is very actively involved in teaching at many levels. The interplay between research and teaching seems to be very good.

8.4.6 Societal relevance and impact

Two of the ten self-selected top dissemination and knowledge exchange results from the last 5–10 years are in the area of macroeconomics and natural resources. Several members of the group have published articles in *Samfunnsøkonomen*, for example, reaching out to the community of economists and other social scientists, as well as to the general public.

8.4.7 Overall assessment

The research quality is very good.

Assessment of research group: 4 - very good

8.4.8 Feedback

- There is room to further enhance research quality to reach the very top, especially given the potential research ideas stemming from Norway's efficient management of its resources.

8.5 Research group: The Choice Lab

The Choice Lab (TCL) is one of the leading research centres for experimental and behavioural economics in Europe and worldwide. It comprises a core group of NHH researchers and also boasts an outstanding network of international collaborators. Its primary focus is on experimental research, with a portfolio ranging from lab to field experiments. Its publication record and international visibility are outstanding.

8.5.1 Organisation, leadership, strategies and resources

TCL was formed around Alexander Cappelen and Bertil Tungodden, who also function as co-directors of the research group. Other core scholars and PhD students belong to the core group. The centre's international visibility is further enhanced by a network of international scholars, and by a series of internal and external meetings, seminars and research schools held in Bergen, at UC San Diego, and elsewhere. Combined with an international visitor's programme, TCL is a brand that is recognised internationally by scholars in the field and also by PhD students abroad.

TCL has the advantage of being the main research centre at NHH and having the capacity required to increase its international excellence. Its research targets are well aligned with NHH's goals. They are academically rewarding and applicable as policy advice. As such, the research centre is strategically well equipped to generate funding. The infrastructure provided by NHH is adequate, and a full-time research coordinator helps to generate and coordinate activities.

The group has a long and outstanding track record of externally funded projects (e.g. RCN, EU grants). It is in the final round of the RCN selection process for a Centre of Excellence.

NHH also provides internal funding. The infrastructure, including lab facilities and additional support appears to be excellent (mobile lab, IT support), although little detail is provided in the report.

8.5.2 Research personnel

Researchers at TCL are internationally recognised. In particular, the two co-directors are leaders in their field, as evidenced by numerous publications, and activities as editors and facilitators. The international network and regular PhD training activities at NHH and abroad both benefit NHH's PhD students and provide an excellent service to the community by being open to PhD students from other institutions worldwide. As such, the opportunities for PhD students are excellent. This includes the excellent international collaborators. Not much information is given, however, about how the involvement of international scholars is organised.

The recruitment strategy is adequate and is helped by the group's well-established international reputation. The report is silent on gender aspects. The gender structure would appear to have room for improvement.

8.5.3 Research production and scientific quality

The research is largely experimental and investigates individual and group decisions, including moral and risky contexts. The group is also known for making methodological contributions and enhancing the quality of experimental research by linking it with other empirical methods.

TCL has an outstanding track record in publishing at the highest level. It comprises both Economics and general science journals. While the leading researchers are typically involved, the publication record includes all members and junior members of the group.

8.5.4 Networking

The TCL research network is outstanding and visible internationally. It benefits both senior and junior members of the group, but also PhD students that do not belong to TCL. PhD students are required to spend one semester abroad, and support is given for attending international workshops and conferences, though the report does not provide details on the procedures.

The international network allows PhD students to collaborate with external experts inside and outside academia.

TCL also has links with other centres of excellence in Norway and with government agencies. The report is not precise about how these links are pursued and how they benefit junior researchers.

Given that TCL is prominently supported as a research hub at NHH, more details would be appreciated about how the excellence at TCL feeds into other fields at NHH. This includes interdisciplinary research, of which hardly any evidence is provided in the report.

8.5.5 Interplay between research and education

The research group's members are actively involved in teaching at BA, MA and PhD level. Guest lecturers are involved in PhD teaching. The interplay between research and education seems to be excellent.

8.5.6 Societal relevance and impact

The group's output is relevant at the societal level. The case study shows how experimental evidence can feed into an improved system to promote tax compliance. As such, TCL has already made an impact on policy. The strong (field) experimental focus of TCL should enable the interaction with other societal players outside academia to be strengthened without compromising its scientific quality and academic output.

8.5.7 Overall assessment

TCL is exemplary in how a strong research environment can generate international visibility and achieve excellent scientific and societal impact. The group's focus on field and lab experiments in combination with surveys (experiments) can be further strengthened. For future academic success, it can be recommended to improve the complementary theoretical foundation of research.

Assessment of research group: 5 - excellent

8.5.8 Feedback

- The panel encourages TCL to further strengthen its outreach into other fields to serve even better as a hub of excellence at NHH.

9 NINA Norwegian Institute for Nature Research

NINA Norwegian Institute for Nature Research is an independent research institute. It was founded in 1988 following the merger of the research section of the then Directorate for Nature Management and Økoforsk. NINA is an interdisciplinary institute that engages in long-term strategic research and commissioned, applied research to facilitate the implementation of international conventions, decision-support systems and management tools. NINA's head office is in Trondheim, and it has branch offices in Bergen, Lillehammer, Oslo and Tromsø, and five field stations. The institute has approx. 240 employees, of whom seven researchers are included in the evaluation of Economics.

NINA Norwegian Institute for Nature Research							
Units included in the evaluation of economics	- The Social and Economic Research Unit (SER) in NINA			Listed researchers			7
				Listed research groups			-
				No. of researchers in listed research groups			-
Other units of the institution				***Training, recruitment and academic positions***			
					2014	**2015**	**2016**
				No. of PhD graduated at the institution per year			
				Male/Female	-/-	-/-	-/-
R&D expenditures and sources of funding (1000 NOK)				Total per year	-	-	-
				No. of positions announced / No. of qualified applicants per year			
	2014	**2015**	**2016**	PhD positions	0/0	0/0	0/0
Funding of the institution				Post.doc positions	0/0	0/0	0/0
Total expenditures	27 000	28 500	29 500	Permanent positions	1/19	0/0	0/0
Types of funding				***Education***			
Core funding from the RCN	4 600	4 900	5 000	**Study programmes BA level**			
External funding, RCN	8 100	8 600	8 900				
External funding EU	1 400	1 100	600	**Study programmes MA level**			
External funding, other sources	12 900	13 900	15 000	**Other:**			

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

9.1 Economics at the institutional level

NINA portrays itself as Norway's leading institution for applied ecological and natural resources research. The institute primarily carries out commissioned, applied research as well as some basic research. Services are thus provided for industry and the authorities. NINA focuses on multi- and interdisciplinary research, and also participates in European research programmes. NINA has about 240 employees, and it has experienced substantial growth in the last decade, although this applies to a lesser extent to the Social and Economic Research Unit (SER), which has 25 employees.

Within the area of Economics, seven researchers at NINA are included in the evaluation. One impact case study, ten most important publications, and five most important dissemination and knowledge exchange results during the last 5–10 years have been listed.

9.1.1 Organisation, leadership and strategy

NINA has an organisational structure that cuts across scientific disciplines. As such, SER comprises both economists and other researchers. A head of social and economic research has been in place since 2015. This organisational change has facilitated the consolidation of NINA-SER. Scientists work across disciplinary clusters, though no explicit organisational details are given for economists. NINA will endeavour to give more priority to the social sciences in future.

The SWOT analysis openly discusses the potential weakness of low core funding (15%) and the minor success currently enjoyed in EU funding applications. The relatively small number of scientists in SER is clearly a challenge. In particular, the geographical spread could represent a challenge to active cooperation on specific projects, although it could be useful for cooperation beyond NINA, since it has branches in major university cities. The same may apply to its covering many disciplines, as well as methods within disciplines. Economics appears to be concentrated in Oslo, however.

9.1.2 Institutional follow-up of previous evaluations

The previous evaluation recommended making more strategic use of resources for the scientific development of individual researchers, and to link them to the NINA's overall goals. Beyond new reporting policies, no details are given on how successful NINA has been in improving individual scientific quality.

9.1.3 Resources and infrastructure

According to the institutional self-assessment, NINA boasts a functional library, has good competence in GHIS analysis, good communication sections and a Norwegian-language refereed web journal. While all this is laudable, it also highlights the limited infrastructure for internationally visible research of high quality. The expenditure has been relatively stable over the last three years. The decline in funding from EU sources needs to be addressed.

The overall infrastructure provided by NINA appears to be adequate. The SWOT analysis indicates that the geographically scattered structure creates challenges in terms of attractiveness and costs.

9.1.4 Research environment

The report describes the goal of strengthening scientific expertise and increasing publication rates and quality, as well as increasing project funding through the RCN and EU. Secondly, the societal impact is to be strengthened. Beyond pointing to communication and the cooperative culture, no means are described for how to achieve these goals. One aspect appears to be strengthened cooperation with various other research centres. It might be useful to also specify enhancements within NINA.

Overall, the SER group faces strong competition from other research groups working on similar topics. The panel recommends strengthening the focus on interdisciplinary work. SER needs to find a better niche to exploit comparative advantages. At the moment, its international visibility appears to be limited. Strategies need to be developed to improve this standing. For example, a more visible international network and a visiting researcher programme can be recommended. The report gives no specifics on systems for supporting research collaboration or research stays abroad.

9.1.5 Research personnel

Recruitment typically focuses on recruiting researchers who already hold PhDs to permanent positions. NINA has only a few PhD students or postdocs funded through projects. More emphasis should be placed on how to enhance the academic path of these junior researchers. No evidence is given in the report about this. Recruitments at the international level are limited, but might be enhanced through better prospects of research stays or by creating links to doctoral programmes.

The gender balance appears to be satisfactory, with 33 per cent female researchers. A mentorship system for female researchers was implemented in 2010.

The report briefly describes the existence of a formal procedure for recruitment to permanent positions. No details are given on how active the recruitment efforts are.

9.1.6 Research production and scientific quality

There seems to be a strong focus on applied and problem-focused research, including decision-support systems. The focus is on development economics, water management, climate vulnerability, watershed services and forest biodiversity, ecosystem services valuations, and urban blue-green infrastructure. The applied focus could complement more academically oriented research centres. However, the panel wonders about the prospects for PhD students and attempts to also retain academic visibility. The publications are primarily linked to the projects, but do not include top field or more general interest journals. *Ecological Economics* appears to be the main outlet.

Assessment of scientific quality: 3 - good

9.1.7 Interplay between research and education

While there are no formal teaching obligations, several researchers serve as invited lecturers at universities and colleges. The panel agrees with the report's statement that better links to universities through adjunct/visiting professor positions could lead to improved academic visibility and also enhance the publication and career prospects of junior researchers at SER.

9.1.8 Societal relevance and impact

As the focus of NINA-SER is applied research, its knowledge transfer to society and decision-makers appears to be excellent. Dissemination plans are mentioned and included in all projects. The impact case study, however, remains at the descriptive level and only describes how valuation research can assess ecosystem services. It is less clear how knowledge about the nature value in Oslo's surroundings impacts actual policy. However, the valuation research can clearly be of direct use to decision-makers in the urban environment. In this sense, high societal relevance and impact are a strength of the institution.

9.1.9 Overall assessment

NINA-SER is spread across disciplines and methods, all with a rather applied focus. It has a good track record in services to society, but rather limited academic output. To a certain extent this is the result

of the topics covered by the research at the institution. However, to provide junior researchers with better prospects, and thereby also enable NINA to hire excellent PhD researchers, a better strategy seems necessary to link with universities and generate highly visible academic output.

9.1.10 Feedback

- The panel encourages the unit to establish affiliate/visiting positions to link with researchers at universities who will improve scientific quality.
- Furthermore, a more active recruitment strategy appears to be needed to ensure future research output.

10 Nord University Business School

Nord University was founded in 2016, following a merger between the University of Nordland, Nord-Trøndelag University College and Nesna University College. The University of Nordland had been established just four years before, following the merger of four university colleges in the region. The rectorate of the university is located in Bodø, but the university has nine different study locations across the northern part of the country.

Nord University Business School

Units included in the evaluation of economics	Nord University Business School
Other units of the institution	

R&D expenditures and sources of funding (1000 NOK)			
	2014	**2015**	**2016**
Funding of the institution			
Total expenditures	101 875	106 160	126 029
Types of funding			
Core funding from the Norwegian gov.	75 900	78 779	93 492
External funding, RCN	4 778	8 079	7 763
External funding EU	351	134	72
External funding, other sources	20 846	19 168	24 702

Listed researchers	11
Listed research groups	1
No. of researchers in listed research groups	8 (8CVs)

Training, recruitment and academic positions			
	2014	**2015**	**2016**
No. of PhD graduated at the institution per year			
Male/Female	3/5	1/4	0/2
Total per year	8	5	2
No. of positions announced / No. of qualified applicants per year			
PhD positions	6/14	5/16	14/49
Post.doc positions	3/5	4/22	1/5
Permanent positions	5/5	2/2	5/5

Education

Study programmes BA level

Økonomi og ledelse, Eiendomsmegling, Regnskap og revisjon, Informasjonssystemer, Trafikklærerutdanning, Årstudium økonomi og ledelse

Study programmes MA level

Business Management
Energy Management
Master in Business Administration

Other

The institution has recently been through two

				mergers; first between the University of Nordland and Nesna University College from 1.1. 2016, and then between the University of Nordland and Nord-Trøndelag University College from 1.1.2017. Campuses at Bodø, Steinkjer and Levanger.

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

10.1 Economics at the institutional level

The Business School was previously part of Bodø University College, and its four-year educational 'siviløkonom' (civil economist) programme was started in 1985. In 1994, the school was approved for educating students on a six-year programme, and in 2000 for doctoral education. The school was awarded university status in 2011, and since 2017 has been a faculty in the merged institution called Nord University.

Within the area of Economics, eleven researchers at the Business School are included in the evaluation. One impact case study, ten most important publications, and ten most important dissemination and knowledge exchange results from the last 5–10 years have been listed.

10.1.1 Organisation, leadership and strategy

The Business School is one of the five faculties at Nord University, and its organisation is typical for a business school. It is led by a dean, and organised in four divisions. It also hosts two centres of strategic importance. All employees in scientific positions are assigned to one of the four rather broad (interdisciplinary) divisions. The leadership structure seems clear. The strategy sets goals that sound ambitious (to be a leading business school within prioritised areas); however, the particular focus on the Northern region takes some of the edge off its goals. The Business School lists a number of research fields and disciplines within which it aims to maintain its current national and international position. The panel understands how important it is for a business school to be on a good level in the major subjects required for a business degree. Even so, the strategy seems unnecessarily multifaceted and vague.

10.1.2 Institutional follow-up of previous evaluations

Prior evaluations have pointed to the need to strengthen academic competence in analytical topics in economics and business management. The institution has followed up this criticism in a good way by expanding the education and research community (recruiting at all levels within the targeted fields).

10.1.3 Resources and infrastructure

According to the institutional self-assessment, the total expenditure of the Business School has been increasing, from NOK 101.9 million (2014) to NOK 126 million (2016), with costs for research personnel being the fastest growing item. The share of external funding has been stable at around 25% to 26% per year. After government and public sources, funding from the RCN and private Norwegian sources jointly provide just over 10% of the total funding. Where there is room for improvement is the very modest share (less than 1% of the total funding) from international sources.

The infrastructure provided by the university seems to be adequate. The new locations and the geographically scattered structure present challenges in terms of operations, attractiveness and costs.

10.1.4 Research environment

There is a good system in place for supporting research collaboration, e.g. in the form of longer stays at other universities, undertaking editorial tasks, and hosting visiting researchers. Moreover, non-academic partners are involved in research activities in various roles. Participation in international conferences is encouraged through annual research allowances.

10.1.5 Research personnel

The recruitment of doctoral students seems to be going well, with a good number of applicants per year, and a considerable number of international applicants. The doctoral programme also seems to be progressing well, with an average of five graduates per year.

One weakness pointed out in the SWOT analysis is a reduction in staff with high formal competence after the recent merger. Recruitment to permanent positions seems to be difficult, with the number of applicants not exceeding the number of positions in any year. External professors are typically attracted to the Business School by part-time temporary positions. Recruitment is carried out by the Business School's management advertising positions nationally and internationally, i.e. using a rather passive approach. The panel encourages the Business School to put considerably more effort into international recruitment, with faculty involvement and holding interviews at international job markets. Internal qualification for scientific positions is encouraged through a recently introduced competence-raising programme, which is a plus. Evidence indicates that the internal career path works. Finance and accounting are mentioned as specific problem areas in recruitment, which is a global phenomenon, and will therefore require extra effort.

The regulations concerning working conditions at Nord University are currently under revision and one suggestion is that, for professors and associate professors, 5–10% of total working time will be allocated for administration, up to 40–50% of the remaining time for research, and the rest for teaching. Staff can apply for a sabbatical on full pay after working five years in a permanent position. These conditions seem to be attractive.

The Business School has a formalised gender policy. About 60 per cent of PhDs graduates during the last three years were female. Of the research personnel in Economics (11), two are female. Since about half of the researchers seem to be in their fifties or older, the age distribution is alarming. All researchers seem to be Norwegian/Nordic. The panel encourages the institution to put more effort into improving the gender, age, and diversity balance, within the bounds of teaching needs.

NORD has signed an agreement concerning the European Charter and Code, and its implementation in ongoing. The Business School awaits progress on NORD's part.

10.1.6 Research production and scientific quality

There seems to be a strong strategy-influenced push at NORD towards high-quality research, and a bonus system has been introduced to encourage publishing in peer-reviewed journals. The SWOT analysis points to the high *proportion* (about 30 per cent in 2016) of Level 2 publications at the Business School as a strength, but also to the recent reduction in research activity as a weakness. The large number of Level 2 publications (6) among the ten most important publications during the last 5–10 years is also mentioned as a strength. However, all but one of them were written by scholars who do not belong to the research group in Economics that is subject to evaluation by this panel. Roughly 60 percent of the publications at the Business School level target the international academic community, which is somewhat below what many of the institutions in this panel report.

According to the bibliometrics, from 2014 to 2016, the group in Economics produced six Level 2 publications (0.6 publications per person). Most of the research is on transport economics and is published in good field journals. The fact that a few, not recently graduated researchers (in the CVs for the FILT research group, which largely includes the same persons as this institution) report less than the required three publications since 2007 indicates that there is room for improvement in the quantity of research production. On the other hand, some of the researchers are quite active on a steady basis.

Assessment of scientific quality: 3 - good

10.1.7 Interplay between research and education

There seems to be a typical level of interplay between academic research and education at the Business School, especially in relation to students' thesis writing. PhD students are engaged in lecturing activities to develop their teaching skills.

10.1.8 Societal relevance and impact

The impact case indicates that the results of the research on transport economics at the Business School have in several instances significantly influenced policymakers' decisions about ferry fare systems, airport structures and passenger charges. This high societal relevance and impact is certainly a strength of the institution.

10.1.9 Overall assessment

The Business School unit in Economics focuses on transport economics, an area in which it has a good track record with high societal impact, but it is clearly under threat due to the combination of an ageing faculty and recruiting problems. Research production is uneven and leaves room for improvement in terms of both quality and quantity.

10.1.10 Feedback

- The panel finds the institution's overall strategy to be somewhat vague and too multifaceted.
- The institution works well on internal career development, but, to be truly successful, more emphasis on recruitment is needed, especially with the current age structure in mind.
- The panel strongly encourages the unit to switch to a more active international recruitment strategy with greater faculty involvement, in order to ensure future research quality and output, and to promote greater diversity.

10.2 Research group: Transport and Logistics Research Group

The Business School at Nord University has a long history of research on transport economics, and a group in transport and logistics emerged already during the 1990s. In 2004, parts of the research activity were organised as a subsidiary that also carried out contract research. The Transport and Logistics Research Group (FILT) found its current form in 2010. It consists of eight members, who are part of the team of 11 members conducting economic research at the Business School. One impact case study, eight publications, and eight CVs have been included.

10.2.1 Organisation, leadership, strategies and resources

FILT has an informal structure and no budget of its own. The formal leader is the division leader, and above him the dean. The overall goal is to produce research in leading peer-reviewed scientific publications. Projects are either initiated by the researchers or are tendered external projects. One

element of NORD's current strategy is to strengthen its national and international position in the field of transport economics, and this goal is mainly supported by the activities of FILT. Concrete goals are high-quality publications, and to develop and apply knowledge, and disseminate it to society and the business sector.

The targets are clear and fit FILT's track record and capabilities. However, some more formal leadership might facilitate the initiation of large externally funded projects, as well as the coordination of tendered projects / the project portfolio, especially now that externally funded projects are no longer (since 2015) run by a university subsidiary, but are managed by the division/FILT's researchers. The infrastructure provided by NORD seems adequate. The group has a great track record of externally funded projects. The Centre for High North Logistics, for which the Business School was assigned responsibility in 2016, seems to open great possibilities for further expansion and strengthening of the research group and its activities.

10.2.2 Research personnel

Since the researchers at FILT are largely the same persons as in the key group conducting research in Economics at the Business School, the same aspects as described for the institution also apply here.

The recruitment of doctoral students and their progress seem to be working very well in terms of applicants and graduation figures. Positions have also been funded externally, e.g. by local energy companies, and the Norwegian Public Roads Administration. However, FILT probably faces the same problem with recruitment to permanent positions as the institution itself. The panel urges the Business School and FILT to put considerably more effort into active (instead of rather passive) international recruitment, especially with the age structure (an average age of 55 years) of FILT in mind. The gender structure (13% female) and the diversity (zero members from abroad) of the research team also have room for improvement.

10.2.3 Research production and scientific quality

The FILT group conducts research on various aspects of transport economics. The research output consists of reports from contract research, scientific (mainly international) publications and also popular science articles. Most of the scientific papers are published in good field journals, with a few of the researchers also regularly publishing in Level 2 journals. The fact that a few, not recently graduated researchers report fewer than the required three publications since 2007 indicates that there is room for improvement of the quantity of research production. On the other hand, some of the researchers are quite active on a steady basis.

10.2.4 Networking

Research group members are encouraged to make study visits to develop external networks, and there are very good examples of networks with which the group has contacts or is part of. FILT also runs a seminar series. In general, this group seems to have very good networks with its international research field.

10.2.5 Interplay between research and education

The research group's members are very actively involved in teaching, and the Business School also offers special courses that are clearly linked to this unit's research area, such as courses in *Transport Economics and Logistics*, and in *Aviation Management.* The interplay between research and education seems to be exemplary.

10.2.6 Societal relevance and impact

As witnessed by the impressive body of contract research carried out by FILT (and the external funding of NOK 20 million during the period 2012–16), and the impact case provided, the research in transport economics at the Business School has major societal impact. In several instances, it has significantly influenced policymakers' decisions concerning ferry fare systems, airport structures and passenger charges.

10.2.7 Overall assessment

The FILT unit has a strong focus on transport economics, an area in which it has good international networks, and a good track record and high societal impact. It faces challenges due to its age composition. The research production of its current researchers is uneven and leaves room for improvement, in terms of both quality (more Level 2 journals) and quantity.

Assessment of research group: 3 - good

10.2.8 Feedback

- The panel encourages the unit to adopt a more active international recruitment strategy with greater faculty involvement, to ensure future research output and to promote greater diversity.
- A more formal leadership of the project portfolio might be beneficial.

11 Norwegian University of Life Sciences, Faculty of Social Sciences/Faculty of Landscape and Society

The Norwegian University of Life Sciences (NMBU) was originally established in 1897 as a specialised university institute for agriculture. The university is situated at Ås, about 30 kilometres south of Oslo. It was awarded university status in 2005 and, in 2014, it merged with the Norwegian School of Veterinary Science (NVH) and took its current name. It is currently organised in seven faculties. Since 2017, Noragric has been a department in the Faculty of Landscape and Society. Noragric, established in 1986, became a department within NMBU in 2005. Since 2014 and the merger with NVH, Noragric has been one of three independent departments, together with the Department of Economics and Business and the Department of Landscape Planning, in the Faculty of Social Sciences.

Norwegian University of Life Sciences, Faculty of Social Sciences (2014-2016)/Faculty of Landscape and Society (2017-)

Units included in the evaluation of economics	- Department of International Environment and Development Studies, Noragric
Other units of the faculty (institution)	

R&D expenditures and sources of funding (1000 NOK)			
	2014	**2015**	**2016**
Funding of the institution			
Total expenditures	34 436	25 887	23 391
Types of funding			
Core funding from the Norwegian gov.	14 134	15 359	14 594

Listed researchers	6
Listed research groups	1
No. of researchers in listed research groups	9

Training, recruitment and academic positions			
	2014	**2015**	**2016**
No. of PhD graduated at the institution per year			
Male/Female	-/1	1/-	-/-
Total per year	1	1	-
No. of positions announced / No. of qualified applicants per year			
PhD positions	0/0	0/0	0/0
Post.doc positions	0/-	0/0	0/0
Permanent positions	0/0	1/34	0/0
Education			
Study programmes BA level			

External funding, RCN	8 584	4 823	8 523	- International Environment and Development Studies -
External funding EU	0	4 880	3 827	**Study programmes MA level** - International Development Studies - International Environment Studies - International Relations
External funding, other sources	10 283	5 220	3 740	**Other:** Faculty of Social Sciences (2014–2016) Faculty of Landscape and Society (2017–)

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

11.1 Economics at the institutional level

Noragric's ambition is to be 'a leading academic institution in creating and sharing knowledge in international environment and development studies through excellent critical education and research'. Six researchers from the area of Economics are included in the evaluation. One impact case study, the 10 most important publications, and 10 most important dissemination and knowledge exchange results from the last 5–10 years have been listed.

11.1.1 Organisation, leadership and strategy

Noragric is organised in four clusters (Climate, Agriculture and Development; Environmental Governance (ENGOV); Conflict, Human Security and Development; and Rights, Accountability and Power in Development), which have established research groups that are also subject to evaluation by SAMEVAL.

Research and education are intertwined. Several master's programmes and a bachelor's programme are offered. At present, there are three master's programmes – in International Environment Studies, International Development Studies and International Relations. The latter is the most recent. It was initiated together with the Norwegian Institute of International Affairs (NUPI) in 2010, while it is now offered independently by the department.

The organisational structure has undergone several profound changes in recent years. As such, it is somewhat problematic to comment on the plausibility and success of the current structure.

Similarly, the academic profile appears to have been influenced by frequent changes. The focus on international relations is relatively new, but it dates back to earlier studies on developing countries. The department's ambition to develop a globally oriented, interdisciplinary and dynamic research and learning environment is plausible. The department builds on a series of international connections and collaborations that also allow for interesting research projects and funding beyond the RCN and EU.

The major organisational changes in 2016 could pose challenges. While faculties are free to organise themselves, the governance structure appears to have been weakened. No heads of research and education exist anymore at the departmental level. The impact of centralisation on governance and the reportedly complex structure has yet to be seen. The university's primary justification for the reorganisation was to reduce the complexity of the governance structure by creating two levels (central and faculty) and fewer units (seven faculties). The board and leadership saw this as a leaner structure and a more appropriately sized leadership group at the central level. The faculty practices a dual language policy, while Noragric continues to use English as its working language. Given the international orientation and history of the unit, it seems questionable that the department has now

been integrated into a structure with less focus on English language use. If the dual-language approach is further pursued, funds will have to be secured to offer support etc. in both Norwegian and English. Focusing on English appears more reasonable, however, given the further internationalisation of the scientific environment.

11.1.2 Institutional follow-up of previous evaluations

Noragric participated in an evaluation of Norwegian Development Research commissioned by the RCN in 2007. At that time, it had 42 academic staff in development research, and 72% of 162 scholarly publications during the period 2001–2005 were classified as falling within development research. Noragric was recognised as one of the largest environments in the country. While the department has never limited its understanding of development studies to the Global South, after the 2007 evaluation, more attention was devoted to globalisation as a process that links the North and the South, the East and the West in new ways, particularly as regards global issues such as human-environment-security relations, climate change adaptation and mitigation, and international relations.

The department reacted to the report's recommendation of more critical, independent research by successfully strengthening its efforts to obtain research funds through open calls. Noragric has advocated that development research should have a distinct place in Norwegian research policy, not just in aid policy. The department also acted on the recommendation that development research is part of social sciences by prioritising recruitment from the social sciences, while maintaining interdisciplinary competence across ecological and agricultural sciences. To develop its own strength and build capacity nationally and globally, the department continued to expand and deepen its PhD programme and to offer post-doctoral research positions to the extent possible within the bounds of available university and project funds. On the whole, the unit seems to have reacted well to prior evaluations.

11.1.3 Resources and infrastructure

According to the institutional self-assessment, the department covers two-thirds of its expenditure through basic university funding. The remaining budget comes from external sources. The report mentions the importance of research time, which is secured though external income and university allocations. The emphasis on offering researchers enough time to conduct their research is laudable.

Library resources are reportedly underfunded, and rely on cross-financing through external funds. Permanent access is crucial to maintaining high research quality. The overall infrastructure provided by Noragric appears to be adequate.

11.1.4 Research environment

The department is organised in interdisciplinary research clusters and groups. The 'environmental governance', 'rights and power in development' and 'conflict, human security and development' clusters are mentioned in particular.

For environmental governance, theoretical contributions are given particular mention, while empirical research is carried out on natural resource management. In general, the research topics are highly relevant and interesting. Interdisciplinary approaches and methods are demonstrated in the education programmes, and in research projects in particular, and this is reflected in publications. Publication is primarily targeted at high-quality, interdisciplinary journals rather than disciplinary Economics journals. The organisational structure for interdisciplinary approaches remains unclear, as is the methodological mix. The publication strategy appears to focus on field journals, without reaching the

top levels or more general interest journals. While a publication strategy focusing on impact factor within the field is reasonable for established researchers, junior colleagues might benefit from more general recognition.

Given the research environment and the increasingly international recruitment, improvement in academic visibility should be possible in the near future. The excellence of research could be facilitated by offering adjunct/visiting professor positions to international scholars, as the department has done in development studies, political ecology and climate studies.

Scientific quality is promoted in accordance with the department's strategy for the period 2014–2018. It is followed up through a number of specific measures, including: cooperation on research applications and research projects; international networking and cooperation; internal peer review of proposals and publications; department seminars organised by clusters and project teams; university and department funds for research activities and participation in international conferences.; and participation in NMBU programmes supporting career development, including the talent programme.

The report mentions that research goals are pursued through academic debate and initiatives in interdisciplinary clusters. The panel wonders how excellence within the Economics discipline is secured – an issue that is primarily important for junior researchers.

11.1.5 Research personnel

Recruitment is based on competitive hiring processes with the emphasis on permanent associate professor positions. In addition, PhD students and postdocs are funded through projects and basic university funds. PhD students, postdocs and associate professors/professors are recruited though open, competitive, international recruitment. English-language advertisements are used and applications are managed in the standard Norwegian portal. In five recent (2014–2016) recruitments to permanent positions, all candidates were external. The thematic focus depends on strategic areas, staff plans, discussions in committees and educational needs. Considerations include interdisciplinary breadth and cooperation. Decisions to advertise positions depend on sufficient funding being available. The report indicates excellent recruitments in recent years, though no further details are provided on the hiring strategy. The report mentions that the department regularly welcomes visiting PhD students. All PhD projects involve extensive field research funded through the university, the Research Council or projects. Postdoc scholarships include an annual sum for research and other activities. Supervisors and mentors regularly support PhD candidates and postdocs in applying for funding for stays abroad. The budgets of associate PhD candidates from partner institutions in the Global South include field research based at their home institutions. The report does not mention any further measures for offering the institution's own PhD students or postdocs research stays abroad. More details should be provided about how to enhance the academic path of PhD and post-doctoral researchers. Are there any links to international doctoral programmes? Staff collaborate with other international PhD programmes through exchange programmes, guest lectures and by serving as committee members. The gender balance has been improved in recent years. However, the imbalance remains at the professorial level – 3 female, 12 male. NMBU has an Equality Committee to promote gender equality and address other issues of exclusion and inclusion.

11.1.6 Research production and scientific quality

The quantity of publications is high, whereas the quality could be further improved. More internationalisation may help to provide an excellent research environment that also facilitates the career development of junior researchers.

Assessment of scientific quality: 3 - good

11.1.7 Interplay between research and education

The split between research and teaching time for individual researchers appears to be standard. Research and education seem to be intertwined, with research output feeding into teaching activities. Three master's programmes and a PhD programme that includes courses are offered (a Thor Heyerdahl PhD Summer School was offered in recent years). Teaching activities by department members extend to offering courses abroad.

The report mentions research projects that master's students are involved in. The idea of forming teams of supervisors, PhD and master's students is interesting and it would be nice to see more details on how this is organised.

11.1.8 Societal relevance and impact

The focus is on a long-term plan within the area of climate, environment and clean energy. Research on this topic can certainly feed into policy as well as society in the more general sense. Dissemination strategies appear to be standard.

11.1.9 Overall assessment

Noragric has undergone major and frequent organisational changes. This has resulted in a reduced governance structure at the departmental level, which may pose challenges in future. Given the interesting research topics and success in acquiring external funds, further strengthening of academic quality and international visibility is recommended. While the quantity of publications is high, the quality could be further improved. More internationalisation could help to provide an excellent research environment that also facilitates the career development of junior researchers.

11.1.10 Feedback

- The panel encourages the unit to establish affiliate/visiting positions to link up with researchers at universities who can improve the scientific quality.
- Strengthening organisational support at the department level and more discretion in decision-making might be sensible.

11.2 Research group: Environmental Governance

The Environmental Governance (ENGOV) research group was established in 2009, but has a long history of research on environmental issues dating back to 1986. According to the report, ENGOV is the most productive research group at Noragric and among the most productive at NMBU. It takes an interdisciplinary approach to its research on, e.g., environmental governance, climate change, biodiversity loss, natural resources (food, energy, water), ecosystem services, and pollution at the local as well as the global level.

It comprises six permanent members plus PhD students working in the field. Several other researchers are also affiliated, but they are mainly PhD students, and no international, established scholars are affiliated to the group.

11.2.1 Organisation, leadership, strategies and resources

ENGOV's organisational structure is changing due to a reorganisation at NMBU. The future of ENGOV appears to be unclear. It is led by a cluster coordinator elected by members. The research clusters are informal and dynamic rather than having a formal structure, but they were represented on the Department Research Committee and remain fully represented on the Department PhD Committee, as well as partially represented on the Faculty Research Committee, which was established in 2017.

Researchers join clusters as full or associated members and contribute to processes such as reviewing publications and proposals, mandatory seminars by PhD candidates, organising events etc.

The purpose of the cluster is rather vague, according to the report. Its goal is to develop novel insights, publish and maintain a (international) network of researchers. The latter might be facilitated through a formal group setting, while both the former are standard ambitions for researchers.

No details are given on the strategies for achieving these goals. The publication strategies and the accompanying outreach are rather standard. Similarly, it remains unclear what ENGOV contributes to the general NMBU environment. It is stated that the interdisciplinary research is organised through projects involving extensive cooperation with international and national networks. Projects run by ENGOV staff rely to a great extent on external funding. Besides domestic sources, the group has been successful in acquiring funds from international agencies like UNEP and the World Bank.

11.2.2 Research personnel

The cluster does not appear to have discretion to make hiring decisions on its own, nor authority to employ permanent staff, while temporary staff cannot be employed beyond a four-year time horizon. The cluster relies to a large extent on PhD students (see other members). These and postdocs are financed by NMBU and through projects. The report does not provide details on PhD training and internationalisation strategies, though possible stays abroad for PhD students are mentioned.

The department's strategy for the period 2014–2018 bases professional development on creating 'teams with diverse and complementary professional competences and backgrounds and ensure the balance of gender, generations and geographic diversity'. The aim was to reach minimum 40% gender representation among both academic and administrative staff. In 2013, the department had a marked gender imbalance among professors (one female), and it has participated actively in the NMBU programme for gender equality support for new female associate professors. It has strengthened its emphasis on research (or sabbatical) leave as per the norm of every seven years in general, and every five years for female associate professors. Three female staff have attained professorships during the period 2013-2017 (and four men). Two female and three male permanent academic staff have been recruited during the period. The department and faculty promote gender balance among professors, e.g. through gender equality funds. The gender balance leaves room for improvement – no explicit strategy beyond the measures outlined in the institutional self-assessment are mentioned.

11.2.3 Research production and scientific quality

ENGOV conducts research on a variety of aspects of sustainable management of resources. Examples are REDD+, and global commons like water and soil or biodiversity. The research is published in reports to agencies and also in scientific journals. Among economics journals, *Ecological Economics* appears to be the highest ranked journal. The group has also published in top-ranked interdisciplinary journals like PNAS, GEC, Bioscience etc. While this publication output might be reasonable given the interdisciplinary nature of the research, more emphasis should be put on publishing in better ranked economics journals (e.g. top field journals like JAERE, JEEM, and beyond). Overall, the academic impact appears to be rather limited.

11.2.4 Networking

ENGOV has a good national and international network, which is described in the self-assessment. No details are given on how the collaborations work, while we note that it is mainly organised through project work.

11.2.5 Interplay between research and education

The research group members are very actively involved in teaching, and the norm is 40% of time devoted to teaching. Members of the group have led the master's programme in International Environmental Studies for many years, have organised international PhD summer schools and teach regularly abroad.

11.2.6 Societal relevance and impact

The societal impact is potentially large. The expertise of the group in the valuation of ecosystem services and payment schemes, as well as REDD+, is laudable and should lead to large demand from governmental agencies. This is witnessed by the case study, where the valuation of ecosystem services may have had an impact on the strategies of the World Bank and others, even though its direct influence may be hard to measure. The case study lists (too) many publications, but is lacking in high-level academic output. However, the research focus of ENGOV has the potential to significantly influence policymakers' decisions on ecosystem preservation policies. The mix of academic publications with a broad outreach is very good.

11.2.7 Overall assessment

ENGOV is well focused on its research topic. It has good international networks, and a good track record of societal impact. The academic output leaves room for improvement in terms of quality. This may be a limiting factor in relation to attracting PhD students of excellent quality who plan to pursue an academic career. Transmitting knowledge to agencies can be a major selling point of the group, however.

Assessment of research group: 3 - good

11.2.8 Feedback

- In order to have a successful future, the group needs to sort out its relevance and also produce high-level academic output. The threat resulting from the reorganisation at NMBU could also be dealt with more effectively if the academic profile is developed more clearly.

12 Norwegian University of Life Sciences, School of Economics and Business

The Norwegian University of Life Sciences (NMBU) was originally established in 1897 as a specialised university institute for agriculture. The university is situated at Ås, about 30 kilometres south of Oslo. It was awarded university status in 2005. In 2014, it merged with the Norwegian School of Veterinary Science (NVH) and took its current name. It is currently organised in seven faculties. Its School of Economics and Business has its roots in agricultural economics, a field that evolved gradually after 1945 to include more general applied economics, business administration, studies in entrepreneurship and innovation. The current School of Economics and Business was established In 2012, and it is now one of the seven faculties of NMBU.

Norwegian University of Life Sciences, School of Economics and Business			
Units included in the evaluation of economics	- School of Economics and Business		
Other units of the institution			
R&D expenditures and sources of funding (1000 NOK)			
	2014	**2015**	**2016**
Funding of the institution			
Total expenditures	55 661	46 400	51 992
Types of funding			
Core funding from the Norwegian gov.	42 361	44 720	48 582
External funding, RCN	6 559	3 323	6 340
External funding EU	0	580	816

Listed researchers	34		
Listed research groups	3		
No. of researchers in listed research groups	22		
Training, recruitment and academic positions			
	2014	**2015**	**2016**
No. of PhD graduated at the institution per year			
Male/Female	2/3	3/3	2/1
Total per year	5	6	3
No. of positions announced / No. of qualified applicants per year			
PhD positions	3/54 (5)	4/67(11)	4/67 (9)
Post.doc positions	-/-	1/18 (5)	-/-
Permanent positions	6/55(21)	-/-	2/26(10)
Education			
Study programmes BA level - Samfunnsøkonomi (Economics)			
Study programmes MA level - Economics			

External funding, other sources	4 562	5 304	3 011	**Other:** No. of positions: Numbers in () refer to candidates deemed sufficiently qualified and called for an interview.

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

12.1 Economics at the institutional level

The School of Economics and Business is a separate faculty at NMBU and it has a staff of 31. The faculty is governed by a board consisting of the dean, several members of the academic staff and students. Day-to-day decisions are made by an executive committee consisting of the dean and the heads of administration, research and education. The latter two are also chairs of the research committee and the education committee, respectively. The tasks of the different governing bodies in the faculty are clearly defined and appropriate, given its size.

12.1.1 Organisation, leadership and strategies

In addition to the formal organisation of the faculty as a whole, there is an informal organisation for research and education. In the case of the research, the members of the faculty are divided among eight research groups according to research domain. The groups differ in terms of their activity levels and collaboration. Several of the research groups have thematic overlaps and it is therefore debatable whether dividing up the faculty into such a large number of very small units gives added value. It is not clear what objective is served by splitting up the faculty into such research groups.

The School of Economics and Business aims to be a leading institution in research and education in Norway within its profile, which builds on its earlier emphasis on environment, natural sciences, social responsibility and ethics. The size of the faculty might necessitate some modesty in defining ambitions. Nevertheless, within a fairly narrowly defined niche, the university could express more ambition, such as an ambition to be at the international forefront in defined domains. The faculty collaborates with a large range of universities on different continents; hence, a more ambitious aim does not seem far-fetched.

The university's strategies to achieve its aims seem appropriate, focusing on a mix of Norwegian and international academic partners, as well as a target group of national and international non-academic partners with which the university collaborates on research.

12.1.2 Institutional follow-up of previous evaluations

In the 2007 evaluation, the Department of Economics and Resource Management was commended for 'a large number of publications, also in international journals, although not that many in leading journals'. The School responded by making an effort to promote a publishing culture among all staff members, including publication in leading journals, an effort that has led to a significant improvement in the faculty´s research profile. The institution has followed up the previous evaluation by implementing a culture for publishing in peer-reviewed international journals. For the most part, researchers publish their work in field journals, including some leading journals, notably *Science*. The School also responded by, inter alia, recruiting a new professor in this area; the institution appointed a professor in energy economics following a recommendation in the previous review.

12.1.3 Resources and infrastructure

The main resources reported are subscription to the Thomson Reuters data base and the collection of several panel data sets from developing countries, in addition to a data set on job advertisements in Norway. The experimental lab has not been realised yet, but could be a great asset for the faculty. The allocation of resources is not overwhelming, although ICT support and administrative support are not included in the description.

12.1.4 Research environment

There are seminars with visiting researchers, typically twice a month, but there is very little information about the potential contribution of international visitors in Economics to these seminars and to the School of Economics and Business. The school itself seems to have decent international contacts. The panel encourages the institution to actively build stronger international networks and seminar activity.

12.1.5 Research personnel

Researchers are primarily recruited from Norway, but in many cases, they have a PhD from abroad. International recruitment has primarily been of postdocs and 'PhD-research fellows'. None of the researchers hired during the last eight years has a PhD from NMBU.

The recruitment pays due attention to gender aspects. The gender balance within the department is gradually improving.

Personnel, both PhDs and permanent staff, are actively encouraged to spend time abroad at another academic institution. The sabbatical system is also used effectively by permanent staff.

The faculty has a PhD programme that includes courses and the writing of a PhD thesis. The research committee has to approve the individual PhD training programmes. PhD students are also encouraged to spend time abroad, and many do so.

The document makes contradictory statements about the course workload. The self-assessment states that the course workload is evenly divided between the academic staff and suggests a load of 40 per cent of working time, which seems to be a normal course workload. The SWOT analysis, on the other hand, indicates that the teaching load is perceived as high (which is mentioned among the weaknesses).

12.1.6 Research production and scientific quality

There is a goal of 1.3 publication points per researcher, plus one PhD candidate graduating per year. That goal was reached in both 2015 and 2016, meaning that recent average productivity is good. The ten most important publications list journals such as *Science*, *World Development,* and Economics journals such as *Journal of Political Economy*, *European Economic Review*, and *Scandinavian Journal of Economics*. This indicates that the institution is able to publish in good, but generally not top, Economics journals. This is also evidenced by a relative low percentage (17 per cent) of articles in Level 2 journals. The productivity is good overall, with 0.62 Level 2 journal articles per researcher. The fields with the highest production appear to be development, environment, energy, and food economics. An analysis of the publications of individual researchers in Economics at the institution reveals that the production and quality is highly skewed, largely relying on a handful of very productive researchers.

Assessment of scientific quality: 3 - good

12.1.7 Interplay between research and education

The faculty is responsible for five Bsc-Msc programmes and one PhD programme. Apart from student involvement in the research, it is unclear whether the research feeds into the course programmes.

12.1.8 Societal relevance and impact

Although the faculty does not have a specific policy for achieving societal impact, it is clear that it has a tradition of doing more applied research for end-users, such as ministries, interest groups and companies. The faculty involves end-users in research projects from the outset and clearly sees positive spillover effects of this interaction, in terms of both the relevance and uptake of the research.

The impact case on tax policy clearly describes the impact of the research on tax behaviour and shows the different channels through which the impact has been achieved. The impact case on poverty and environment shows the scientific and societal impact achieved by the PEN project, which was coordinated by an NMBU professor, and where NMBU researchers also contributed to data management.

The list of Long-term plan projects provided in the self-assessment does not sufficiently clarify how the projects contribute to the plan. In most cases, only the name and size of the project have been given, but no information is provided on the exact topic of the research.

12.1.9 Overall assessment

This institution is able to produce research of good quality on average, typically published in field journals. However, the research productivity is highly skewed and relies on a few very productive researchers.

12.1.10 Feedback

The institution is encouraged to work on its recruitment policy (making it more international for permanent positions as well), and on incentives for more even research productivity. A strategy for societal impact might be helpful too, given the potential that lies in the very topical research areas at the institution.

12.2 Research group: Food Economics and Policy

The Food Economics and Policy research group at NMBU focuses on food economics and policy research on all parts of the food value chain and covers consumer research, as well as production and markets. Furthermore, part of the research focuses on developing methods for economic research.

12.2.1 Organisation, leadership, strategies and resources

The research profile is particularly broad given the relatively small size of the group, i.e. only five staff and two PhD students. The group's ambition to be among the leading groups in food economics and policy in Norway and to be an interesting partner for researchers in Norway and abroad, is modest. The group could be more ambitious and aim to be leading internationally, although this might require the group to narrow its focus. The group could achieve a more ambitious goal by setting up an affiliation programme with leading groups elsewhere in the world.

The group applies for external funding, mostly from Norway, and to some extent also from the EU and ERA-NET. The amount of external funding seems appropriate given the size of the group.

The institution provides adequate administrative support for the group in its execution of projects and by providing access to the broader set of PhD courses offered by the faculty.

The group is currently led by Frode Alfnes; the leadership is not heavily institutionalised, however, but rotates among staff members. The mechanism for decision-making within the group is unclear.

12.2.2 Research personnel

The group is unbalanced in terms of age and gender given that there are no young researchers (younger than 40) or female members among the permanent staff. The group has a regular inflow of PhD researchers, however, who have access to courses offered by the faculty and can enrol in the PhD programme run by NMBU. Most PhD researchers have spent several months at academic institutions abroad that are leading in the field.

12.2.3 Research production and scientific quality

Several of the permanent members of the group publish a sound number (around two–three) of articles in peer-reviewed journals per year; for some fewer than one per year. The articles submitted to the committee generally target leading international journals in the domain of food and agricultural economics, or interdisciplinary journals that rank highly in terms of their impact factor.

12.2.4 Networking

The group participates in a small number of international research projects. Moreover, its members collaborate with researchers from other groups at NMBU and other universities and institutes (e.g. NIBIO), and with food research institutions on the campus.

The research output of the group also demonstrates the outputs of the interdisciplinary collaborations through articles in interdisciplinary journals.

12.2.5 Interplay between research and education

The group contributes to several BA and MA-level programmes in Business and Economics at NMBU. Moreover, the staff contributes to the PhD course programme. It is not clear, however, to what extent the courses taught by the group cover its research domain. The teaching load of around 40% is sound and suggests a good balance for staff members.

12.2.6 Societal relevance and impact

The self-assessment provides no evidence of societal impact attributable to the research of the group, or of activities aimed at achieving societal impact.

12.2.7 Overall assessment

This is a very small group with a very broad profile in relation to its size, but with overall sound productivity and good research quality. The work of the group is published in disciplinary and interdisciplinary outlets, which is a logical choice given the profile. The group is generally well connected to international research networks.

Assessment of research group: 3 - good

12.2.8 Feedback

The panel recommends taking action to improve the age and gender structure of the group. The panel also recommends the group to strive for critical mass in its profile, either by narrowing the focus, or through closer collaboration with other groups at or outside NMBU.

12.3 Research group: Development, Land and Climate

The research group Development, Land and Climate (DLC) focuses on the intersection of theory and empirical analysis, at the overlap between social and natural sciences that are relevant to development. Topics in this research agenda include land use, climate-smart agriculture and poverty. This is closely aligned with the overall mission of NMBU, which emphasises research on various global challenges.

12.3.1 Organisation, leadership, strategies and resources

Development economics has a long tradition at the Economics Faculty (HH) at NMBU. The current research group on DLC was formed in 1999. Part of the DLC group now seems to have been merged into the newly established Land Tenure Centre at NMBU.

The current status of the group within the faculty and university is unclear. DLC seems to be a group that has emerged over time. It consists of a few senior staff who collaborate closely on joint projects on related themes. The group, while benefitting from some core funding for its senior staff and some of its doctoral students, is mostly funded by large-scale, long-term external funding. These grants help to maintain some impressive data collection efforts and many high-profile outreach activities.

12.3.2 Research personnel

The group includes two full professors, two associate professors, one post-doctoral researcher and around 11 doctoral students. Several PhD students appear to be funded by central NMBU core funds, while others are funded by a large-scale, long-term capacity development programme. With less than one-third female members, the gender balance leaves room for improvement. The group works closely with international research and development institutions, and the work has, for example, included associate positions and sabbatical stays. Hence, mobility appears to be very good.

12.3.3 Research production and scientific quality

The group's research is largely externally financed, with core funded time for core staff apparently helping to (cross-) subsidise the external grants. These grants have helped the team to collect an impressive number of datasets, which, in turn, have helped to define the publication agenda.

The group holds regular informal research meetings and co-hosts a fortnightly research seminar series with another team at NMBU.

Several members of the team publish in very good journals in the fields of development and agricultural economics. The scientific quality of the group as a whole is good.

12.3.4 Networking

The group has extensive research contacts with North American universities and, in particular, many collaborations with international organisations. It also has excellent contacts in selected countries in the Global South, where the group's researchers regularly conduct fieldwork and from where many doctoral students join the group.

12.3.5 Interplay between research and education

There is a development economics master's programme, as a specialisation within the Economics programme at the School of Economics and Business. The group's senior staff also teach basic courses in Economics and in research methodology.

12.3.6 Societal relevance and impact

The team has had repeated, high-profile, research-led policy impacts that have shaped debates in developing countries and at a global level. These impacts were achieved by pursuing long-term research agendas backed by complex data collection efforts that formed the empirical foundations for the policy-relevant research.

12.3.7 Overall assessment

This is a small but highly productive group with a clear and focused research agenda at the interface of social sciences and the environment. The group produces high-quality research findings and its work has high societal impact.

Assessment of research group: 3 - good

12.3.8 Feedback

- It is unclear what exactly the formal status of this group is. Should the university wish to formalise this group, then a long-term recruitment strategy at the senior level would help to ensure that its valuable work can be continued.

12.4 Research group: Energy and Environment

Within the School of Economics and Business at NMBU, the Energy and Environment Group (ENE) is one of eight small units, comprising six permanent members and seven PhD students of a total of 32 permanent staff and 32 PhD students in the eight units at the school.

12.4.1 Organisation, leadership, strategies and resources

As a small group, ENE is simply organised, with the leadership role rotating among the permanent staff members. Its aim is to be at the forefront of research on energy and environmental economics in Norway, and to make significant contributions to international research. The research focus of the group is on efficient and sustainable use of energy and natural resources, with the emphasis on the implications for human welfare and the environment, including climate change.

The 2007 evaluation (see 10.1.2) encouraged the department 'to strengthen its research in energy economics'. Hence, the School and the ENE group have been responsive to earlier recommendations.

12.4.2 Research personnel

The group consists of two professors, two associate professors, one postdoc, one adjunct professor and six PhD students. Several PhD students are funded by central NMBU core funds, while others are funded by a capacity development programme. The group works closely with international research institutions, and the work has, e.g., included sabbatical stays. Hence, mobility appears to be very good.

Recruiting is done for the most part in Norway. There do not seem to be any particular issues with regard to gender balance or mobility.

12.4.3 Research production and scientific quality

The two full professors in the group publish around five articles in peer-reviewed journals per year; while some other members publish fewer than one per year. The articles submitted to the committee generally target leading international journals in the domain of energy and resource economics or

interdisciplinary journals. Students, especially graduate students, are involved in staff research to a certain extent.

12.4.4 Networking

NMBU has exchange agreements with more than 93 universities worldwide, including six Nordic ones, 44 elsewhere in Europe, and eight in North America. In this spirit, the ENE group has extensive collaboration with researchers outside NMBU, both in Norway and abroad, and it is active in national and international networks and at conferences. One of the members of the group has participated in a series of EU projects, but all with rather small funding for NMBU.

12.4.5 Interplay between research and education

Teaching and research linked to environmental issues are an important part of NMBU's core activities. The researchers are actively involved in teaching at various levels. The interplay between research and education seems to be good.

12.4.6 Societal relevance and impact

The ENE group aims to make a difference for policymakers and other stakeholders in the energy sector and in environmental affairs, at home and abroad. Two of the ten self-selected top dissemination and knowledge exchange results from the last 5–10 years were contributed by members of the ENE group. Members of the group have published articles in *Samfunnsøkonomen*, for example, several articles on climate change aimed at engaging economists, other social scientists and the general public.

12.4.7 Overall assessment

This is a research group with good productivity and quality, mainly publishing in field journals.

Assessment of research group: 3 - good

12.4.8 Feedback

- A higher ambition level would be beneficial, especially given NMBU's focus.

13 Norwegian University of Science and Technology, Faculty of Economics and Management

The Norwegian University of Science and Technology (NTNU) was founded as a university in 1996 following a merger between six research and higher education institutions in the Trondheim area. In 2016, it merged with the university colleges in Gjøvik, Ålesund and Sør-Trøndelag, and became the largest university in Norway. NTNU is a comprehensive university with a technological emphasis and with research and training in nearly all disciplines and professions.

Norwegian University of Science and Technology, Faculty of Economics and Management			
Units included in the evaluation of economics	- Dept. of Economics (ISØ)		
Other units of the faculty (institution)	- NTNU Business School (HHS) - Dept. of International Business (IIF) - Dept. of Industrial Economics and Technology Management (IØT)		
R&D expenditures and sources of funding (1000 NOK)			
	2014	**2015**	**2016**
Funding of the institution			
Total expenditures	189 519	194 283	207 084
Types of funding			
Core funding from the Norwegian gov.	155 466	161 147	174 403
External funding, RCN	22 597	21 436	20 486
External funding EU	0	0	365

Listed researchers	17		
Listed research groups	1		
No. of researchers in listed research groups	7		
Training, recruitment and academic positions			
	2014	**2015**	**2016**
No. of PhD graduated at the institution per year			
Male/Female	2/0	5/1	0/0
Total per year	2	6	0
No. of positions announced / No. of qualified applicants per year			
PhD positions	1/9	-/-	4/19
Post.doc positions	-/-	1/13	-/-
Permanent positions	-/-	-/-	2/52
Education			
Study programmes BA level - Economics - Political Economy			
Study programmes MA level - Economics			

External funding, other sources	11 456	11 700	11 830	- Finance **Other:** NTNU established the Faculty of Economics and Management (ØK) 1 January 2017 with units from NTNU, Faculty of Social Science and Technology Management (SVT) and the University colleges in Sør-Trøndelag, Ålesund and Gjøvik. The faculty has four departments of various sizes.

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

13.1 Economics at the institutional level

NTNU comprises eight faculties and the NTNU University Museum. NTNU established the Faculty of Economics and Management on 1 January 2017 based on units from NTNU, the Faculty of Social Science and Technology Management (SVT) and the university colleges in Sør-Trøndelag, Ålesund and Gjøvik. The faculty has four departments, one of which, the Department of Economics, reports to panel 2 and will be the subject of evaluation here. The academic staff consist of 15 persons from Trondheim and 2 from the Department of International Business in Ålesund. The assessment is based on the 15 researchers in Trondheim.

13.1.1 Organisation, leadership and strategy

The eight faculties at NTNU have a similar leadership model, with appointed leaders at all levels. The Faculty of Economics and Management is led by a dean and his/her vice-deans for research, education and continuing and further education. Each department has a department head. All members of the management team are appointed for fixed terms of four years.

NTNU is in an interim phase after the merger in January 2017 and has not yet developed a coherent strategy. Instead, each department relies on strategies developed in the past. As part of the merger, a 'merger platform' was developed, which mentions core values: 'NTNU aims to conduct free and independent development of knowledge and to protect and promote academic freedom. Researchers have the right to freedom in their choice of topic, method, implementation of research and publication of results. Creative, constructive, critical, respectful and considerate are NTNU's core values.' Furthermore, NTNU wishes to spearhead innovation, entrepreneurship and the commercialisation of technology. The Department of Economics developed a strategic plan for 2015–20 (before the merger was on the agenda). which included three priority areas for research: to increase the number of research groups at a high international level, strong involvement in NTNU's strategic research areas, and quality in all research.

The leadership structure seems to be fine, and the ambitions – as so far set out – seem sensible and ambitious.

13.1.2 Institutional follow-up of previous evaluations

In a previous evaluation, the Department Economics was encouraged to further develop its research strategy, including plans to strengthen its international profile, and to improve the quality of the PhD programme, as well as its recruitment policy. Since then, the institution has further increased its publication output in international journals, including two papers in a top-five journal. The number of international co-authorships has increased as well. There is increased focus on research quality, and incentives for it. Further work has also been done on the structure of the PhD programme, as well as on ambitions (ongoing activities) to recruit internationally.

13.1.3 Research environment

There is not much description of the research environment in the self-assessment. The Department of Economics values publication in quality outlets and has an incentive system that favours publication in prestigious journals. Staff are encouraged to participate in conferences and take sabbaticals. All staff regularly give presentations at international conferences in their field. It is possible to apply for one year's research leave every fifth year. There are regular research seminars with international visitors. There are many guest professors at the institution. The research is concentrated in three areas: public economics; natural resources, environmental and development economics; and, finally, macro and financial economics. Given the relatively small size of the department, this concentration in a few areas appears sensible from a research point of view with respect to creating critical mass. With a view to teaching, we might ask whether a broader portfolio would be better.

13.1.4 Resources and infrastructure

Good databases are available at the institution.

13.1.5 Research personnel

The Department of Economics currently has 14 permanent academic staff, 11 professors and 3 associate professors, while another two are on leave. The department also has one professor II, one postdoc and 12 PhD students. Associate and full professors have 45 per cent research time. The department tries to distribute the teaching load evenly among staff. The department's hiring strategy requires the most qualified person to be appointed, regardless of field. The department is open to international hires but at present has no international scholars among its permanent staff (but a process to recruit internationally is ongoing at the time of the self-assessment). Given the size of the department, we applaud the strategy. The SWOT analysis mentions various strengths and weaknesses that appear to be well described and sensible. A crucial issue seems to be to get the merged entities to work as a whole. The majority of researchers are male and the age distribution among permanent staff is relatively uniform.

13.1.6 Research production and scientific quality

During the period 2011–2016, the group has published 2 books, 14 book chapters and 99 journal articles. In total, 26% of the publications are on Level 2 (and this is also true for the journal articles). The group has produced two absolute top publications in top-five journals, and there are a number of top-field and second-tier, general interest journal publications. For a group of this size, this is a strong publication record. There are areas where the group is at the international research frontier. This is also reflected in the high number of Level 2 publications per researcher, 1.14 (cf. Appendix G-2)

Research production is in general on a very good level, and even excellent in certain areas, but it is quite unevenly distributed across individuals.

Assessment of scientific quality: 4 - very good

13.1.7 Interplay between research and education

The self-evaluation emphasises that all courses are taught by lecturers with a PhD who carry out research. The elective courses are related to the department's research fields. While this is good, it also brings into question the rather narrow focus of the department's research. The department itself touches upon the problem when it mentions that there can be problems matching students who want to write their master's theses on areas where the department does not do research.

13.1.8 Societal relevance and impact

The department engages in collaborations with ministries and Norges Bank and uses it research as the basis for writing reports and giving advice. The list of the ten most important dissemination and knowledge exchange results clearly demonstrates that the department is active in this respect and that its research is of societal relevance.

13.1.9 Overall assessment

The researchers in Economics at the institution publish in quite good and occasionally excellent journals, but there is considerable variation between individuals and research fields.

13.1.10 Feedback

The institution is encouraged to work further on an international recruitment strategy, and to strengthen its international networks.

13.2 Research group: Public Economics

The research group Public Economics was established gradually in the late 1980s and was fully established in the mid-1990s. It is based at the Norwegian University of Science and Technology. A number of PhD students and postdocs have been affiliated to the group over the years. The group's establishment was to a significant extent based on external funding, mainly from the Research Council and ministries.

The research group consists of seven members and two affiliated researchers. One impact case, seven papers and seven CVs have been included.

13.2.1 Organisation, leadership, strategies and resources

The research group is led by Professor Jørn Rattsø. The group's main scientific goal is to conduct high-quality research on state-local governments, educational economics and urbanisation. The aim is to publish the research in well reputed international outlets. Furthermore, it aims to conduct applied research of relevance outside academia. The group cooperates with several ministries. Group members have chaired government commissions. It also aims to contribute to the public debate.

The strategy is not very precise as regards management issues and the question of how research projects are chosen and managed, and how resources are allocated internally.

The group raises approximately NOK 10 million per year in external funding, about two-thirds from the RCN and one-third from other public sources, mainly ministries. There are no figures on the funding from NTNU.

13.2.2 Research personnel

Five out of the seven group members have previously been PhD students and/or postdocs attached to the research group. Most PhD students have been recruited from the master's program at NTNU. Increasing external recruiting is an ambition at NTNU. This is welcomed by the panel. Low geographical mobility in Norway has been a hindrance to external recruiting, but this may be about to change. Needless to say, it would be good for the group to expand through external – and even international – recruitment.

PhD students are typically initially involved in ongoing projects and will later develop their own projects. Funding is provided for longer stays (1–2 semesters) at foreign universities and research

institutions, including several leading institutions. PhD students are encouraged to publish internationally, but are also involved to some extent in projects for ministries etc.

The group members' average age is reasonably high. There are six males above the age of 50 and one female aged 40-50. There is thus room for improvement in both the age and gender balance.

13.2.3 Research production and scientific quality

The researchers in the Public Economics group have a good publication volume and quality, and typically publish in field journals, while some publish in top-field journals and most in lower-ranking journals. The group is quite focused on its area and its research has visibility. The group is doing well, but there is still room for improvement.

13.2.4 Networking

The group is well connected nationally as well as internationally. It has collaborators at Norwegian as well as foreign universities and it interacts with ministries and policymakers. A number of conferences and workshops are organised by the group, and international academics are invited. The members benefit from many existing international networks in the area. Funding is provided for participation in conferences, and postdocs are encouraged to go on international visits.

13.2.5 Interplay between research and education

Members of the group are tenured at NTNU and have regular teaching obligations (approx. 45% of their time). They therefore participate in the development of study programmes and courses. Most teaching by the group is in public economics. The researchers are therefore involved in the education of master's students and in PhD training.

13.2.6 Societal relevance and impact

The impact case shows that the research carried out is policy-relevant and has had societal impact.

13.2.7 Overall assessment

The research is on a good level in terms of both quantity and quality.

Assessment of research group: 4 - very good

13.2.8 Feedback

- The panel calls for a more targeted strategy. The age and gender balance of the research group leaves room for improvement.

14 NUPI Norwegian Institute of International Affairs

NUPI Norwegian Institute of International Affairs was established in 1959 by the Norwegian parliament, modelled on the Royal Institute of International Affairs, Chatham House.[26] NUPI is a government agency with special credentials and with core funding from the Research Council of Norway. NUPI carries out research and disseminates findings on global power relations, security policy, development issues, international economics and Norwegian foreign policy. NUPI has approximately 80 employees, of whom five researchers are included in the evaluation of economics.[27]

NUPI Norwegian Institute of International Affairs

Units included in the evaluation of economics	- Norwegian Institute of International Affairs NUPI
Other units of the institution	

R&D expenditures and sources of funding (1000 NOK)

	2014	2015	2016
Funding of the institution			
Total expenditures	95 005	99 569	112 203
Types of funding			
Core funding from the RCN	16 072	15 899	16 166
External funding, RCN	18 850	23 906	27 265

Listed researchers	5
Listed research groups	0
No. of researchers in listed research groups	0

Training, recruitment and academic positions

	2014	2015	2016
No. of PhD graduated at the institution per year			
Male/Female	1/3	1/-	1/1
Total per year	4	1	2
No. of positions announced / No. of qualified applicants per year			
PhD positions	1/22	-/-	-/-
Post.doc positions	-/-	-/-	-/-
Permanent positions	1/117	1/8	2/215
Education			
Study programmes BA level			

[26] http://www.nupi.no/en/About-NUPI/Facts-about-NUPI/NUPI-s-history.

27 NIFU, Instituttkatalogen (Norwegian Institute Directory), version, October 2017, 2017: 91–92, https://www.nifu.no/publikasjoner/institute-katalog.

External funding EU	1 326	440	10 030	**Study programmes MA level**
External funding, other sources	50 940	55 969	46 998	**Other**

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

14.1 Economics at the institutional level

Typically, each European country has one publicly owned research centre that benefits from its proximity to the government of the day and the networks that that entails. In Norway, this role has traditionally been played by NUPI. At the same time, NUPI now raises a large share of its funds through grants and has therefore carried out a major reorganisation to improve its fundraising, project management and research performance. Having said that, Economics is only one of several disciplines at NUPI, which pursues a topical research agenda. It is therefore challenging for this review to comment on its performance in Economics seen in isolation.

14.1.1 Organisation, leadership and strategy

The institute was established in 1959 by an act of the Norwegian parliament. It is 'owned' by the Norwegian Ministry of Education and Research. The institute is governed by a board and a director, and it has full autonomy, although the Ministry appears to set performance targets for the institute. It has about 80 staff members.

The aims of the institute are to conduct research and to provide policy advice. It has three research fields (security, defence and conflict studies; globalisation and development; international order and governance) and, within these fields, six research groups and some cross-cutting geographically defined research centres.

14.1.2 Institutional follow-up of previous evaluations

The institute appears to have been well evaluated recently by the Research Council of Norway. The institute also appears to have undergone a strong transformation in several respects, in terms of both its academic research profile and its internal management processes and policies. This seems to have strengthened its performance, as reported in the self-assessment.

14.1.3 Resources and infrastructure

The institute is largely grant-financed, with 15 per cent of its revenue being provided by the Government of Norway as a core grant.

According to the self-assessment, the equipment and infrastructure appear to be sufficient.

14.1.4 Research environment

It seems that the institute has initiated several good policies around internal feedback, quality control and peer reviews. An external evaluation (according to the self-assessment) notes that 'Its users are relatively content'. This appears to refer to the research staff.

14.1.5 Research personnel

The institute recruits internationally and across multiple disciplines. Given its topical research agenda, little evidence was provided on the disciplinary composition of its staff.

The institute seems to have started to improve its gender balance, increasing the share of female researchers from 20 per cent to 40 per cent during the period 2012–2016.

14.1.6 Research production and scientific quality

The top-ten Economics articles provided by the institute for this review were mostly written by four researchers at the institute. This suggests a very high concentration of economic expertise capable of publishing journal articles. The papers appeared in good field journals such as *World Development, Research Policy* and *The World Economy*.

Based on the data provided, the economists at NUPI appear to mostly publish journal articles and predominantly in English, though some book chapters and some Norwegian publications are also produced. According to the bibliometrics, the overall scientific impact (in terms of field-normalised citation scores) of the researchers in Economics at NUPI is below the Norwegian average in Economics. The mean number of papers in Level 2 journals in Economics is 1.0, which is good.

Assessment of scientific quality: 3 - good

14.1.7 Interplay between research and education

This does not apply to this institute except that it hosts some master's and doctoral students. The role of doctoral students could perhaps be revised and strengthened. The self-assessment talks somewhat technocratically about 'producing' PhD students.

14.1.8 Societal relevance and impact

As with many social science research units, the institute's research agenda is highly relevant in itself. While there is a lot of media engagement, i.e. dissemination activities, the ultimate impact (which is not the same as dissemination) seems to be the sum of many smaller contributions. The institute's agenda as a whole does not appear to contribute to new insights or stimulate public debates on its own – but the institute does appear to respond to requests for comments. Perhaps the societal contribution could be thought through and raised to another level as a strategic project.

It is not clear whether the institute also fulfils the function of Chatham House by providing a forum for open or behind-closed-doors policy debates.

14.1.9 Overall assessment

From the information provided, NUPI appears to be doing increasingly well. It seems to be implementing all the change processes required to improve its management and indicators. Yet the information provided does not help us to judge the overall quality of the research produced from a disciplinary point of view.

14.1.10 Feedback

- There is room for improvement as regards scientific quality.
- The role of doctoral students could perhaps be revised and strengthened.
- The 'owner's' role in setting the research agenda remains somewhat unclear. Given the low level of core funding provided, it is unclear whether a strong, quite operational role for the owner is best suited to the production of high academic quality. The Government may find that NUPI would produce higher quality academic work and even more strategic policy advice, if the Government reduced its influence on the institute's research agenda. We recommend that this option be considered in the interest of long-term academic quality.

- Finally, we have a recommendation for national policymakers in Norway, namely to consider how to create a level playing field between university-based and institute-based research groups. The latter face a more uncertain and challenging funding environment despite their often highly relevant research agendas.

15 UiT The Arctic University of Norway, Faculty of Biosciences, Fisheries and Economics

UiT The Arctic University of Norway was founded in 1972 as a comprehensive university for the Northern Norway. Over the past ten years, the university has undergone several mergers with university colleges in the region, and it is now the third largest university in Norway. The Faculty of Biosciences, Fisheries and Economics has its historical roots in fisheries economics. To boost fisheries economics and other fields of fisheries knowledge, a university college for fish and the fishing industry, then named Norges fiskerihøgskole (The Norwegian University College of Fisheries) was founded in 1972. Its section in Tromsø became linked to the new University of Tromsø. In 1988, the university college was reorganised and fully incorporated in UiT. During the last 30 years, the college has undergone a series of reorganisations. The current Faculty of Biosciences, Fisheries and Economics comprises three departments, of which two are part of this evaluation: the Norwegian College of Fishery Science and the School of Business and Economics.

UiT The Arctic University of Norway, Faculty of Biosciences, Fisheries and Economics

Units included in the evaluation of economics	- The Norwegian College of Fishery Science - The School of Business and Economics
Other units of the faculty (institution)	- Dept. of Arctic and Marine Biology

R&D expenditures and sources of funding (1000 NOK)			
	2014	**2015**	**2016**
Funding of the institution			
Total expenditures	370 984	390 383	449 663
Types of funding			
Core funding from the Norwegian gov.	251 677	291 575	343 001

Listed researchers	18
Listed research groups	1
No. of researchers in listed research groups	16

Training, recruitment and academic positions			
	2014	**2015**	**2016**
No. of PhD graduated at the institution per year			
Male/Female	1/1	1/0	2/0
Total per year	2	1	2
No. of positions announced / No. of qualified applicants per year			
PhD positions	¼	3/9	2/1
Post.doc positions	½	0/0	0/0
Permanent positions	¼	1/3	2/4
Education			
Study programmes BA level			

External funding, RCN	35 673	47 184	44 942	- Economics - Fishery and aquaculture science
External funding EU	3 033	7 794	5 595	**Study programmes MA level** - Economics
External funding, other sources	60 024	60 177	54 545	**Other**

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

15.1 Economics at the institutional level

The Faculty of Biosciences, Fisheries and Economics at UiT The Arctic University of Norway has developed rapidly through mergers and reorganisations in recent years.

15.1.1 Organisation, leadership and strategy

In 2009, the original Norwegian College of Fishery Science (NCFS, est. 1972) became a department in the new Faculty of Biosciences, Fisheries and Economics, and a new School of Business and Economics at UiT was added to the mix. The Center for Economic Research (est. 2015) serves as an umbrella for several research sub-groups. Economic research at NCFS is concentrated in the Marine Resource Economics group that specialises in fisheries management, with the emphasis on sustainable use and development. The group (five professors, one postdoc and six doctoral students) aims for publication and conference participation in the international arena. Six research areas have priority: behavioural economics; industrial organisation; migration and labour markets; marine ecosystem services; fisheries management; and soon also aquaculture economics.

15.1.2 Institutional follow-up of previous evaluations

At the time of the previous evaluation, the unit of analysis was the Department of Economics and Management at the Norwegian College of Fishery Science, then a faculty at UiT. The economists evaluated in the current evaluation work at the new Fisheries College and Business School. The evaluation was positive, emphasising the fact that the department was branching out into new areas. On the negative side, the panel noted that little work had been published in the best journals (Level 2). One suggestion was to expand national and international cooperation. Since then, emphasis has been placed on recruiting international scholars with an established network, and a reward system for publishing has been introduced. More weight has also been given to building networks with the EU and the collaborative project University of the Arctic.

15.1.3 Resources and infrastructure

With an academic staff of five (three professors, two associate professors), the local research environment is small, well below what would constitute a critical mass. Even so, it is well connected through ambitious digital connections to libraries, in addition to excellent computing facilities. External funding constitutes a significant addition to regular state financing, and helps to support research assistance, data collection and visits by foreign scholars. A special unit helps academic staff with applications for research grants.

15.1.4 Research environment

Researchers work closely with colleagues at the University of Life Sciences (NMBU) at Ås who specialise in some of the same areas, and also with Scottish and other European colleagues.

15.1.5 Research personnel

Open positions are advertised internationally as well as in Norway. International mobility is encouraged, e.g. through sabbaticals for permanent staff. PhD students are encouraged to undertake longer visits abroad. There is a gender policy in place, and a project to enable more women to qualify for the professorial level. The gender balance is fair.

15.1.6 Research production and scientific quality

The faculty has published its research in a number of refereed academic journals, mostly specialised field journals of good and occasionally very good quality, rather than high-ranked general journals. The research group in industrial organisation often publishes in Level 2 journals. UiT's sabbatical system (which requires each researcher to earn 0.7 publication points per year) encourages researchers to produce at least one Level 1 journal publication per year, instead of pursuing a high-risk strategy that aims for top-ranked general journals. The bibliometric analysis indicates that the economists here produced 8 Level 2 journal articles from 2014 to 2016 (0.48 per person).

Assessment of scientific quality: 3 - good

15.1.7 Interplay between research and education

Teaching seems to be well connected with research through widespread use of models and examples taken from, e.g., the teachers' own research, especially at the master's level, and through student involvement in research projects.

15.1.8 Societal relevance and impact

Social relevance and impact are difficult to judge based on the information provided. The unit briefly lists some dissemination activities in the form of books, media contributions and work on committees, but no impact case is submitted.

15.1.9 Overall assessment

There is room for improvement in research productivity as well as quality. The percentage of Level 2 journals (20% during 2014 to 2016) and the productivity per person are rather low.

15.1.10 Feedback

In view of its small size, the faculty may wish to consider whether its six main areas of specialisation are sufficiently closely connected to create efficient cross-fertilisation.

15.2 Research group: Economics at BFE

The research group Economics at BFE consists of resource economists working at the Norwegian College of Fishery Science (NCFS) and economists from the School of Business and Economics. The documents and background material suggest that the group under evaluation does not actually operate as a compact unit, but has been constructed for the purpose of this evaluation.

15.2.1 Organisation, leadership, strategies and resources

The School of Business and Economics and the Marine Resource Economics group have different leaders and different thematic priorities, as shown by their activities and profile. Hence, this group seems to lack overall coherence and leadership.

The sub-groups at the School of Business and Economics and Marine Policy are led by Østbye and Aanesen. The two groups seem to act as two units that make their own strategic research decisions.

The research profile of the School of Business and Economics is a more general one and does not focus on a specific research domain. The group does not have external funding for its projects, as evidenced by the material provided.

However, the Marine Resource Economics group has positioned itself in a niche that follows logically from its location within NCFS. The group is also visible internationally, since it is successful in finding EU funding for its research in the domain of fisheries.

The strategy of the group seems to be well-aligned with the strategy of the home institution. The resources and infrastructural support provided by the university seem to be adequate.

15.2.2 Research personnel

The whole group has a balanced composition in terms of age and gender. Moreover, the group as a whole is able to benefit from a sound policy for career development. The supervision and mentoring of PhD candidates and young research fellows is well organised. PhD candidates are recruited internationally and are encouraged to spend time abroad. The PhD candidates enrol in a PhD programme run by the university.

15.2.3 Research production and scientific quality

The group publishes in disciplinary and interdisciplinary journals, with the latter mainly comprising environmental economics and marine research journals. The publication output reflects the interdisciplinary research collaborations of the MRE group. Overall, the vast majority of the researchers publish less than one journal article per year, with the notable exception of a few researchers whose output is far higher. The quality of the journals targeted by the group in the list of the most important publications is appropriate overall, i.e. they are generally the more important journals in the domain.

15.2.4 Networking

The Marine Resource Economics group collaborates more intensively with NMBU, and also with other universities abroad through its participation in EU research projects. The School of Economics and Business also has links to researchers abroad, but seems not to be connected to any EU-funded project.

15.2.5 Interplay between research and education

The group contributes to several BA and MA level programmes, with the main contributions being to Economics, with smaller contributions to Fishery Science and International Fishery Management at

UiT. Moreover, the staff contribute to the PhD course programme in Economics. The research of the group appears to be well-aligned with the courses taught by the group. The teaching and supervision load of around 48% is sound and suggests a good overall balance for staff members.

15.2.6 Societal relevance and impact

The group actively endeavours to achieve societal impact by involving non-academic partners, such as ministries and representatives of private enterprises, in its research. The self-assessment does not provide information about the actual impact achieved through the research of the group.

15.2.7 Overall assessment

The groups evaluated here are two separate groups, each with its own leadership and thematic priorities. The Marine Resource Economics group has a sound balance between disciplinary and interdisciplinary research and is well connected to international research networks. The School of Business and Economics has international connections, but lacks internationally funded research projects. For both groups, there is scope for improvement in research productivity and quality.

Assessment of research group: 3 - good

15.2.8 Feedback

- Given the relatively small size of both groups and their close vicinity, they might both benefit from closer collaboration. Such collaboration would require joint leadership and the development of a joint strategy.

16 Uni Research Rokkan Centre

Uni Research Rokkan Centre is a subdivision of Uni Research Ltd, which was founded in 1986, initially as a foundation owned by the University of Bergen. Uni Research Rokkan Centre is located in Bergen. The centre combines publicly funded scientific research and commissioned research.[28] From January 2018, Uni Research is part of the research company NORCE. NORCE consists of the research institutes Uni Research AS, Christian Michelsen Research AS, International Research Institute of Stavanger AS, Agderforskning AS and Teknova AS.

Uni Research Rokkan Centre

Institutional level (faculty)

Units included in the evaluation of economics	- Uni Research Rokkan Centre
Other units of the institution	

R&D expenditures and sources of funding (1000 NOK)

	2014	2015	2016
Funding of the institution			
Total expenditures	44 400	49 000	52 900
Types of funding			
Core funding from the RCN	4 272	4 699	5 083

Research area: economics

Listed researchers	6
Listed research groups	1
No. of researchers in listed research groups	6

Training, recruitment and academic positions

	2014	2015	2016
No. of PhD graduated at the institution per year			
Male/Female	-/-	-/1	-/-
Total per year	-	1	-
No. of positions announced / No. of qualified applicants per year			
PhD positions	-/-	-/-	-/-
Post.doc positions	-/-	-/-	-/-
Permanent positions	1/10	-/-	-/-
Education			
Study programmes BA level			

[28] Since 2003, Uni Research has been organised as a non-profit company, where the university is the main shareholder with 85 per cent of the shares. Uni Research has 440 employees in the fields of biotechnology, health, environment, climate, energy and social sciences. NIFU, Instituttkatalogen [Norwegian Institute Directory), version, October 2017, 2017: 139–140, https://www.nifu.no/publikasjoner/institute-katalog.

External funding, RCN	23 640	23 265	24 933	-
External funding EU	1 345	800	1 164	**Study programmes MA level** -
External funding, other sources	16 332	19 281	23 079	**Other**

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

16.1 Economics at the institutional level

Uni Research Rokkan Centre describes itself as a multidisciplinary research institute that employs 65 researchers and has a budget of approx. NOK 50 million. Only six researchers are listed in the area of Economics.

16.1.1 Organisation, leadership and strategy

The centre is led by a research director. It relies almost exclusively (92 per cent) on external funding. The strategy is therefore focused on raising external funds. The research undertaken is mostly applied research. The centre's strategy is to develop into a leading national research institute and be on the frontline internationally. Furthermore, the centre wishes to be an attractive collaboration partner for others and contribute to knowledge in society. It pursues a multidisciplinary strategy where different topics of relevance to society are investigated. The topics are high on the current political agenda, such as public sector reforms, gender balance, migration, health services, welfare state issues and so forth. The strategy does not include basic research.

16.1.2 Institutional follow-up of previous evaluations

N/A due to lack of information from the institution.

16.1.3 Resources and infrastructure

The centre relies almost exclusively on external funding. Adequate research infrastructure seems to be in place.

16.1.4 Research environment

The research environment is a bit difficult to assess from the self-assessment. The number of economists is small, only five full-time researchers. The research is described as multidisciplinary. There is no description of seminars or conferences etc. The group collaborates with the University of Bergen, NHH and other groups; and it collaborates nationally and internationally.

16.1.5 Research personnel

The centre employs 65 researchers from various fields, including six economists. It does not educate PhDs, but employs PhDs in research projects. They are enrolled at the University of Bergen. On average, researchers spend 75 per cent of their time on research and the rest on securing projects and administration. Most researchers are recruited from the University of Bergen, but also from other Norwegian universities.

16.1.6 Research production and scientific quality

During the period 2011–2016, the whole group has published 1 book chapter and 35 journal articles; 43 per cent of the journal publications are in Level 2 journals, with 1.33 Level 2 publications per researcher (cf. Appendix G-2). However, we do not have figures for the six economists. Looking at the journals in which the group has published, there are not many Level 2 Economics journals on the list. Among the 10 most important publications submitted for review, there are two top field publications (with researchers from the University of Bergen) and some second-tier field and general interest publications. The scientific quality is good. The group does publish in good, but not excellent, international journals.

Assessment of scientific quality: 3 - good

16.1.7 Interplay between research and education

There is no teaching at the centre.

16.1.8 Societal relevance and impact

The centre's research is almost exclusively based on external funding and it has a very applied flavour. In many cases, the research appears to be relevant from a societal point of view. No impact case has been submitted. The centre has produced a number of research reports that appear to be relevant, and, in this sense, the research has impact. The research carried out does seem to have relevance and presumably some impact.

16.1.9 Overall assessment

The research is socially relevant and quite applied. Some of it also has a distinct multidisciplinary flavour. The best research is published in international journals, but there are no top publications. The productivity does not appear to be very high, which is not surprising in view of the small size of the group. Taking into account that the research is not exclusively economic, and therefore should not be judged from a strictly economic perspective, it is our assessment that the research is good overall.

16.1.10 Feedback

- The group of economists appear to be quite small given the focus area of the institution.

16.2 Research group: Welfare and Health Economics

The research group Welfare and Health Economics was established quite recently, in March 2012. It now includes six listed members. Nine additional associate members from various universities are affiliated. The original members were associated with the research programme 'Health Economics Bergen' financed by the RCN during the period 2001–2011. All members hold a PhD, while three are research professors.

16.2.1 Organisation, leadership, strategies and resources

The research manager is Karin Monstad. The group describes its interaction as informal, comprising project activity and group meetings where the focus is on relevant calls for proposals and project development.

The aim of the group is to conduct empirical research of a high standard that is publishable in highly regarded international journals. Whereas the empirical method and data requirements depend on the

question at hand, much research is done using quantitative methods on administrative data, where the group finds that Nordic researchers have an absolute advantage.

The group involves users and stakeholders and finds that this two-way exchange benefits both research and the users and stakeholders. The strategic aim is to contribute to the broader strategy of the Uni Rokkan Centre and to be a nationally leading research institute within the social sciences and humanities, to be an attractive partner for national and international research cooperation, and to contribute to knowledge about social organisation. It has a particular focus on healthcare and home care services, as well as welfare state issues.

It is a strategic goal to secure more long-term, and also international, funding. The group has participated in several Horizon 2020 applications. The centre is predominantly based on external funding. It cooperates with UiB in various ways, both on databases, library facilities and infrastructure in general.

16.2.2 Research personnel

The group applies to the RCN for PhD or postdoctoral positions as an integral part of research applications. Researchers can also be recruited through Uni Rokkan Centre. PhD students are typically enrolled at the University of Bergen. The group does not appear to have ambitions to recruit from other international (or national) institutions. Of the six listed members, two are female and four are male.

All full-time staff (five in total) have a PhD from Bergen (either NHH or UiB). One part-time employee (50%) has a PhD from the Lund University in Sweden. In this sense, mobility seems to be limited and it appears that the group could benefit from opening for more international (as well as other Norwegian) recruitment. The group's average age is relatively high; five are in the age group 50–59 and one in the age group 30–39.

16.2.3 Research production and scientific quality

The researchers in the group have a good publication volume and quality, and typically publish in field journals or second-tier general interest journals. Among the submitted publications, one is in a top field journal, while the rest are in field and second-tier journals.

16.2.4 Networking

The group organises conferences and workshops. Together with the University of Oslo and the University of Bergen, the research group hosts the annual National Conference on Health Economics, participants at which come from the health care sector, ministries and pharmaceutical firms and hospitals. The group collaborates with other groups at various international as well as Norwegian universities.

16.2.5 Interplay between research and education

The group's researchers have no teaching responsibilities, but some are affiliated to the University of Bergen.

16.2.6 Societal relevance and impact

The impact case concerns an experiment in voter mobilisation. While interesting in itself, it is somewhat unclear how large a societal impact the experiment had. While voting is an ingredient in a welfare state, it is perhaps also rather unclear whether it relates directly to the main strategic focus of the group, which the group itself states to be healthcare and home care services, as well as welfare

state issues. That said, the group's applied research does appear to be of relevance to society and some of it sheds light on important and policy-relevant questions.

16.2.7 Overall assessment

The research is on a good level in terms of quantity and quality.

Assessment of research group: 3 - good

16.2.8 Feedback

- Recruitment seems to be very local, and a more international orientation may be recommendable.
- Furthermore, while the quality of the group's research is good, there is still room for improvement in terms of producing top-field publications.

17 University of Agder, School of Business and Law

The University of Agder (UiA) was founded in 2007, when Agder University College was awarded university status. The former University College of Agder had been established in 1994, when six regional colleges merged into a university college. The university currently has two campuses in Southern Norway, in Kristiansand and Grimstad. The university has seven faculties, one of which is the School of Business and Law. The school is divided into three departments.

University of Agder, School of Business and Law

Units included in the evaluation of economics	- Dept. of Economics and Finance - Dept. of Management - Dept. of Work-life and Innovation
Other units of the faculty (institution)	- Dept. of Law

R&D expenditures and sources of funding (1000 NOK)			
	2014	**2015**	**2016**
Funding of the institution			
Total expenditures	64 054	77 142	85 239
Types of funding			
Core funding from the Norwegian gov.	57 461	63 741	75 462
External funding, RCN	3 917	2 048	2 120
External funding EU	0	0	0

Listed researchers	20
Listed research groups	0
No. of researchers in listed research groups	0

Training, recruitment and academic positions			
	2014	**2015**	**2016**
No. of PhD graduated at the institution per year			
Male/Female	1/-	1/-	2/-
Total per year	1	1	2
No. of positions announced / No. of qualified applicants per year			
PhD positions	0/0	3/8	0/0
Post.doc positions	0/0	0/0	0/0
Permanent positions	0/0	0/0	0/0

Education

Study programmes BA level

- Business administration
- Law
- Marketing and management
- Tourism management

Study programmes MA level

- Business administration
- Accounting and auditing
- Innovation and knowledge development

External funding, other sources	8 629	13 648	9 164	**Other :** The UiA School of Business and Law was established as a faculty with effect from 01.01.2015, earlier a part of the faculty of Economics and Social Sciences.

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

17.1 Economics at the institutional level

The School of Business and Law at the University of Agder combines business studies, economics, law and related disciplines.

17.1.1 Organisation, leadership and strategy

The School of Business and Law consists of four departments, each with a head of department. Overall leadership is provided by a dean and a faculty director and a wider faculty board. There are a number of consultative processes and regular meetings to ensure appropriate information flows.

The faculty adopted a new strategy for the period 2017–2020 in late 2016. Different aims are formulated for the domains of research, education, outreach and work culture. The specific aims for the research domain include a commitment to research publications such as journal articles across all research centres, an improvement in the quality of research, and increased third-party funding of research.

17.1.2 Institutional follow-up of previous evaluations

Since the last evaluation in 2007, the school has changed its recruitment policy to focus on full and associate professors as a way of improving research quality – and it has also committed to improving publication quality.

17.1.3 Resources and infrastructure

About 80–90 per cent of all funding for the school is provided by the Government through a core grant, while around 3 per cent of its income comes from the Norwegian Research Council.

17.1.4 Research environment

While the school does not offer a PhD programme in Economics, it enables students to pursue a doctorate in Economics by collaborating with another institution on the necessary coursework. A separate PhD committee has been established to support policy and practice in this area.

According to the self-assessment, the school maintains three research centres with a focus on economics, namely (i) competition, networks and institutions, (ii) health economics, and (iii) real estate economics. They appear to be rather small.

17.1.5 Research personnel

The Economics Department has graduated four PhD students in the last three years, all of whom were men.

The gender balance in the Economics Department is very unequal. As there have been no recruitments in the last three years, there have been few opportunities to address this imbalance during this period.

17.1.6 Research production and scientific quality

According to the list of recent important publications in Economics in the self-assessment, the school has published in a number of field journals in the last ten years. The school has published between 8 and 15 Level 2 publications per year in the last four years.

Data provided by Damvad Analytics indicate that the vast majority of publishing researchers in Economics are men (only 2 of 17 listed staff are female). Publications are mostly in journals (53 papers) and in books (28 chapters). Only 15 per cent of the journal articles are published in Level 2 journals (0.47 per researcher). Correspondingly, only just over half of all papers are published in English. The mean number of Level 2 journal articles per person in Economics is 0.32, which is a low mean value in the national context. This is partly due, however, to the overall publication strategy at the School of Business and Law, which is to publish in high-ranking journals as described in the ABS Journal Guide at level 4*/4 and 3. Since the correlation between ABS level 3 and DBH level 2 is semi-strong, this may explain the low Level 2 percentage.

Assessment of scientific quality: 2 – fair

17.1.7 Interplay between research and education

The school describes some efforts to involve students in research projects. Teaching is clearly a core activity at this institution. We give the institution credit for involving students in research.

17.1.8 Societal relevance and impact

There are some links to local and regional firms and some members of staff engage in policy advisory activities.

17.1.9 Overall assessment

Since its recent establishment, the school appears to have introduced a number of relevant policies and practices to support better research, including in Economics. However, despite these laudable intentions, there are number of significant structural challenges that will make it difficult to achieve this aim quickly, or even at all. It seems that the majority of the funding is geared towards teaching and allows little scope for new recruitment, for example.

17.1.10 Feedback

- It remains unclear whether the university, despite the best intentions, has sufficient research capacity in Economics to reach a critical mass for good quality research. Its comparative advantage remains mostly in teaching.
- This also has implications for its doctoral training. The university may wish to consider discontinuing its doctoral training in Economics.

18 University of Bergen, Faculty of Social Sciences

The University of Bergen (UiB) was established in 1948, but its origins can be traced back to 1825 and the founding of Bergen Museum. The University of Bergen is a comprehensive university, organised in seven faculties. In 1970, the university established a Faculty of Social Sciences, including a complete higher education in Economics. The faculty currently consists of seven classical social science departments, one of which is the Department of Economics.

University of Bergen, Faculty of Social Sciences

Units included in the evaluation of economics	- Dept. of Economics
Other units of the faculty (institution)	- Dept. of Administration and Organization Theory - Dept. of Comparative Politics - Dept. of Geography - Dept. of Information Science and Media Studies - Dept. of Social Anthropology - Dept. of Sociology

R&D expenditures and sources of funding (1000 NOK)

	2014	2015	2016
Funding of the institution			
Total expenditures	315 308	325 321	340 822
Types of funding			
Core funding from the Norwegian gov.	269 519	270 769	275 476
External funding, RCN	31 451	34 521	36 741
External funding EU	1 681	6 656	7 525
External funding, other sources	12 646	13 377	21 080

Listed researchers	54
Listed research groups	3
No. of researchers in listed research groups	29

Training, recruitment and academic positions

	2014	2015	2016
No. of PhD graduated at the institution per year			
Male/Female	0/1	2/0	0/0
Total per year	1	2	0
No. of positions announced / No. of qualified applicants per year			
PhD positions	2/8	4/16	3/12
Post.doc positions	-/-	1/1	1/1
Permanent positions	-/-	1/2	1/11

Education

Study programmes BA level
- Bachelor's Degree Programme in Economics
- Bachelor's Degree Programme in Political Economy

Study programmes MA level
- 2-year Master's Degree Programme in Economics
- 5-year Integrated Master's Degree Programme in Economics

Other: One-year Programme in Economics

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

18.1 Economics at the institutional level

There are about 3,500 students taking 15 bachelor's level and 15 master's level programmes, around 100 PhD students and 130 permanent academic staff. Of the latter, 18–20 are employed in the Department of Economics. Thus, both the faculty and the Economics department are medium-sized by Norwegian standards.

18.1.1 Organisation, leadership and strategy

The Faculty of Social Sciences has a fairly standard Scandinavian organisation, with an elected dean and department heads responsible for day-to-day management. The educational programmes receive advice from advisory boards, which are chaired by the vice-deans. Research is organised in research groups, the formal organisation of which varies. According to the most recent strategy plan for the Faculty of Social Sciences, the main goals are to increase participation in Horizon 2020 and to continue recent years' successful growth in external research funding. A stronger focus on talent development and international recruitment of staff at all levels are important elements in the strengthening of research efforts.

UiB has several centres that are key vehicles for international research collaboration. The three centres in social sciences are interdisciplinary and cover the following areas: development, health, and law and economics.

Research in economics and finance is carried out at the Department of Economics, which has 18–20 employees in permanent positions at full or associate professor level. In addition, the department has a few postdocs and doctoral students. Notably, a large proportion of the permanent positions are actually funded by external long-term grants. Microeconometrics and incentive and game theory are strong research areas. They are applied in fields such as labour, health, family and environmental and development economics. Research at the department is organised in four research groups: competition and finance; labour, social insurance and family; health; and behavioural environmental and development economics.

18.1.2 Institutional follow-up of previous evaluations

Some of the research groups that have members from Economics have been evaluated by the RCN, but there has been no previous evaluation of a unit comparable to the one at hand.

18.1.3 Resources and infrastructure

Teaching and administrative tasks are expected to account for a little over half of staff's working time, and the rest is available for research work. External funding can also be used to some extent to release researchers from teaching duties. Moreover, sabbaticals are available for tenured staff either in the form of one semester after three years or two semesters after six years. All in all, infrastructure and resources are in place, and the possibilities for research production are good.

One major infrastructure investment carried out at UiB is the Digital Social Science Core Facility, which integrates internet panels conducted at UiB with the Norwegian Citizen Panel and the Citizen Lab. The DIGSSCORE has been created to facilitate research in social sciences, and multidisciplinary research in particular. This is clearly an innovative initiative that is likely to become a valuable asset for the research community in Bergen.

18.1.4 Research environment

There are a number of internationally leading scholars in professor II positions (10-20% positions). Support mechanisms enable PhD students and postdocs to spend time abroad. There is a seminar

series, and also monthly PhD seminars, as well as joint workshops with the Norwegian School of Economics (NHH). The research environment appears to be good.

18.1.5 Research personnel

Roughly half of the permanent staff are in the age range 60–70 years and will consequently be replaced in the coming years. In a medium-size department that teaches full programmes in Economics, the recruitment of academic staff entails striking a balance between teaching needs and specialisation in research. Another balance that has to be struck is between hiring local and international staff, since a considerable part of the teaching requires Norwegian-language skills. The department is clearly well aware of these important considerations.

There is an ongoing debate on whether the Economics department at UiB should recruit from the international job market organised by the American Economic Association, but so far they have restricted their efforts to international networks and advertisements in Northern Europe. Central elements of the faculty's research policy are actions taken to promote a more gender balanced staff, international recruitment of both doctoral students and permanent staff, and incentives for PhD students and postdocs to spend time and work at research institutions abroad.

The University of Bergen is currently working on an application to be certified as adhering to the principles of the European Charter and Code.

18.1.6 Research production and scientific quality

As is commonplace nowadays, the aim of the faculty's research strategy is to carry out high-quality research, and to publish it in high-quality outlets. If high-quality research also means high societal relevance, or impact, publishing social science research in highly ranked journals is often hard because the editors are often from the scientific superpowers, especially the US but also the UK, where institutions, policies and sometimes also societal problems differ markedly from those in Norway.

In recent years, however, several members of UiB's Economics department, especially the younger researchers, have been able to publish work on highly socially relevant topics in some of the most prestigious journals in Economics and Finance. The research questions in these studies include: long-term effects of neonatal health, impact of improved publicly provided elderly care on the welfare of the elderly's offspring, consequences of changes to legislative rules for maternity leave, and the effects of commercialisation of innovation at universities on the quantity and quality of these innovations. These are, of course, societally relevant questions not only in, but also outside Norway. The researchers skilfully exploit the rich Norwegian registry data sets and analyse institutional changes to address them. As some of the most successful published work has been carried out by relatively young researchers, the future development and quality of the department's research looks very promising.

Overall, given the relatively modest size of the department and its research groups, the quantity and quality of the publications – also in terms of citations – are impressive. The quality of the research groups' output varies from good to excellent. Almost half of the publications are internationally co-authored. Not only have the researchers published in the very top outlets, but also at the next, highly competitive level, in top field journals and the like. Thus, 61 per cent are published in Level 2 outlets, and the number of Level 2 publications per person is 1.45.

18.1.7 Interplay between research and education

Teaching at UiB is research-based, and especially with respect to the elective courses at both bachelor's and master's level, the staff's research interests are heavily reflected in the menu of courses. The interplay between research and teaching is good.

18.1.8 S

18.1.9ocietal relevance and impact

Some of the publications mentioned above did not just receive attention from academia, but also from media and policymakers. In addition, members of the academic staff have also been active in advisory roles on energy and environmental policies and the renewal of the public sector.

18.1.10 Overall assessment

The researchers at this medium-sized institution have been able to publish their research in high-quality outlets in economics and finance in a commendable way, and the average research productivity is good.

Assessment of scientific quality: 4 - very good

18.1.11 Feedback

- The institution is encouraged to address the age and gender imbalance, as well as to increase efforts to expand international recruitment.

18.2 Research group: Competition and Finance

The Bergen Center for Competition Law and Economics (BECCLE) was founded in 2011. The purpose of BECCLE is to bring together researchers in competition analysis (lawyers and economists) at UiB and the Norwegian School of Economics (NHH). At the same time, the Department of Economics at UiB hired its first professor in finance. These events led to the formal creation of the Competition and Finance (CF) research group.

The research group consists of 11 members (3 of whom are PhD students) and 5 affiliated researchers. Seven of the members of the group are full-time tenured staff. One impact case, 15 papers and 16 CVs have been included in the evaluation.

18.2.1 Organisation, leadership, strategies and resources

The aim of CF is to bring together researchers working on economic studies of the private sector and to encourage joint work in the area. There are three focus areas: competition policy, finance (with the emphasis on start-ups and entrepreneurship), and trade unionism. These areas are of a temporary nature and are the result of bottom-up staff interests. The intention is to seek cohesion across the groups (details are lacking on how this will happen). The goal is to produce high-quality research that is also of interest to policymakers and the public, and also to develop research-based teaching in the area. The strategy might have been more precise and ambitious, and less fragmented in terms of the research area. UiB participates in knowledge clusters, of which BECCLE is one. All research groups have formal leaders.

The group is mainly funded by UiB through BECCLE, but it also has a good level of funding from the RCN and other sources. The aim is to improve research quality, and the group sees larger externally funded projects as the next step.

18.2.2 Research personnel

A major goal of CF is to recruit and develop junior researchers. One postdoc and four PhD students have been associated with CF so far. All of them have been internal hires (with a UiB background).

There is no comprehensive PhD programme at the department, so students take courses at other institutions, mainly abroad. PhD students are expected to spend one year abroad. The Norwegian Competition Authority is a typical employer for PhD graduates.

The panel encourages the research group to undertake international recruitment. The PhD programme would benefit from a more formal structure, which would also increase its international attractiveness, and promote a more ambitious placement policy. The age structure of the research group is reasonably good, while its gender composition (only one female) leaves room for improvement.

18.2.3 Research production and scientific quality

Most researchers in CF publish in good and strong field journals and show good productivity, while some publish in top-three journals (in the Finance subgroup, five top-three publications in a few years). Almost all recent publications have been in Level 2 journals, according to the Norwegian ranking. The junior researchers from CF (the fresh PhDs) also seem to do well – one has published in a good journal, and there are two resubmissions to a good and a top-three journal, respectively. One goal is to achieve a larger presence in the top-five journals in Economics as well (there is one publication from 2002, and a recent invitation to resubmit). CF seems to be on a good path, but more international recruitment might enhance goal attainment.

18.2.4 Networking

A main non-academic partner is the Norwegian Competition Authority, which is based in Bergen. The group also has solid ties to the Faculty of Law at UiB, and to relevant researchers at NHH. The group encourages its researchers to undertake visits abroad, and it organises research seminars and hosts workshops. BECCLE also funds some incoming researchers. BECCLE is a member of CLEEN, an important association of research units focusing on competition policy. This cooperation is aimed at joint organisation of conferences, workshops, data exchange, research visits and joint research. CF seems to have built good networks.

18.2.5 Interplay between research and education

CF organises PhD courses delivered by foreign visiting researchers, adjunct staff at UiB, and others, some in cooperation with NHH. The research group also participates fully in teaching activities at the Department of Economics. Research-based teaching activities have been developed in many areas. The interplay between research and teaching is on a good level.

18.2.6 Societal relevance and impact

The impact case shows that the research carried out has had societal impact, especially on policymakers in Norway. However, a lot of this seems to rely on a few researchers' achievements.

18.2.7 Overall assessment

The research is generally on a very good level in terms of both quantity and quality, and the trend is positive. The Finance subgroup has an excellent track record.

Assessment of research group: 4 - very good

18.2.8 Feedback

- The panel calls for a more targeted strategy and focus. The gender balance in the research group leaves room for improvement. A more structured doctoral programme, a more active international recruitment strategy, and structured efforts to develop junior members would probably be beneficial for the research group.

18.3 Research group: Health Economics

The research group Health Economics has a fairly long tradition at UiB. In the late 1990s, economists, together with researchers at the Uni Research Rokkan centre in medicine established Health Economics Bergen.

18.3.1 Organisation, leadership, strategies and resources

Health Economics at the Department of Economics is organised in a group, HERG, which cooperates with the research group working on labour, social insurance and family economics. The group leader is Professor Askildsen. He and Assistant Professor Riise, hold the two permanent positions in health economics.

The key topics of the health economics research group are the evaluation of policies and pricing practices in the healthcare sector, as well as the performance of healthcare professionals. The outcome variable in the empirical analyses is seldom health outcomes, which means that the joint interest with the LSIE group is somewhat limited.

18.3.2 Research personnel

The HE group is relatively small, but it is part of a larger local network primarily consisting of researchers in public health and primary care. Researchers have been recruited both internally and externally to this group. The health economics group has at least two professor II positions held by two internationally highly respected researchers. The self-assessment report claims that there is widespread collaboration between the health economics group and other units, but this is not very visible in the publication lists provided. The group composition is well balanced in terms of gender and age.

18.3.3 Research production and scientific quality

The volume of articles published by the research group is not very large. What there is, however, is of fairly high quality. Thus, there are a number of articles that have been published in the top field journals, such as *Journal of Health Economics*, *Social Science and Medicine* and *Health Economics*. The publication market in health economics is very competitive since it is a relatively large field and has a high share of young researchers who are pressed to publish as well as possible. Some of the work done by group members has also been published in journals such as *Journal of Public Economics*, *Journal of Economic Behavior and Organisation*, and *European Economic Review*, which are all quality outlets.

Health economics journals typically have relatively high impact factors, but individual articles published in them do not necessarily have as high an impact. The scientific impact of the HE group's publications, as measured by citations, is not very impressive. This could be because, although the articles are of good quality, the themes the group works on are only of interest to a small proportion of health economics academics.

18.3.4 Networking

The group has very good national and international networks, which its PhD training courses can draw on, and which provide opportunities to participate in international and interdisciplinary research projects. Other HERG members at the Economics department are not primarily health economists and the two permanent researchers in health economics have to teach standard Economics courses. This naturally limits the possibilities for specialisation.

18.3.5 Interplay between research and education

HERG contributes to teaching in Economics but also through an experience-based special master's programme in the HE area, formally organised under the Faculty of Medicine and Dentistry. The researchers are also engaged, for example, in tutoring master's students and PhD students. The research-education interplay appears to be on a good level.

18.3.6 Societal relevance and impact

The group leader, Askildsen, has advised public committees on financing healthcare systems, payment systems for specialised care and priority setting in health care. The group also has strong links with policymakers in the research domain.

18.3.7 Overall assessment

This is a well-balanced group, both in terms of age and gender, with strong connections to international and national research networks. The group has a very sound mix of publications in top journals in the general Economics domain and in top field journals. There is scope for further improvement in terms of research quality.

Assessment of research group: 3 - good

18.3.8 Feedback

- The group seems to be engaged in many activities, despite its very small size. The group cooperates with a similar group at the University of Oslo, HERO, both on research and on organising conferences and workshops. Perhaps more economies of scale and scope might be achievable through extended cooperation.

18.4 Research group: Labour, Social Insurance and Family

The research group on Labour, Social Insurance and Family (LSIF) originated with a small group of staff members at UiB's Economics department working on social insurance issues in the early 1990s, financed by the Ministry of Labour. The group has subsequently extended its scope to include a broader set of labour market topics and, more recently, also family economics research. The analyses carried out by group members are empirical and typically use register data and exploit institutions or changes therein to capture relationships of interest.

18.4.1 Organisation, leadership, strategies and resources

The LSIF group is led by Professor Vaage and appears to be fairly loosely organised. Its main joint activities are internal seminars and the organisation of national conferences on social insurance research. The group has been successful in attracting external funds, and, hence, as many as three of its permanent members, one postdoc researcher plus all PhD students are externally financed. Moreover, infrastructure in the form of large databases and their extension and maintenance is crucial to research of the type carried out by the group. LSIF has also been able to raise funding for these investments. This is all quite impressive.

In addition to permanent staff and doctoral students, other important contributors to the research by LSIF are adjunct professors who are leading scholars in their fields and are affiliated to good US universities. They visit Bergen regularly and actively participate in and contribute to LSIF projects. The network also includes other research groups working on related topics at NHH and the Uni Research Rokkan Centre (medicine).

18.4.2 Research personnel

LSIF plays an active role in obtaining external financing for PhD students and postdocs. PhD students are encouraged to spend time abroad and typically do so for one year. There is a strong group of foreign adjunct professors engaged by LSIF. The gender balance is fair.

18.4.3 Research production and scientific quality

As mentioned above, economic analysis of families has become an increasingly important part of the group's research agenda, in addition to the topics related to social insurance. Intergenerational mobility is another new area on which group members have done research in the last 10–15 years.

The volume of research, as measured by publications, has been quite stable over the period considered. Many of the articles have been published in field or general economics journals of good quality, and have also been well cited by other researchers. Notably, there is a trend towards higher quality in the publication outlets, and this trend can be expected to continue since the publications in top journals, which have been widely recognised both in Norway and internationally, but also outside academia, are mainly based on research carried out by younger members.

18.4.4 Networking

LSIF cooperates closely with other labour/social insurance/family researchers in the Bergen area, and also with other national users of register data such as the Frisch Centre, Institute for Social Research, and Statistics Norway. This collaboration includes joint workshops, joint PhD projects etc. As regards international collaboration, the extensive list of adjunct professors plays a key role.

18.4.5 Interplay between research and education

The tenured members of the group participate in teaching in Economics.

18.4.6 Societal relevance and impact

The case study, FAMILY, provided as part of the self-assessment report is an excellent example of research of very high quality, the results of which are important in informing family policy discussions and decision-making. In fact, this research has also attracted attention in policy circles outside Norway. At the same time, it seems as if there has been relatively little output from the cooperation with Uni Research in recent years.

18.4.7 Overall assessment

This group has a solid base in its stable scientific production, with a positive trend as regards quality. The area has great potential for the future.

Assessment of research group: 5 - excellent

18.4.8 Feedback

- The international cooperation through adjunct professors seems to produce results, but the group might consider additional ways to improve its international networks. In line with the recommendation for UiB as a whole, the panel encourages the group to go for international state-of-the-art recruitment.

19 University of Oslo, Faculty of Social Sciences

The Department of Economics at the University of Oslo (UiO) is the largest and oldest institute for economic research in Norway. Its history goes back to the establishment of the first university in Norway, The Royal Frederiks University in Christiania (now the University of Oslo) in 1811. During the nineteenth century, Economics was part of the Faculty of Law, and no independent study programmes in Economics existed. In 1963, Economics became a department in the new Faculty of Social Sciences. Today, the department offers bachelor's and master's programmes, and also a PhD programme that has around 40 students. The research subjects at the institute include economy and economic policy, econometrics, income, employment and welfare; resources, energy and environment; money, credit and finance; industry, market and competition, as well as behaviour, information and strategy and demography.[29]

University of Oslo, Faculty of Social Sciences

Units included in the evaluation of economics	- Dept. of Economics
Other units of the faculty (institution)	- Dept. of Sociology and Human Geography - Dept. of Social Anthropology - Dept. of Political Science - Dept. of Psychology - ARENA Centre for European Studies - TIK Centre for Technology, Innovation and Culture

R&D expenditures and sources of funding (1000 NOK)

	2014	**2015**	**2016**
Funding of the institution			
Total expenditures	516 013	519 699	594 049
Types of funding			

Listed researchers	85
Listed research groups	2
No. of researchers in listed research groups	30

Training, recruitment and academic positions

	2014	**2015**	**2016**
No. of PhD graduated at the institution per year			
Male/Female	6/4	5/7	¾
Total per year	10	12	7
No. of positions announced / No. of qualified applicants per year[30]			
PhD positions	3-4/20	3-4/8	3-6/5
Post.doc positions	2/200	-/-	1/80
Permanent positions	1/90	-/-	1/80
Education			

[29] www.sv.uio.no/econ/english/research.

[30] A qualified applicant for a PhD in economics needs to have a well-defined course portfolio from his/her master's. The number of qualified applicants is therefore limited. For postdocs, the only formal requirement is a PhD in economics. Moreover, these positions are advertised internationally as part of the international job market in January each year. For most applicants, we are one of twenty or so places applicants apply to. The number of qualified applicants should be interpreted in that light. Tenure track positions and permanent positions have some additional requirements. They are also advertised internationally and are more attractive than postdocs, which explains the high number of qualified applicants. For all the internationally advertised positions, many applicants eventually decline offers from us because they have at least one more attractive offer.

Core funding from the Norwegian gov.	407 822	441 167	460 585	
External funding, RCN	69 307	65 166	77 179	**Study programmes BA level** - Economics
External funding EU	9 527	17 965	24 203	**Study programmes MA level** - Economic Analysis (5 years) - Economic Analysis (2 years)
External funding, other sources	23 791	25 732	31 936	**Other:** Positions: from 2015 The Department has announced tenure track positions. 2015: Tenure-track Assistant Professor/Associate Professor – 3 Positions - 540 Applicants 2016: Tenure -track Assistant Professor – 1 position - 480 Applicants. Permanent position/tenure track Associate Professor – 1 position – 80 Applicants

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

19.1 Economics at the institutional level

Within the area of Economics, 85 researchers at UiO are included in the evaluation. The ten most important publications, and ten most important dissemination and knowledge exchange results during the last 5–10 years have been listed, and five impact cases are included.

19.1.1 Organisation, leadership and strategy

The faculty is governed by a board, and headed by a dean. The faculty's main research aims are to encourage basic research as well as applied research, both theoretical and empirical, of high quality and relevance. It aims to be at the forefront of international research in some areas and leading in Europe in many others. The research environment acknowledges the importance of bottom-up research. Participation in public forums and debate is encouraged. The goals seem to be clear and ambitious.

19.1.2 Institutional follow-up of previous evaluations

The last evaluation of Economics (2007) identified the following challenges: strengthening research within the fields of specialisation, solving the recruitment problem, and improving the PhD programme. Since the evaluation, the number of publications in the best journals has increased, and there are now two formal research groups. International recruitment has had high priority and become the norm now. A tenure track system has been introduced. The PhD programme has seen a modest increase in the number of admitted students, and more courses are now offered by international guest scholars.

19.1.3 Resources and infrastructure

The faculty's R&D expenditure has increased to NOK 594 million (2016) and the proportion of external funding is 22 per cent, mainly from the RCN, but also some from international sources (EU). The databases are good.

19.1.4 Research environment

Mobility is encouraged for all permanent staff members, and there is extensive activity in terms of seminars and conference visits, as well as longer stays at other institutions. In Economics, there is an extensive guest researcher programme. The department also organises events aimed at communicating and exchanging scientific knowledge.

19.1.5 Research personnel

A tenure track system has been in place since 2016, and the faculty has recently refined the criteria for promotion. In Economics, three members of staff were hired in 2016, and one position has been advertised this year. The experience is very positive, with, for example, 600–700 applicants, many from top or well-respected international universities, for the recent tenure-track assistant professor position. Fifteen candidates have been invited to a job seminar. It seems that recruitment has clearly improved and now follows international standards in an excellent way.

The PhD programme lasts for three years and includes a course component worth 45 credits. The graduates are mostly employed by research institutes or in consulting, but an increasing number also go to the academic job market. A placement officer helps those aiming at the international market. All PhD students are encouraged to have a research period abroad. At the faculty level, there are also five exchange agreements including PhD students. The number of graduates in Economics has been around 10 annually, with a balanced gender composition. The PhD programme seems to be working very well.

The time allocated for research for academic staff is 47 per cent of annual working hours. Tenure-track assistant professors have one half of the standard teaching and administrative duties, while postdocs have even less than that. Academics over the age of 60 can also be granted less teaching and administrative duties. These conditions seem attractive. All permanent employees can be granted one year of research leave after six years of service (female researchers significantly more often). There are publication incentives in place through, e.g., the salary level, and top-up money for the department, but no bonus payments for individual publications. Participation in competence development courses is encouraged.

In line with UiO's employment policies, all hiring of new staff at the faculty is subject to moderate gender bias and it is stated that the aim is to achieve a balanced gender composition. Female researchers are encouraged to attend mentoring programmes, and are given priority in career building programmes at UiO. At the faculty level, 33 per cent of the professors, and 54 per cent of the PhD students are female. UiO lists the impending retirement of top researchers as one of its threats. In Economics, the age structure shows a good spread, and the proportion of female researchers is good (24 females of the 85 listed for the evaluation period).

19.1.6 Research production and scientific quality

The department's research areas include empirical microeconomics, environmental economics, welfare economics, macroeconomics and international trade. During the years 2014 to 2016, the institution has, according to the bibliometrics, produced 60 Level 2 publications (0.65 per person). All the ten most important publications during the last 5–10 years are Level 2 publications according to the Norwegian system, and include five FT-50 journal publications. Looking in more detail at the individual researchers' publishing activity, the productivity is mostly very good, and the outlets are either good field journals or top journals. The frequency of top publications is quite high and very nicely distributed across many researchers.

Assessment of scientific quality: 5 - excellent

19.1.7 Interplay between research and education

The research is important for teaching the department's courses. Students review research papers and their thesis work utilises research findings. Many also work as research assistants.

19.1.8 Societal relevance and impact

Participation in general public debate is encouraged. The five impact cases included demonstrate considerable societal impact in many areas. However, it seems as though the societal impact is created in a rather ad hoc way (a bottom-up strategy).

19.1.9 Overall assessment

This is an excellent institution that is, e.g., recruiting in accordance with international standards, has good career paths and incentives, an internationally attractive PhD programme, and a big enough staff to ensure critical mass in specific areas, resulting in excellent volumes of research output as well as excellent quality.

19.1.10 Feedback

- The panel encourages the unit to work further on achieving a good gender balance. The unit is on a very good path in this respect.

19.2 Research group: Equality, Social Organisation and Performance

The name of the research group Equality, Social Organisation and Performance (ESOP) indicates that the centre pursues a wide, but intellectually coherent empirical research agenda around themes that are of relevance to Nordic countries and beyond.

19.2.1 Organisation, leadership, strategies and resources

ESOP has had three lives: first, as an informal research group at the Department of Economics at the University of Oslo, then as a core-funded centre of excellence for ten years, from 2007 until 2016, and, most recently (but outside of the remit of this evaluation), as a centre under direct control of the department. This recent structural change means that this review comes at an awkward time. The record of accomplishment that can be observed was generated under Research Council funding – while the future will be a less generously funded and more 'normal' existence. The review below attempts to take account of this discontinuity.

The task of this research group is to coordinate and enhance the quality of research conducted by its members; it is not a top-down, unified management unit pursuing an explicit research agenda. This is in line with how the department and the faculty as a whole view the role of academic management at the university. The research agenda of the group is by definition policy-relevant. Having said that, research excellence appears to be the primary goal of the centre (and the department).

The group is governed by the board of the Department of Economics. It is not quite clear how much resources are provided to the group by the department/university as core resources after December 2016, and how large (in relative terms) the reliance on external grants will be in the new steady state.

19.2.2 Research personnel

The core research team has twenty members, of whom 15 are men and 5 are women. Only four core staff work full-time for the group, three of them men. Two more (male) staff members have 64% and 40% contracts with the group; all other staff devote between 10 and 25% of their time to the group. Some of these part-time core staff are not based in Oslo.

19.2.3 Research production and scientific quality

The quality of the group's research is excellent by any standard. Papers are regularly published in top-five journals and they touch on important issues in Economics and the real world alike.

19.2.4 Networking

The group is very well networked with European and North American researchers.

19.2.5 Interplay between research and education

Excellent research clearly shapes teaching in the case of this group. Perhaps because of the size of the senior team, less emphasis is placed in the documentation on the role of doctoral training and on doctoral students as researchers in their own right.

19.2.6 Societal relevance and impact

The research agenda is by its nature relevant to society. Perhaps less so as regards advising on specific social programmes or economic management, but in a wider, intellectual sense, it provides insights and ideas that promote a broader debate about what type of society is economically feasible or desirable. In that context, the Nordic model (whatever that is) provides much inspiration for the group's theoretical and empirical research. This works in part, since the group is quite large. The team can produce a critical mass of ideas, which, together, form a fascinating reading list for students of social change. In other words, the societal relevance is demonstrated less by individual research projects and more by the interwoven fabric of its constituent parts.

19.2.7 Overall assessment

The group is an excellent research centre by global standards. It is a pity that the Research Council funding could not be institutionalised. The particular attraction of the group, apart from the quality of its work, is its slightly eclectic and non-standard, but highly fruitful research agenda, which makes it stand out from the usual research centres at universities. Looking ahead, it will be a challenge to maintain coherence while raising substantial funds for untenured staff.

Assessment of research group: 5 - excellent

19.2.8 Feedback

- Academically, the implications of globalisation and technological change for development do not appear to have yet been fully absorbed. Placing more weight on 'development' as a research theme in the future may be an interesting option for the group – also in terms of attracting excellent international staff and students, and helping to further diversify its staff and student body
- In any case, future recruitment should aim to address the significant gender imbalance among senior, resident staff.

19.3 Research group: Oslo Fiscal Studies

The research group Oslo Fiscal Studies (OFS) was established in 2012 through a grant from the RCN. It is based on cooperation between the Department of Economics at UiO, Statistics Norway, and the Ragnar Frisch Centre for Economic Research. The unit has expanded by hiring new researchers, hosting visitors and developing networks, organising seminars and conferences, and by stimulating department staff to conduct research within the field of OFS.

The research group consists of nine members and two affiliated researchers. The nine members have employment percentages ranging between 100 per cent and 10 per cent (mostly below 50 per cent). One impact case, 11 papers and 11 CVs have been included.

19.3.1 Organisation, leadership, strategies and resources

OFS has the same board as the Department of Economics. There is a head of OFS, and an executive group of three persons in charge of running OFS. There is also an advisory scientific board. Research ideas mainly originate from the bottom up, but the leaders try to stimulate cooperation and to put together research teams / portfolios of projects. The leadership of OFS takes overall responsibility for planning. The organisation seems to be a working one, although the role of the board of the department is somewhat unclear.

The aim is to expand the volume and quality of research and teaching of public economics, and especially of tax analysis. Publishing in highly reputable journals and dissemination through domestic channels are encouraged. The funding comes about evenly from the RCN and the department. The strategy might have been more precise and ambitious.

19.3.2 Research personnel

Hiring is done by the department in accordance with UiO's procedures. The text mentions 'the closing down of OFS' and that those employed in tenured positions will then be fully funded by the department. Recruitment is international and active searching is used, e.g. through job market participation. In the case of the recruitment of adjunct researchers, OFS has in practice had greater autonomy. OFS has no PhD programme of its own, but participates in offering PhD courses, and also PhD supervision.

The age profile of the research group is reasonably high (for seven members listed in the summary material, the average age is between 50–59). The gender structure is male with one exception (a visiting researcher, 10 per cent). There is room for improvement in both the age and gender composition.

19.3.3 Research production and scientific quality

The researchers at OFS have a good publication volume and quality, and typically publish in strong international Level 2 scientific journals, even occasionally reaching a top one (the *American Economic Review*). The group is quite focused on its area and its research has high visibility.

19.3.4 Networking

Conferences and workshops are organised by OFS, and international academics are invited to participate. OFS's members benefit from many existing international networks in the area. Funding is provided for participation in conferences, and postdocs are encouraged to make international visits. There is also close cooperation with the national tax authority, and presentations at which practitioners participate. OFS is quite well positioned in this respect.

19.3.5 Interplay between research and education

One of OFS's objectives is to expand the volume and quality of teaching in public economics and tax analysis. The researchers are therefore involved in the education of master's students and in PhD training, and the amount of education offered in the area has expanded since OFS was created. The interplay between research and education seems to be on a very good level.

19.3.6 Societal relevance and impact

The impact case shows that the research carried out is policy-relevant and has had excellent societal impact, also internationally.

19.3.7 Overall assessment

The research is on a good level in terms of volume, and the quality is very good. This is a very small but very good and well-focused research group with some international links.

Assessment of research group: 4 - very good

19.3.8 Feedback

- The panel calls for a more targeted strategy. The age and gender balance in the research group leaves room for improvement. Because of its small size, the group is encouraged to network more with other researchers in this niche area (domestically/internationally) in order to create more critical mass.

20 University of Stavanger, Faculty of Social Sciences

The University of Stavanger (UiS) was founded in 2005, when Stavanger University College of Applied Sciences was granted university status. Recently, there has been a reorganisation process, and the university is currently organised in six faculties. The Faculty of Social Sciences has about 180 employees who work in two departments and at the Norwegian School of Hotel management.

University of Stavanger, Faculty of Social Sciences

Units included in the evaluation of economics	- UiS Business School
Other units of the faculty (institution)	- Dept. of Social Studies - Norwegian School of Hotel management - Dept. of Media, Culture and Social Sciences

R&D expenditures and sources of funding (1000 NOK)			
	2014	**2015**	**2016**
Funding of the institution			
Total expenditures	168 731	180 566	197 351
Types of funding			
Core funding from the Norwegian gov.	155 439	169 810	188 984
External funding, RCN	7 984	12 984	10 178
External funding EU	4 512	2 182	4 605
External funding, other sources	10 887	13 349	11 605

Listed researchers	29
Listed research groups	1
No. of researchers in listed research groups	14

Training, recruitment and academic positions			
	2014	**2015**	**2016**
No. of PhD graduated at the institution per year			
Male/Female	1/1	1/1	1/1
Total per year	2	2	2
No. of positions announced / No. of qualified applicants per year			
PhD positions	1/5	3/5	2/8
Post.doc positions	0/0	1/1	0/0
Permanent positions	½	1/3	0/0

Education

Study programmes BA level
- Tourism management, Hotel management, Auditing & accounting, Business administration, and Law

Study programmes MA level
- International service management, Business administration, accounting & auditing, and Executive master of service management and Executive MBA

Other: All these study programmes are multi- disciplinary, and includes courses from all areas of research conducted by the staff belonging to the economics panel

Source: The Research Council of Norway, Self-assessment report for the institution, 16/12960

20.1 Economics at the institutional level

20.1.1 Organisation, leadership and strategy

UiS is new as a university, taking its existing form only in 2004. This entails legacy issues in adjusting to becoming a unitary research-focused institution, and ensuring that continuing organisational and system changes do not create obstacles to surmounting this challenge. The report evidences a lot of good ideas, in part due to earlier RCN reports, but a well-articulated framework for drawing these ideas together is still evolving. For example, the link between on one side the strategies, funding, and research quality (which is currently incentivised at the individual level) and on the other the centres and the Research Area Programmes (RAP), could be strengthened. Interdisciplinarity, while a focus, appears to still be evolving as well.

20.1.2 Institutional follow-up of previous evaluations

The evaluation of Economics was held in 2007, and the follow-up has primarily focused on developing (interdisciplinary) research groups.

20.1.3 Resources and infrastructure

Research funding mainly comes from the RCN, with some budding funding from external sources and an adequate infrastructure in the form of the central research office and the research centres that can develop this further. The research areas are adequately connected to H2020 and LTP goals. The strategy for using these resources is less clear. For example, there is little link to specific actions that could improve international visibility: showing that funding is used efficiently to get the most quality and visibility out of a minimal input is not an emphasis here. Seed funding and dedicated administrative personnel are good additions that are addressed in the Lemon Lab report.

20.1.4 Research environment

There is very little documentation of seminars and other types of activities.

20.1.5 Research personnel

The report mentions heterogeneity, and there is evidence of this. While the outputs included in the report are outstanding, they are centred on a limited group of scholars. Where the latter hold joint appointments at other leading institutions that have their own methods of improving research and international visibility for their own benefit, it is difficult to isolate the contribution from Stavanger and for UiS to benefit from these successes.

Other than this, the general outlines of the posts are standard, with 40% time devoted to research. The gender balance seems to be in line with other Norwegian institutions and the institution has clear targets in this area.

While there is little discussion about PhD training in general, all PhD students and academic staff are encouraged to spend time abroad, and financial support for sabbatical leave is tied to this. While international recruitment is a goal, it is not clear that this includes attendance at large meetings such as the AEA. Similarly, it is not clear that PhD candidates are actively recruited abroad rather than simply making recruitment 'open' to international candidates. An action plan for the European Charter has been submitted.

There are no plans to recruit further in Economics, despite the area being a priority.

20.1.6 Research production and scientific quality

The research demonstrates the strength (from the SWOT analysis) of being innovative, and, by implication, meeting the standards of top journal publication. A wide variety of constituencies benefit from the research (also from the SWOT analysis), and there are some internationally excellent academic papers, many Norwegian-based papers, and some books and reports that could have wider dissemination.

The steps covering individual incentives and support, selected support for certain types of personnel, mentoring of new personnel, enhanced PhD training, and aligning RAPs to core topics in the department are intended to improve research quality and decrease heterogeneity, although it is too early to see an effect. Adapting to the ABS listing should also help to align internal standards with international standards of publishing quality. The bibliometric analysis indicates that the economists here produced 23 publications in Level 2 journals from 2014 to 2016 (0.99 publications per researcher).

Assessment of scientific quality: 3 - good

20.1.7 Interplay between research and education

A thorough statement on the interplay between research and teaching is a strength of the report. It is clear that learning is research-based from the outset, although it is less clear that original work in a BA thesis is required of all students. It is not clear why the MA and the BA theses are organised differently (for example, a presentation for one and not the other) or why inclusion in research projects is seen as superior to pursuing independent ideas in one's thesis. The measures under consideration for improving research-based learning are positive, but there is room for further measures.

20.1.8 Societal relevance and impact

Holding conferences and publishing popular articles forms the bulk of the dissemination activity. The conferences could be much more widely spread between staff, and much more frequent, with more impactful dissemination. There is little evidence of more than a vague tie to policy here. Measures to allocate extra budget funding for dissemination activities, and internal buyouts for impact work could improve relevance and impact. The Agder project shows good potential impact, but the volume of submitted impact case studies is low, so that the overall impact activity is hard to judge.

20.1.9 Overall assessment

The output is at the international forefront overall, with a high degree of originality and published in good, and even excellent, international channels for scholarly publication. Heterogeneity needs to be addressed, however, and impact needs to be spread more evenly between staff. Funding and impact levels have yet to realise their potential.

20.1.10 Feedback

- The panel urges taking steps to systematically consolidate the excellent ideas and energy of this institution, and to take an approach that improves quality across the board for all researchers, incentivises more impact and access to funding, and continues the good work on linking research and teaching.

20.2 Research group: Laboratory for Research on Learning and Motivation

The research group Laboratory for Research on Learning and Motivation (Lemon Lab) dates from spring 2017. It grew out of an informal subgroup of the Labour Economics group and has four permanent members. It focuses on learning and motivation in education and work, using field and lab experiments. The purpose of establishing the lab as a separate group is to narrow its focus, and improve funding, collaboration and dissemination, which are seen as necessary given the ambition to exploit the abundant opportunities.

As the group has such a brief track record as a separate entity at this point, we can only comment on its plans.

20.2.1 Organisation, leadership, strategies and resources

While the permanent members are all economists, the group is otherwise interdisciplinary, including a teaching spectrum that runs the gamut from human resources management to educational economics, a conference on behavioural economics that is held once a year, and evidence of interdisciplinary work in the impact case study. The spillovers to the rest of the institution are not clear in the report and can be strengthened.

Mari Rege and Ola Kvaloy lead the group and have high-quality and relevant research records and extensive contacts nationally and internationally. They take the lead in the support, mentoring, funding, and partnership context, although little evidence is provided to flesh this out. Both have a very good funding and partnership record by any measure.

The university's investment in data storage infrastructure is crucial and useful to the group, since it uses a large amount of sensitive data. The university has provided substantial support for Lemon Lab, including administrative personnel and seed funding, although this may have occurred during the group's informal phase. It is unclear from the report whether these resources are used to best advantage to further the aims of the group or the university.

There is little information linking discretionary resources to challenges. For example, while there are international mobility challenges, there is no mention of whether resources would improve this.

Overall, the successful implementation of Lemon Lab as an internationally recognised research institution may require continued and discretionary access to funding, both internally and from outside sources.

20.2.2 Research personnel

The group has a good gender balance and the female and professorial head of this group is exceptional. The group has a balance of PhD students (2 on full-time), postdocs (2 on full-time), temporary researchers (6 on 10% of full-time) and permanent researchers (4 on 50% of full-time, including the leaders), enabling individual attention to be given to mentoring, support for research efforts, and providing networking opportunities aimed at spreading the name of the group and its work.

The PhD completion rate is 100 per cent, although there is no information on where graduates end up. One paper was co-authored with the student's supervisor, a system that facilitates higher publication figures for permanent staff and potentially helps students to learn. Information on the method of supervision is lacking, but the supervisors are clearly capable.

The report indicates considerable scope for growth, but there is little evidence of how aggressively the group recruits internationally.

20.2.3 Research production and scientific quality

The group produces solid quantities of research of uniformly high quality. Publishing in the top journals is evidence of originality and of advancement of the discipline.

20.2.4 Networking

The lab has many national and international collaborators who are actively involved in the lab. It has also, for example, organised an annual behavioural economics workshop at the University of Stavanger.

20.2.5 Interplay between research and education

The submitted teaching hours suggest that teaching is not a heavy burden. International adjunct scholars teach and also co-supervise students, which should help to spread their knowledge and integrate them fully into the group and the university as a whole. Additional support such as childcare and housing could also help in this regard.

20.2.6 Societal relevance and impact

The potential impact is large: the projects are very applied, and the subject matter is relatively aligned with both the Horizon 2020 and Long-term plan for research in the public sector, renewal and wellbeing categories. In the submitted case study, it could be claimed that the study is underpinned by research. Clear beneficiaries and impact channels exist and the reach covers the gamut from local to international aspirations. The effect on education is potentially good. At the same time, the impact appears to be more potential than actual at present: the underlying research is not specified in any detail and research outputs as a result of the study have not yet appeared; an educational approach has not yet been adopted or shown to be effective.

20.2.7 Overall assessment

The group appears to be very ambitious and capable, with high-quality publications that are original and in the international sphere.

Assessment of research group: 4 - very good

20.2.8 Feedback

- The panel encourages the group to evolve its formal structure in a way that shows its contribution and enables the group to realise its ambitions.
- Recruitment appears to be limiting the potential of the group in terms of both work and funding.
- In other areas, the group needs to clarify how it uses its financial resources to best advantage to further its ambitions, and how it maximises its considerable positive spillovers within the institution and elsewhere.

21 Overall Assessment of Economics

Based on written material provided by the institutions and research groups, bibliometric statistics, as well as interviews, this panel has reviewed research in the area of Economics, conducted at Norwegian universities, business schools and independent research institutes, and their research groups participating in this evaluation. Before commenting on each of the unit's subject to this evaluation, the panel would like to make a few general observations about research in Economics in Norway, as well as about the institutional landscape in Norway within the area.

21.1 Profile, strength and weaknesses

Research in Economics in Norway is conducted in a large number of units, which exhibit considerable diversity in terms of the size of research groups as well as the conditions for conducting research. At one end, there are large universities with many researchers, and typically good conditions as regards funding, incentives and the time allocated for research. At the other end, there are smaller, more teaching-oriented universities where faculty size is also small, critical mass within domains is small, and teaching needs may limit the possibilities for conducting research. Among the independent research institutions, there is variation in the possibilities and time available for research that can lead to publication in top journals, because commissioned work mainly published in report form often constitutes the bulk of the workload. The aggregate bibliometric data show that, in terms of field-normalised citation scores, the research in Economics carried out by the units in this evaluation during a recent time period (2014 to 2016) is on a par with corresponding research in the Nordic region, and 11 per cent above the OECD average. Journal publications are the dominant academic outlet, with 88 per cent of total publications. Most institutions only contribute a small share of the total publications, but NHH and the University of Oslo reach two-digit shares, at 14 and 13 per cent, respectively, followed by BI, at 9 per cent. Next, we will report our general observations under several separate headlines, roughly matching those used in the individual reviews.

21.1.1 Follow-up of earlier evaluations

In general, the institutions seem to have addressed the recommendations from earlier evaluations remarkably well. Typical recommendations from earlier evaluations have concerned raising the quality of academic research, improving recruitment policy and enhancing the structure and degree of formalisation of the PhD programme. In many cases, we find significant improvements in recent years in research productivity and quality, international recruitment, recruitment policy (tenure track-type systems), as well as in improving the attractiveness of PhD programmes, especially for international students. Areas in need of strengthening have typically been subject to additional recruitment. In some cases, however, there was not enough detail about how the institution had addressed issues raised in prior evaluations (and about what those issues were) for the panel to make a judgement. Moreover, despite the progress, the panel still finds room for improvement in many typically smaller institutions as regards these issues; that is, research quality and productivity, the effectiveness and international attractiveness of the PhD programme, as well as international recruitment.

21.1.2 Research personnel

The panel found considerable variation in *recruitment policies* among the institutions. Some, typically bigger institutions, were fully on a par with international recruitment policies (i.e. they regularly go to international job markets to interview and hire new staff, and fly candidates in for additional job talks). For some institutions, international recruitment had a rather passive form (they merely advertise the position internationally and see what transpires). Finally, for others, the requirement to provide education in the Norwegian language, and perhaps also in more remote locations, seemed to limit

recruitment to graduates from a home university, and occasional supplementary contacts. Especially at some of the research institutes, there was concern about how to renew the skills of the institution (or group) in the face of what are often long-term relationships with individuals and where renewal largely takes place via the throughput of individuals in the system. While many institutions engage in extensive networking and training to ensure that current employees remained at the forefront of their field, some cited family life as a challenge in relation to external visits, and others cited international salary levels as barriers to hiring new personnel from outside. Many had an active visitor programme to bring researchers from abroad to Norway, but, in some of the reports, it was unclear whether skill transfer occurred during these visits or whether researchers were being brought in to bulk up outputs rather than to fully integrate them into the internal system. The reports contain very little information about efforts to place the institutions' own doctoral students in international or national job markets.

Gender balance and opportunity. Gender balance was an area of consistent concern in the reports, and the panel also typically found an imbalance, sometimes strong, to exist in the units. Gender balance is an acknowledged international problem, especially in certain areas within Economics and Finance. Fortunately, gender balance appears to some extent to be a legacy issue, with more gender imbalance in more senior roles and posts occupied by older individuals and a better gender balance in more junior roles occupied by younger scholars. Still, this issue needs attention here so that opportunities can be shown to be clearly available to any individual with the talent, desire, and energy required to undertake them. The use of role models and mentors as well as continuing support for all researchers who have care responsibilities, needs to remain a focus.

Age balance. The panel also found several cases of skewed age structures, where a large proportion of the researchers were approaching the end of their careers. Such an age structure naturally also offers opportunities for renewal, if successful recruitment takes place. The panel encourages all such units to engage in timely successor planning and invest in the recruitment process, so that new positions can be filled promptly by good (younger) candidates.

21.1.3 Research production and scientific quality

The panel found that the overall level of scientific production is very good and well placed on the international stage. Research quality in general is at good or very good levels, with some cases of outstanding performance. An increased focus on higher-quality journals (Level 2 in the Norwegian system) is a trend that pervades at all the institutions, and there are both salary level / tenure track incentives and separate personal monetary incentives in place for publishing at this level. The typical outlet is an international refereed journal, and a large share of these publications are co-authored with international researchers. Field journals are still the dominant outlet, but several institutions also frequently publish in top-five journals in Economics or Finance. While the average quality of the output was good or better than good, in many cases it was strongly skewed towards a few extremely productive researchers.

One of the most common and positive aspects of the report is the high ambition of all the institutions. Becoming a player on the international stage, while retaining the benefits for the local and national areas, is a common aim and reflects a balanced set of goals that can have well-diversified benefits for society as a whole. On the other hand, all institutions should not pursue the same goals. Hence some heterogeneity in goals, or the pursuit of comparative advantages, may also be called for. This applies especially to smaller universities, which may have a comparative advantage in teaching, and to the institute sector, which is not funded in the same way as the universities are.

21.1.4 Research cooperation/ networking

In general, we find that the institutions are typically very well linked to the international research community by means of seminars, visiting scholars (in/out), opportunities for PhD students to spend time abroad, and frequent participation in and organisation of international conferences and workshops. The use of international adjunct professors ('professor II', with a 20 per cent workload) seems to be a specifically Norwegian/Nordic feature that, in many cases, is used commendably in order to bring international expertise to the institution / research group. The funding situation seems to allow for several such positions, especially among the bigger institutions. Most academic institutions have a sabbatical system in place, often with a requirement for a period spent abroad, which also encourages international research contact. Such international research contacts are reflected in the large number of international co-authorships. However, we have some specific remarks concerning the research groups, and interdisciplinary work.

The *research groups* were mostly created bottom-up by the institutions. We found considerable variety within them. Some had a long history, whereas others were formed explicitly for this evaluation; some were quite focused and often with substantial intra-group cooperation, whereas others were quite broad and more just a collection of individuals.

The leadership and organisation of the research groups was often quite vaguely explained. In many units, parts of the research were *interdisciplinary*. For a disciplinary panel in Economics, it was a challenge to evaluate interdisciplinary research, but the panel has tried to take it into account as far as possible.

21.1.5 Interplay between research and education

While some interplay between research and education is clear in many reports, it is treated rather briefly in some reports as a natural result of having excellent researchers doing the teaching, so that students are potentially exposed to work at the frontier. Undergraduate or master's students' work as research assistants, thesis work, or PhD interaction with supervisors is also commonly mentioned.

It is not clear that this exploits the full potential of *research-led education*, which can also emphasise curiosity and creativity in the work required of students in their degree programmes as a means of acquiring a research-oriented mindset. At the undergraduate level, it is not clear whether many institutions have support for research paper writing and research project construction as part of their thesis training. It is also unclear whether all programmes require thesis work at the undergraduate level. However, a positive point is that most research groups do not 'buy out' their members full-time from teaching duties, which potentially enables strong researchers to interact with students at all levels.

21.1.6 Societal relevance and impact

A positive feature of the review is the inclusion of impact as part of the report, which broadens the relevance of the research done by academics in Norway. The panel found many interesting impact cases among the units, and we list a few of them in Appendix L. However, criteria still need to be developed for the evaluation of societal impact. The panel found that views of what constitutes impact vary among researchers: some focus on reporting dissemination rather than impact. It also seems that many institutions have only just begun to consider impact, resulting in a lack of a systematic approach. On the other hand, some institutions had made impact part of their strategy.

21.2 Overall feedback

In international comparison, the research in Economics in Norway is at a good or very good level, with some cases of excellent performance.

Among the weaknesses, the panel found that most institutions still have some distance to go to achieve truly active international recruitment and placement and further raise the average quality of research output in Economics, and a better gender balance.

The panel notes that, to a much larger extent than the universities, the research institutes rely on external funding. This may affect their ability to conduct basic economic research of high quality. For smaller universities, the trade-off between teaching and research may have the same effect. Some institutions / research groups lack critical mass, which affects research quality and the quality of their PhD programmes.

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Figure and table list

Appendices

Appendix A: Terms of reference

Evaluation of research in the social sciences in Norway 2016 - 2018

Terms of reference

The Research Council of Norway has been charged by the Ministry of Education and Research with the responsibility for performing evaluations of research. The Division for Science has decided to evaluate research activities in the social sciences in Norwegian universities, university colleges and relevant research institutes.

The objective of the evaluation

The objective of the evaluation is to review the overall state-of-the-art of research in the social sciences in Norway, focusing primarily on the situation in universities, university colleges and relevant research institutes. The evaluation will also take into consideration knowledge exchange and the societal impact of the research performed. For the higher education institutions, the interplay of research and education will be assessed. The conclusions of the evaluation will provide greater knowledge about the present state of social science research, and form the basis for recommendations on the future development of research within the various fields of the social sciences in Norway.

For the institutions evaluated, the evaluation is expected to provide insight, advice and recommendations that can be used to enhance their own research standards, taking into account the different roles and purposes for universities, university colleges and research institutes. For the Research Council, the evaluation will help to expand the knowledge base used to develop funding instruments and provide input on research policy to the Norwegian Government.

The evaluation is expected to:

- Review the scientific quality of the research within the social sciences in an international context;
- Provide a critical review of the strengths and weaknesses of the fields of research nationally, at the institutional level and for a number of designated research groups;
- Investigate the relevance and social impact of social sciences research in Norway in general and in particular its potential to address targeted societal challenges as defined in the Norwegian Government's Long-term plan for research and higher education;
- Assess the role of organizational strategies and leadership in promoting the quality of research, education and knowledge exchange;
- Assess the extent to which previous evaluations have been used by the institutions in their strategic planning;
- Investigate the extent of interdisciplinary research at the institutions and in the research groups;
- Identify the research groups that have achieved a high international level in their research;
- Review the role of the Research Council in funding research activities in the social sciences.

Organisation and methods

The evaluation will be carried out by an international evaluation committee consisting of seven panels. Each panel will carry out the evaluation in its field of expertise.

Panel 1	Geography
Panel 2	Economics
Panel 3	Political science
Panel 4	Sociology
Panel 5	Social anthropology
Panel 6	Economic-administrative research
Panel 7	Educational research[31]

The panels will base their evaluations on self-assessments provided by the research institutions and a bibliometric analysis, as well as on interviews and presentations given in meetings with the involved faculties/departments and the social science research institutes. The self-assessments from the institutions will include factual information about the organisation, its resources and strategic plans, national and international research collaboration, dissemination and societal impact of the research, as well as education activities.

For a selected number of *research groups* the institutions will also provide CVs and publication lists for the group's members, a description of the scientific objectives and organisation of the group as well as a digital copy in full text of one scientific article or book chapter for each group member affiliated with a Norwegian research organisation. The Research Council will provide data on its funding of social sciences research and supplementary information on the societal impact of the social sciences in Norway.

The panels are requested to present their findings in written reports. Preliminary reports will be sent to the institutions included in the evaluation in order to check the accuracy of the factual information. The evaluation committee's final reports will be submitted to the Board of the Division for Science for final approval.

The principal evaluation committee will consist of the chairs of each panel.

Tasks of the evaluation panels

The panels are requested to:

- Evaluate research activities with respect to scientific quality and impact.
- Evaluate the societal impact of the evaluated research activities.
- Evaluate how research activities are organised and managed.
- Evaluate the interplay of research and education activities in the higher education institutions and ensure coordination with the evaluation on education quality.
- Give specific recommendations for the future development of research activities.

[31] The evaluation of educational research is organized in a separate evaluation process using the same methods and evaluation data as the other panels. Whereas the evaluation of social science research is organized under the Division for Science, the evaluation of educational research is organized under the Division for Society and Health and its result will be reported to that board. At the same time the evaluation of educational research will be considered as a panel under the evaluation of social science research and thus be included in the report of the principal committee to the board of the Division for Science* *This decision was altered during the process, and the evaluation of Norwegian education research was launched as a separate report in March 2018: ISBN 978-82-12-03674-1 (pdf).

Aspects to be addressed in the panel reports:

The following mandatory aspects must be addressed. The panels are free to include other questions/aspects they consider valuable to the evaluation.

1. National level

- Strengths and weaknesses of Norwegian social sciences research in an international context;
- Research cooperation nationally and internationally;
- The scientific and societal impact of the research, including relevance for societal challenges identified in the Norwegian Government's Long-term plan for research and higher education;
- Cooperation with other sectors of society (e.g. private and public sector);
- General resource situation regarding funding and infrastructure;
- Human resources, gender balance and mobility.

2. Institutional level

- Organisation, research leadership and strategy, including follow up of recommendations given in previous evaluations;
- Resource situation, such as funding, staffing, infrastructure and the balance between resources and research activities;
- The scientific quality of research within the disciplines included in each panel;
- Facilitation of scientific quality, e.g. publication strategies, focus areas of research, national and international research collaboration;
- Training, mobility and career paths, e.g. policies for recruitment, mobility, career paths as well as gender and age balance in academic positions;
- Research collaboration and facilitation of collaboration and networking activities at the national and international level;
- Collaboration and contacts beyond academia, including strategies for dissemination of the research, examples of impact and the social relevance of the research;
- The interplay of research and education activities in the higher education institutions, including strategies to enhance it.

3. Research groups

- Organisation, research disciplines and competence of members;
- Research activities, scientific quality and production. The scientific quality of the research groups should be assessed according to a 5-point scale;
- Training, mobility and career path of researchers;
- Research collaboration and networking activities at the national and international level;
- Use of research infrastructure;
- Knowledge exchange and societal impact of the group's research, value added to partners outside of academia;
- If relevant, the groups' contribution to education activities.

Tasks of the principal evaluation committee

The committee is requested to compile a summary report based on the findings, assessments and recommendations of the panels. This report should offer an overall assessment of the state of the research evaluated. The report should also offer a set of overall recommendations concerning the future development of research in the social sciences.

The committee is requested to:

- Summarise the overall scientific quality and relevance of the research in the social sciences in Norway. Identify which research areas have a particularly strong scientific and societal impact in a national and international context, and which are particularly weak.
- Summarise general assessments related to structural issues such as institutional and national strategies, the institutional landscape, research infrastructure, recruitment and mobility.
- Summarise how the research institutions and the Research Council have followed up previous evaluations.
- Provide assessments and recommendations at the institutional level, taking into account the different roles and purposes for the universities, university colleges and research institutes.
- Provide assessments and recommendations at the national level, including the role of the Research Council in funding research activities in the social sciences.

The committee's conclusions should lead to a set of recommendations for the future development of research in the social sciences in Norway, providing advice to the research institutions, the Research Council and the Ministry of Education and Research.

Appendix B: Overview of participating institutions, number of researchers and research groups

Institution	*No. of researchers*	*No. of research groups*	*Participating in panel**
Bergen University College	20	1	6
BI Norwegian business school	153	3	2 and 6
CICERO Center for International Climate and Environmental Research	27	1	1, 2 and 3
CMI Chr. Michelsen Institute	59	2	2, 3 and 5
Fafo Institute for Labour and Social Research	58	3	3, 4 and 5
Fridtjof Nansen Institute	29	2	3
Frisch Centre	37	2	2
Hedmark University of Applied Sciences	32	-	4 and 6
Institute for Social Research	45	4	2, 3 and 4
IRIS International Research Institute of Stavanger	28	-	3, 4 and 6
Lillehammer University College	52	2	3, 4 and 6
Molde University College	30	2	6
NHH Norwegian School of Economics	287	11	2 and 6
NINA Norwegian Institute for Nature Research	25	-	1, 2 and 4
NIPH Norwegian Institute of Public Health	19	-	3
Nord University, Business school	76	3	4
Nord University, Faculty of Social Sciences	63	3	2 and 6
Nordland Research Institute	31	3	1, 4, 5 and 6
Norwegian Institute for Defence Studies	21	1	3
Norwegian University of Life Sciences, Faculty of Social Science/ Faculty of Landscape and Society	54	4	1, 2, 3 and 5
Norwegian University of Life Sciences, School of Economics and Business	57	4	2 and 6
Norwegian University of Science and Technology, Faculty of Economics and Management	179	2	2 and 6

Institution	*No. of researchers*	*No. of research groups*	*Participating in panel**
Norwegian University of Science and Technology, Faculty of Social Sciences and Technology Management	129	7	1, 3, 4 and 5
Norwegian University of Sport and Physical Education	21	2	4 and 6
NUPI Norwegian Institute of International Affairs	38	2	2 and 3
Oslo and Akershus University College, Centre for Welfare and Labour Research	172	8	3, 4 and 5
Oslo and Akershus University College, Faculty of Social Sciences	77	3	3, 4 and 6
PRIO Peace Research Institute in Oslo	35	3	1 and 3
TØI Institute of Transport Economics	23	1	4 and 6
Uni Research Rokkan Centre	28	4	2, 3 and 4
University College of Southeast Norway	48	3	4 and 6
University of Agder, Faculty of Social Sciences	93	5	1, 3, 4 and 6
University of Agder, School of Business and Law	62	-	2 and 6
University of Bergen	215	12	1, 2, 3, 4 and 5
University of Oslo, Centre for Development and the Environment	21	3	1, 3 and 5
University of Oslo, Faculty of Law	16	-	3 and 4
University of Oslo, Faculty of Social Sciences	306	13	1, 2, 3, 4, 5 and 6
University of Stavanger	172	7	4, 4 and 6
University of Tromsø, Faculty of Biosciences, Fisheries	76	2	2, 4 and 6
University of Tromsø, Faculty of Humanities, Social Sciences and Education	58	4	1, 2, 3 and 5
VID Specialized University	26	3	4 and 5
Western Norway Research Institute	7	1	1
42 units	**3005 researchers**	**136 research groups**	

*** Panels:**
1= Geography
2= Economics
3= Political Science
4 = Sociology
5 = Social Anthropology
6 = Economic-Administrative Research Area

Appendix C: Institutional self-assessment, level 1 and level 2

Institutional self-assessment - Guidelines

The self-assessment form consists of two levels:

1. **The research institution**
2. **The research discipline(s) corresponding to the panel**

In this evaluation, the term 'research institution' refers to either an independent research institution/research institute or to the faculty-level of a higher education institution. The research institution is responsible for the self-assessment at both level 1 and 2.

For each panel, the self-assessment should include information on both the research institution (level 1) and the relevant research discipline(s) (level 2) participating in the evaluation. Level 2 will in several cases cut across organisational units, but the rationale is to highlight each discipline corresponding to the panel.

List of panels:

Submitting the self-assessments

Panel 1	Geography
Panel 2	Economics
Panel 3	Political science
Panel 4	Sociology
Panel 5	Social anthropology
Panel 6	Economic-administrative research

The self-assessments, including all attachments, should be submitted as an editable pdf-document by e-mail to sameval@forskningsradet.no no later than **10. March 2017**.

Please write in English and avoid using abbreviations or acronyms that are not standard.

Format of the pdf-document

Documents should use Times New Roman 12-points font size and be structured as follows – with all the attachments after the Self-assessment form:

Front page with the name of the research institution	
List of contents	Use the chapter titles indicated in the outline on p. 2-4 of these guidelines
Self-assessment research institution (level 1)	• Self-assessment form level 1 • Fact sheet including organisational map and list of funding sources • SWOT analysis
Self-assessment research discipline/ panel (level 2)	• Self-assessment form level 2 • Form 1: Number of positions that have been announced during the past three years and the number of qualified applicants • Form 2: Audience of scientific publications • Excel-file: Overview of study programmes • Form 3: Research matching the priorities in the Norwegian Government's Long-Term Plan for Research and Higher Education and other relevant policy documents • List of 10 most important publications • List of 10 most important dissemination and knowledge exchange results
The societal impact of the research – case studies (level 2)	• List of cases studies attached in separate pdf-documents • The names of the case study documents should be in the following format: SAMEVAL[institution]-[research discipline/panel]-case[number or short name]

Self-assessment level 1

1. The Research institution (indicative number of pages)

1.1 Organisation & strategy (3 pages)

a. Describe how the research institution is organised by 01.01.2017 (refer to organisational map in the **fact sheet**). If relevant, you may expand on recent organisational changes in a separate item (see item 1.2)
b. Describe briefly the governing structure of the institution, focusing on the delegation of responsibilities for research, knowledge exchange and, if relevant, education, within the organisation.
c. Present briefly the institution's strategic aims for the next 5-10 years. Include current prioritised research areas.
d. Describe current strategies for national and international research collaboration, as well as for collaboration with non-academic partners (private, public or 'third' sector).
e. For those who have been evaluated by the RCN within the last 15 years: Describe how the evaluations have been followed up by the institution. Institutions may refer to previous reporting to the RCN where relevant.
f. Give a **SWOT analysis** (Strengths, Weaknesses, Opportunities and Threats) of the institution using the enclosed template.

1.2 Organisational changes, if relevant (1 page)

Describe recent organisational changes, or planned reorganisations, and the reasons for these changes. Implications of ongoing merging-processes for organisation, governing structures and strategic aims should be described.

1.3 Resources & infrastructure (1 page)

a. Give an overview of the resources of the institution by filling in the enclosed **fact sheet**.
b. Describe major research infrastructures (such as databases, archives, laboratories and scientific collections) at the research institution, detailing any important upgrades over the past 5-10 years and/or new equipment needs. Refer to Norway's national strategy for research infrastructure 2012-2017 where relevant.

1.4 Gender, mobility and career paths (1 page)

a. Describe the research institution's policy for gender equality, and how this is followed up.
b. Describe the institution's policy for mobility and career paths. Include to what extent researchers are recruited from other Norwegian and/or international institutions. Where relevant, please describe policies for international collaboration and career planning for PhD-students and postdocs.

c. Has the institution implemented the European Charter & Code and been awarded the brand "HR Excellence in Research", or will the European Charter & Code be implemented soon? If not, please elaborate on the reason for this.

Self-assessment level 2

2. Research discipline(s) corresponding to the panel

2. 1 Employment (2 pages)

a. Please describe plans for recruitment within the research discipline.
b. Give an overview in **Form 1** of the number of positions that have been announced within the research discipline during the past three years (2014-2016) and the number of qualified applicants (all levels). Include to what extent researchers are recruited from other institutions in Norway or internationally.
c. If relevant, please describe how the PhD training is organized and to what degree PhD students are included in larger projects within the research discipline.
d. Indicate the normal distribution of time between research, teaching and other activities (administrative tasks, project acquisition etc.) for all academic positions and policies for redistribution of tasks between staff.
e. If relevant, describe the policy for research leave/sabbatical leave for academic staff.

2.2 Scientific quality (3 pages)

a. Give a brief overview of the research activities and research groups within the research discipline. Please provide details of the most important contributions to the larger research community over the last 5-10 years. Please include a list of the most important publications resulting from the research in this period (maximum ten publications).
b. Describe strategies for research development within the discipline, including strategies for scientific publications.
c. Please estimate the primary audience of your scientific publications in **Form 2**.
d. Please describe the significance of external research funding to the development of scientific quality within the research discipline.

2.3 Gender perspectives (1 page)

a. Describe the extent to which gender perspectives are integrated in the research within the discipline, providing examples of relevant projects and/or publications.
b. Please identify a contact person for forthcoming mapping of gender research in Norway.

2.4 If relevant: Interplay between research and education (1 page)

a. Indicate the linkages between the research within the panels of the evaluation and the study programmes offered by the institution. Use the enclosed **excel file** to indicate the study programmes based on the teaching activities of the researchers to be evaluated by the panel. If applicable, list research groups that are linked with the study programmes.
b. To what extent are students involved in staff research? Describe how and on what levels.
c. Indicate the main challenges for optimizing the interplay of education and research within the discipline and the measures taken to meet these challenges.

2.5 Societal relevance (2 pages)

a. Please indicate the relevance of the research within the discipline for the thematic priorities set out in Norwegian Government's Long-Term Plan for Research and Higher Education or list other relevant policy documents in **Form 3**.
b. Describe strategies for dissemination, user-involvement and knowledge exchange, identifying any particular obstacles to achieving these aims within the discipline.
c. Please provide a list of ten important examples of dissemination/knowledge exchange activities of the research unit from the last 5-10 years.

2.6 Impact case studies

The institution is invited to document examples (cases) of the impact of their research beyond academia, according to the definitions provided in the attached form.

Please note the following requirements for reporting impact:

a. The research underpinning the impact cases should be anchored within the research institution.
b. Both the research and the impact should have been produced within the last 10 – 15 years. Priority should be given to more recent examples. Special circumstances may allow for extending the given time interval when necessary to explain longer research traditions relevant to the reported impact. In such cases, great importance should be attached to documenting tangible impacts within the time frame provided.
c. Each research institution is invited to submit one case per research discipline. If desired, the institution may submit further cases for evaluation, limited upwards to one case per ten researchers participating on one panel.

2.7 Other information

Include any other information that you consider relevant for this evaluation.

Attachments

- Fact sheet, including organisational map and list of funding sources
- SWOT analysis
- Form 1: Number of positions that have been announced during the past three years and the number of qualified applicants.
- Form 2: Audience of the results of scientific publications
- Form 3: Research matching the priorities in the Norwegian Government's Long-Term Plan for Research and Higher Education and list of other relevant policy documents
- List of 10 most important publications
- List of 10 most important dissemination and knowledge exchange results
- Template for case studies: The societal impact of the research

Excel-file: Overview of study programmes

FACT SHEET (level 1)

1. Research institution:
   - ⇨ **Organisation Chart** (to be attached)

Table 1: R&D expenditures and sources of funding (1000 NOK)

Type of expenditures	**2014**	**2015**	**2016**
Research personnel (salaries including social costs)			
Other personnel (salaries including social costs)			
Other running costs			
Total expenditures			
Types of funding			
Core funding from the Norwegian government			
External funding from RCN			
External funding from other public Norwegian sources			
External funding from other private Norwegian sources			
External funding from the EU			
External funding from other international public sources			
External funding from other international private sources			
External funding as % of total expenditures			

⇨ Please specify **main funding sources** (funders & programmes) in an attachment

Table 2: Number of PhDs graduated at the institution per year

	2014		2015		2016		Total	
	Male	Female	Male	Female	Male	Female	Male	Female
PhDs graduated within:								
Panel 1 Geography								
Panel 2 Economics								
Panel 3 Political science								
Panel 4 Sociology								
Panel 5 Social anthropology								
Panel 6 Economic-administrative research								
Total								

2. SWOT analysis

Research institution:

Give a SWOT analysis (Strengths, Weaknesses, Opportunities and Threats) of the institution.

Factors related to the organisation of research, available resources for research and the research activities themselves may be included.

	STRENGTHS	**WEAKNESSES**	
Organisation			**Organisation**
Resources			**Resources**
Research			**Research**
Organisation			**Organisation**
Resources			**Resources**
Research			**Research**
	OPPORTUNITIES	**THREATS**	

Form 1 Number of positions that have been announced during the past three year (2014-2016) and the number of *qualified* applicants (all levels).

	2014		**2015**		**2016**	
Position	Announced	Applicants	Announced	Applicants	Announced	Applicants
Ph.D.						
Post.doc						
Permanent positions						

Form 2 Roughly estimate which audience the results of your scientific* publications primarily are intended for (in percentage)

The total of all categories should amount to 100%

The evaluation panel will use this as background information to interpret publication citation data for the institution.

	Within the academic discipline(s)	**Beneficiaries outside the academic community**
National audience	**X%**	**X%**
International audience	**X%**	**X%**

* Limited to peer reviewed publications according to the definition in CRIStin.

Form 3 Long –Term Plan for Research and Higher Education

In the Long-term plan (LTP) for research and higher education 2015–2024, the Norwegian government has identified six long-term priority areas:

1. Seas and oceans;

2. Climate, environment and clean energy;

3. Public sector renewal, better and more effective welfare, health and care services;

4. Enabling technologies;

5. Innovative and adaptable industry;

6. World-leading academic groups.

Please use **table 3** to list the most relevant active research projects addressing one or more of these priority areas. (The table can be expanded if necessary):

Table 3: Research projects addressing priority areas of the LTP

Institution	Panel	Priority area of the Long-term plan for research and higher education	Research project (please include title of project, size in terms of researchers and budget, time frame)

Please list other policy documents with strategic relevance for your research – if applicable:

1.

2.

3.

4.

5.

List of 10 most important publications the last 5-10 years

Use Times New Roman 11-points font size for this list.

The research institution may submit publications from individual researchers as part of the self-assessment. Reference to the submitted publications should be made under the description of the relevant research discipline in the self-assessment (paragraph 2.2 Scientific quality).

Publications to be submitted *Please provide full reference including DOI or URL for openly accessible publications**	DOI, URL or filename	Indicate pages to be read (if applicable)**
1.		
2		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

*) Publications that are not openly accessible should be attached as a PDF-file.

) For monographs and other publications **exceeding 30 pages the main ideas and findings of the publication should be indicated. The selected chapter(s) should not exceed 50 pages.

List of 10 most important dissemination and knowledge exchange results the last 5-10 years

Use Times New Roman 11-points font size for this list

Specific guidelines: Results of dissemination and knowledge exchange activities directed towards the public or different user-groups. This could be popular science publications, grey literature, books or articles, reports, contributions to media, products or information material.

Title	*Category**	*Reference of sources*
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

*Use categories for registration in CRIStin

The societal impact of the research – template for case studies[32]

Guidelines

The impact of the research is defined as any effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment and quality of life, beyond academia. Impact includes, but is not limited to, an effect on, change or benefit to:

- the activity, attitude, awareness, behaviour, capacity, opportunity, performance, policy, practice, process or understanding
- of an audience, beneficiary, community, constituency, organisation or individuals
- in any geographic location whether locally, regionally, nationally or internationally.

Effects on other research or effects within the submitting institution (for instance the effects on teaching within the institution) are not to be reported as impact cases.

How to report and submit impact-cases?

Use the template on the next page to report the impact. Please copy the form for the submission of more than one impact case, so that only one case is reported per form.

- ⇨ Each case-study should be clearly named and saved in a separate pdf-file and attached to the self-assessment for the appropriate panel.
- ⇨ The name of the file for each case study should be as follows:
  SAMEVAL [institution]-[number of research panel]-[short case name]

[32] The following is inspired by the 2014 evaluation of research in UK higher education institutions (the Research Excellence Framework REF, see www.ref.ac.uk).

Template for case studies: The societal impact of the research

Institution:
Research discipline/panel:
Case number or short name (max 10 characters):
Name of impact case:
Summary of the impact (maximum 100 words)
Description of the research underpinning the impact: (maximum 400 words.) (Include names of key researchers and, if relevant, research groups. A time frame for when the research was carried out should also be included).
Details of the impact (maximum 400 words) (Include a description of how the research has contributed to the impact on society).
References to the research (scientific publications)
References to sources to corroborate the claims made about the impact (publications, reports, media items, policy papers, etc.)
If relevant: External references (external users or others who have witnessed the impact and could be contacted to corroborate the claims made in the reported research cases).

Appendix D: Innmelding av forskergrupper

SAMEVAL Innmelding av forskergrupper

Veiledning til institusjonene desember 2016

Institusjoner som har meldt inn forskere til evalueringen av norsk samfunnsvitenskapelig forskning har mulighet til å melde inn forskergrupper til evalueringen. Forskergruppene vil bli gjenstand for en nærmere vurdering av internasjonale fageksperter.

1.1 Kriterier for innmelding av forskergrupper:

Forskergrupper kan meldes inn dersom de oppfyller følgende kriterier:

Kriterier	Beskrivelse
Forskning på høyt internasjonalt nivå	Dokumentert gjennom publikasjoner i sentrale internasjonale publiseringskanaler.
	En eller flere av gruppens medlemmer kan de siste 5 år eksempelvis ha: - vært invitert foredragsholder (key note) på internasjonale konferanser - hatt gjesteforskeropphold i utlandet - hatt oppgaver som fagfelle i vurdering av publikasjoner, forskningsprosjekter eller andre faglige verv utenfor Norge - vært leder av eksternt finansiert prosjekt - deltatt i internasjonalt forskningssamarbeid (f.eks. dokumentert gjennom prosjektsamarbeid, sampublisering, eller deltakelse i redaksjoner eller faglige komiteer utenfor Norge)
Minst 5 medlemmer	- 3 av 5 medlemmer må være ansatt ved institusjonen som melder inn gruppen og minst 2 av disse må være fast vitenskapelige ansatte - 2 eller flere medlemmer kan være ansatt ved andre nasjonale eller internasjonale institusjoner dersom forrige kriterium er oppfylt
Ha en organisering og et formål som lar seg beskrive i egenevalueringsskjemaet	Se vedlagte egenevalueringsskjema (self assessment) for forskergrupper
Er innmeldt i CRIStin	Forskergrupper skal meldes inn ved å opprette en forskergruppe i CRIStin. Se vedlagte veiledning.

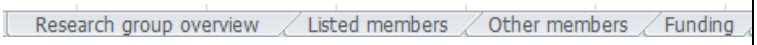
Begrensinger for innmelding av forskergrupper:

- Hver institusjon har mulighet til å melde inn **én forskergruppe per panel.**
- Institusjoner som har meldt inn 20 eller flere vitenskapelig ansatte til evalueringen har samtidig mulighet til å melde inn **én ekstra gruppe per 20 vitenskapelig ansatte.**
- Forskere kan bare meldes inn til én forskergruppe i denne evalueringen, men deltakelse i flere forskergrupper kan synliggjøres i skjemaet "Research group members and financing".
- Institusjoner som melder inn en forskergruppe kan synliggjøre samarbeid med forskere ved andre institusjoner ved å legge dem til i skjemaet "Research group

members and financing". Dette kan gjøres gjensidig slik at forskere som telles ved den ene institusjonen ikke teller ved den andre.

1.3 Dokumentasjon av forskergruppene

Institusjonene skal levere inn følgende dokument (på engelsk) per gruppe:

Dokumenter	**Innhold:**	**Navngivning av fil:**
Research group members and financing	Excel fil hvor følgende fire arkfaner skal fylles inn:  **Research group overview:** - Navn på institusjon som melder inn gruppen - Navn på gruppe: Samsvarer med navn i CRIStin - URL til registrert forskergruppe i CRIStin. - Navn på gruppeleder. **Listed members:** - Navn på innmeldte medlemmer med opplysning om stilling, forskningstid i gruppe, institusjon, alder, kjønn, PhD-givende institusjon - Tittel på publikasjoner med referanse til innsendt PDF eller en Open Access lenke, type publikasjon og sidehenvisning. **Other members:** - Medlemmer som er meldt inn til andre forskergrupper i SAMEVAL ved egen institusjon eller ved andre institusjoner. - Medlemmer som er meldt inn til evalueringen av humanistisk forskning (HUMEVAL) eller utdanningsforskning (UTDEVAL). - Medlemmer fra Norge som ikke er innmeldt til noen av evalueringene. - Medlemmer fra utlandet. **Funding:**	1. Research group members and financing.xlsx

	Oversikt over eksterne finansieringskilder. Beløpene som oppgis skal være et anslag basert på aktivitetsnivå 2012-2016.	
2. Self-assessment	Se vedlagte mal. Punkt 1.1-1.5 og punkt 1.7 skal fylles ut.	2. Self assessment.pdf
3. Societal impact	Forskergruppene inviteres til å dokumentere eksempel på forskningens samfunnsbidrag. Eksempelet skal hentes fra forskningsgruppens aktiviteter og være i kjernen av gruppens faglige virksomhet.	3. Impact case study.pdf
4. Curriculum vitae	Se vedlagte mal. Det skal leveres ett skjema per gruppemedlem (dette gjelder alle gruppemedlemmer og ikke bare innmeldte medlemmer).	4. Curriculum vitae [etternavn].pdf
5. Publikasjoner	- Medlemmer som er meldt inn til evalueringen kan levere én vitenskapelig publikasjon i fulltekst. - Dersom publikasjonen overskrider 50 sider, skal man i dokumentet "researcher group members and financing" indikere hvilke sider som vektlegges (max 50). - En digital kopi av publikasjonen legges ved i PDF-format. Alternativt legges det ved lenke til vitenskapelige arbeid som er åpent tilgjengelig (Open Access). **NB! Enkelte publikasjoner kan fremstå som fritt tilgjengelige ved den enkelte institusjon uten å være det (betalt abonnement).**	5. Publication [etternavn].pdf

1.4 Innlevering

Fristen for innmelding av forskergrupper og innsending av dokumentasjon er satt til **fredag 10. februar 2017.**

Informasjon om forskergruppene skal sendes inn til Forskningsrådet på e-postadressen sameval@forskningsradet.no på følgende måte:

1) Det skal sendes én e-post per forskergruppe som inkluderer alle vedlegg for gruppen.
2) Med unntak av "research group and financing" (Excel-format) skal alle vedlegg være i PDF-format (maskinlesbar og ikke skannet versjon).
3) Tittel på e-posten skal være som følger:
   SAMEVAL [navn på institusjon]-[navn på forskergruppe]

NB! Store forsendelser kan med fordel deles inn i flere e-poster, eller sendes ved hjelp av UNINETT FileSender.

1.5 Kontaktpersoner i Forskningsrådet

Seniorrådgiver Heidi Dybesland, sameval@forskningsradet.no, telefon 22037142

Seniorrådgiver Hedvig Buene, sameval@forskningsradet.no, telefon 22037242

Seniorkonsulent Helene Sophie Aanerud, sameval@forskningsradet.no, telefon 22037547

Vedlegg:

- SAMEVAL **Research group members and financing (excel file)**
- SAMEVAL **Research group self-assessment**
- SAMEVAL **Research group - Impact case study (optional)**
- SAMEVAL **CV mal**
- SAMEVAL **Brukerveiledning for registrering i CRIStin**

Appendix E: Research group self-assessment

Research group self-assessment

Maximum 5 pages pr. group.

1.1 Organisation, leadership, strategy and resources

a. Please give a brief account of the establishment and the development of the research group.
b. Please describe the leadership and organisation of the research group.
c. Please describe the scientific goals of the research group and the strategy for scientific publication and knowledge exchange, including cooperation with non-academic partners.
d. Please describe how the research group contributes to the strategic goals of the host institution.
e. To what extent does the research group incorporate external funding as a factor in its strategic planning? And, if relevant: please comment briefly on the support from the host institution in the development and running of externally funded projects.
f. To what extent does the host institution assist the research group in providing relevant research infrastructure, such as databases, scientific collections or experimental facilities?

1.2 Research profile and quality

a. Please describe the research activities and the research profile of the group.
b. Please describe how the research group has contributed to the development of the state of the art within its field. Examples of contributions may include (but are not limited to) theoretical and methodological developments, new empirical findings, interdisciplinary developments and production of datasets.

1.3 Recruitment and training

a. How does the research group contribute to recruitment and career development for temporary or permanently employed academic staff/researchers?
b. Please describe how PhD-students and postdoctoral fellows are recruited to the research group, nationally or internationally.
c. What is the group's contribution to the training and mentoring of PhD-students and postdoctoral fellows?
d. Please describe the extent to which PhD students and postdoctoral fellows participate in international exchange programmes (including time spent at research institutions abroad).
e. To what extent do PhD-students take part in collaboration with partners outside of academia?

1.4 Networking

a. Please describe how the research group engages in research collaboration. Collaboration may include (but is not limited to) cooperation across faculty divisions,

across institutions, with partners outside of academia or international cooperation.

1.5 Impact on teaching (if relevant)

a. Please describe how the research group contributes to educational activities.
b. How much time does the research group spend on teaching?
   Fill in the table below and add a comment if necessary

	Name of study programme	**Approximate time spent on teaching by research group members per year (hours including preparation)**
BA-level		
MA-level		
PhD-level		
Other		
Comment		

1.6 Other information

Include any other information that you consider relevant for this evaluation.

Curriculum vitae MAX 1 page

Research group				**Panel #**	
Name:				**CRIStin ID**	
Sex:		**Birth year:**		**Nationality:**	
Academic position:					
Former academic positions (last 5 years)					
Academic degrees	*Degree, university and year:*				

Number of PhD-students (if relevant)	**As main supervisor:**	**As co-supervisor:**
Under supervision		
Completed degrees 2006-2016		
Number of publications	**2007-2011**	**2012-2016**
Peer-reviewed monographs		
Articles in peer-reviewed journals		
Book chapters		
Academic commentary editions		
Exhibition catalogues		
Translations (related to research area)		
Textbooks for educational purposes		
Popular scientific books		
Popular scientific articles		
Reports		

Please rank your three most important publications since 2007	1. 2. 3.

Research group - Impact case study (optional)

The research group may document examples (cases) of the impact of their research beyond academia. The impact of the research is defined as any effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment and quality of life, beyond academia. Impact includes, but is not limited to, an effect on, change or benefit to:

- the activity, attitude, awareness, behaviour, capacity, opportunity, performance, policy, practice, process or understanding
- of an audience, beneficiary, community, constituency, organisation or individuals
- in any geographic location whether locally, regionally, nationally or internationally.

Effects on other research or effects within the submitting institution (for instance the effects on teaching within the institution) are not to be reported as impact cases.

How to report and submit impact-cases?

Please note the following requirements for reporting impact:

- The research underpinning the impact cases should be anchored within the research group.
- Both the research and the impact should have been produced within the last 10 – 15 years. Priority should be given to more recent examples.
- Use the template on the next page to report the impact. Please copy the form for the submission of more than one impact case, so that only one case is reported per form.
- Each case-study should be clearly named and saved in a separate pdf-file and attached to the self-assessment for the research group.
- The name of the file for each case study should be as follows:
  SAMEVAL [institution]-[research group]- [short case name]

Template for case studies

Name of impact case: (max 10 characters)
Summary of the impact (maximum 100 words)
Description of the research underpinning the impact: (maximum 400 words.) (include names of key researchers in the group. A time frame for when the research was carried out should also be included).
Details of the impact (maximum 400 words) (include a description of how the research has contributed to the impact on society).
References to the research (scientific publications)
References to sources to corroborate the claims made about the impact (publications, reports, media items, policy papers, etc.)
If relevant: External references (external users or others who have witnessed the impact and could be contacted to corroborate the claims made in the reported research cases).

Appendix F: Damvad Fact sheet for Economics

On the factsheets from Damvad Analytics

The Factsheets are appendices to the Damvad Analytics's report *Social Science in Norway – Statistical analysis of publications and research personnel*,containing publication and research personnel statistics, and an analysis of social sciences in Norway. This factsheet presents a number of key indicators for each of the six evaluation panels, based on the listed individuals and their affiliations. The data presented summarize results for the last three years, 2014-2016. Please refer to the main report for descriptions of the data and method underlying the analyses.

Variables/indicators:
The indicators are based on the listed individuals and their affiliations. The data presented summarize results for the latest three years 2014-2016. Each factsheet shows indicator values for each of the institutions participating in the evaluation, for the research field in total and social science in Norway.

- **Number of NPI pub:** Total number of publications – counting publication qualified for being included in the Norwegian Publishing indicator
- **Pub Points:** Total publication points according to the Norwegian Publishing indicator
- **Number of listed individuals:** Total number of listed individuals per participating institution and faculty, not included are non-publishing individuals.
- **Share of L1 journals:** Share of NPI level 1 publications for NPI journal publications
- **Share of L2 journals:** Share of NPI level 2 publications – for NPI journal publications
- **Share of L1:** Share of NPI level 1 publications – for the total number of NPI publications
- **Share of L2:** Share of NPI level 2 publications – for the total number of NPI publications
- **PP per listed individuals:** Publication points per listed researcher – measuring the ratio of publication points per individual at each institution. The numbers may in some cases include individuals with more than one affiliation and/or individuals that are no longer affiliated with the given institution.
- **Avg. SJR:** SJR average for NPI publications indexed in Scopus
- **Avg. SNIP:** SNIP average for NPI publications indexed in Scopus
- **Impact OECD:** Impact relative to OECD – measured as Field Normalized Citation Score
- **Impact Norway:** Impact relative to Norway – measured as Field Normalized Citation Score
- **Impact Nordic:** Impact relative to the Nordic countries – measured as Field Normalized Citation Score.

Abbreviation	Description
SNIP	Source Normalized Impact per Paper (SNIP) SNIP measures the citation impact by normalising the citations based on the total number of citations in the research field. SNIP has the advantage of allowing direct comparison of publication sources in different subject fields. This makes it possible to compare the publication output across the diversified set of institutions.
NPI publications	The Norwegian Publication Indicator (NPI) Publications qualified to be included in the NPI are used as the basis for the performance-based basic funding system employed in Norway to distribute funding between institutions in the higher education sector as well as to the research institutes.
SJR	SCImago Journal ranking (SJR) The SJR takes into account both the number of citations received by a journal title and the prestige of the journal titles where such citations originate. As such the SJR indicator is a variant of the eigenvector centrality measure used in network theory. Here the measure establishes the importance of a node in a network, based on the principle that connections to high-scoring nodes contribute more to the score of the node.
Scientific Impact - FNCS	Field Normalized Citation Score (FNCS) The FNCS indicator considers differences in publication patterns for different scientific fields, publication types, and publication year. Finally, as an extra precaution to avoid overestimating the citation counts, we exclude self-citations, i.e. authors citing their own work. In calculating the scientific impact for each of the participating institutions relative to the average of Norway, the Nordic countries and OECD. As the average for the three benchmarks is equal to one, a value of e.g. 1.25 indicates that these publications receive 25 percentage point more citation than average.

Economics

Institution	Number of NPI pub	Pub Points	Number of listed individuals	Share of L1 journals	Share of L2 journals	Share of L1	Share of L2	PP per listed individuals	Avg. SJR	Avg. SNIP	Impact OECD	Impact Norway	Impact Nordic
BI	107	115.00	43	39%	61%	40%	60%	2.67	2.38	1.72	1.04	1.04	0.99
CICERO	63	39.97	14	70%	30%	63%	37%	2.86	1.71	1.54	0.96	0.91	0.84
CMI	36	26.20	16	71%	29%	67%	33%	1.64	1.23	1.32	1.04	0.81	0.96
Frisch	56	55.79	26	62%	38%	66%	34%	2.15	1.72	1.53	0.77	0.99	0.84
ISF	56	52.23	10	71%	29%	75%	25%	5.22	2.16	1.35	0.46	0.78	0.44
NHH	126	111.20	62	44%	56%	44%	56%	1.79	1.91	1.67	0.67	0.82	0.64
NINA	61	13.37	6	89%	11%	79%	21%	2.23	1.76	1.43	2.27	1.22	1.58
NMBU - HH	151	82.40	34	84%	16%	82%	18%	2.42	2.45	1.23	1.42	1.15	1.20
NMBU - Nor	43	22.70	5	92%	8%	88%	12%	4.54	1.34	1.23	1.16	1.00	0.96
NTNU - ØK	46	42.39	18	62%	38%	65%	35%	2.36	1.50	1.38	0.56	0.69	0.59
NUPI	33	22.75	11	79%	21%	73%	27%	2.07	1.16	1.24	0.79	0.66	0.51
UiA-HH	82	47.93	17	85%	15%	77%	23%	2.82	0.95	1.08	1.07	1.09	1.01
UiB	80	62.53	51	48%	52%	49%	51%	1.23	2.49	1.84	0.68	0.96	0.74
UiO-SV	144	123.50	92	55%	45%	53%	47%	1.34	2.47	1.91	0.85	0.85	0.76
UiS	150	91.80	23	84%	16%	85%	15%	3.99	1.23	1.25	1.46	1.20	1.24
UiT-BFE	46	27.07	17	80%	20%	78%	22%	1.59	1.45	1.28	0.66	0.48	0.73
UNI	20	17.55	12	58%	42%	60%	40%	1.46	1.51	1.40	0.56	0.65	0.67
Nord - HHN	26	27.75	10	76%	24%	77%	23%	2.78	1.40	1.06	0.41	0.60	0.45
Economics	1275	1093.00	425	71%	29%	70%	30%	2.57	1.11	1.68	1.11	1.01	0.99
Social Science in Norway	8945	7418.20	2611*	78%	22%	74%	26%	2.84	1.51	1.46	1.12	1.02	1.00

Appendix G: Output in scientific journals, Economics

Institution	Number of researchers	Research Grades	Number of articles	Percentage on level 2,	Number of articles on level 2	Number of articles on level 2 /per researcher
Frischsenteret	26	4	50	0,38	19	0,73
Institutt for samfunnsforskning	10	3	38	0,29	11	1,10
Norsk institutt for naturforskning	6	3	53	0,11	6	0,97
Norsk utenrikspolitisk institutt	11	3	24	0,21	5	0,46
CICERO Senter for klimaforskning	14	3	55	0,3	17	1,18
Uni Research Rokkan Centre	12	3	19	0,42	8	0,67
Chr. Michelsens Institutt	16	3	31	0,29	9	0,56
Universitetet i Agder Handelshøyskolen	17	2	53	0,15	8	0,47
Universitetet I Tromsø BFE	17	3	41	0,2	8	0,48
Nord universitet Handelshøyskolen	10	3	25	0,24	6	0,60
NMBU Noragric* **	5	3	NA	NA	NA	NA
NMBU Handelshøyskolen* **	34	3	NA	NA	NA	NA
Universitetet I Stavanger	23	3	143	0,16	23	0,99
NTNU	18	3	42	0,38	16	0,89
Handelshøyskolen BI	43	4	102	0,61	62	1,45
Universitetet i Bergen	51	4	67	0,52	35	0,68
NHH	62	5	111	0,44	49	0,79
Universitetet i Oslo SV	92	5	130	0,46	60	0,65
Total/mean	518**	3,38	984	0,32	341,1	0,79

*Table made by the Economics panel, January 2018, based on data from Damvad Analytics, 2017.

**502 researchers in Economics were enlisted for the SAMEVAL – evaluation, whereas Damvad in their bibliometrical analysis counted 518 economicsts.

*** Separate numbers are not provided for NMBU.

Appendix H: Time frame for collected self-assessments and bibliometric data

Institutional self-assessment

Level 1 The Research institution	**1.1 Organisation & strategy**	
	1.1.c	the institution's strategic aims for the next 5-10 years
	1.1.e	the institutions who have been evaluated by the RCN within the last 15 years
	1.2 Resources & infrastructure	
	1.2.b	important upgrades over the past 5-10 years and/or new equipment needs.
	FACT SHEET	
	Table 1	R&D expenditures and sources of funding (2014-2016)
	Table 2	Number of PhDs graduated at the institution per year (2014-2016)
Level 2 Research discipline(s) corresponding to the panel	**2.1 Employment**	
	2.1.b	number of positions that have been announced within the research discipline during the past three years (2014-2016) and the number of qualified applicants (form 1)
	2.2 Scientific quality	
	2.2.a	most important contributions to the larger research community over the last 5-10 years. Please include a list of the most important publications resulting from the research in this period
	2.3 Societal relevance	
	2.3.c	ten important examples of dissemination/knowledge exchange activities of the research unit from the last 5-10 years.
	2.4 Impact case study	
	2.4.b	the research and the impact should have been produced within the last 10 – 15 years.

Research group self-assessment

CV	former academic positions	Last 5 years
	number of PhD- students with completed degrees	Between 2006-2016
	number of publications	Between 2007-2011 and 2012-2016
	your three most important publications	Since 2007
Impact case	the research and the impact should have been produced within the last 10 – 15 years.	

Bibliometric data

Research personnel data	The data used for the analysis of the research personnel covers the period 2005 to 2015.
Publication data	The data collected from CRIStin will cover the period from 2011 to 2016.
	The Scopus enhanced data will cover publications between 2011 and 2016. However, to ensure robustness of the citation analysis, publications published internationally after 2016 will not be included when assessing citations and impact.

Appendix I: Template for assessments of the units: institutions and research groups

1. [NAME OF INSTITUTION]

SECRETARIAT: A short introduction on establishment and development of the institution and its organization.

SECRETARIAT: Fact sheet

1.1 Evaluation of [Institution]

1.1.1 Organisation, leadership and strategy

ASSESSMENT: overall reasoning

- How do you review the leadership of the research area on an institutional level?
- Does the institution have adequate goals and a suitable or an unsuitable strategy to reach them?
- How do you consider the institutions' strategic focus (or lack there of), taken into account its publication strategies, the national and international research collaboration?
- How does the institute make use of external research funding? Are the use of this funding reasonable, and/or is there room for improvements?

1.1.2 Institutional following up on previous evaluations

ASSESSMENT: overall reasoning

- Consider conclusions and recommendations from previous evaluations, and give your opinion on the way the reviews have been followed up.

1.1.3 Research environment (if relevant)

ASSESSMENT: overall reasoning

- How do you review the institutions policy for maintaining a fruitful environment for production and exchange of knowledge? (i.e. seminars, summer schools, guest lectures and scholars, etc)

1.1.4 Resources and infrastructure

ASSESSMENT: overall reasoning

- Does the institution provide adequate resources and infrastructure?
- Does the research area make good use of these?

1.1.4 Research personnel

ASSESSMENT: overall reasoning

- Are the area's hiring and career development practices consistent with best practice?
- Are PhD candidates, post-docs and junior faculty adequately trained and mentored?
- Has the institution implemented the European Charter and code and been awarded the brand "HR Excellence in Research, or what are the plans to implement the Charter?
- Is there a transparent career path?
- Is there sufficient national and international mobility of researchers?

- Is the balance among the research personnel appropriate in terms of gender, age and diversity?

1.1.5 Research production and scientific quality

ASSESSMENT: reasoning

Numerical scale, scientific quality, 5-1 (excellent–weak)

- To which extent does the institution pursue policies to improve and facilitate scientific performance of high quality?
- How is the productivity, the degree of originality and international profile?
- Evaluation of the cases from the institutions in the research area
- Has the institution contributed to advancing the state of the art in the research area /scientific discipline/ to interdisciplinary production of knowledge?
- How does the institution make use of interdisciplinary approaches, when these are relevant?

1.1.6 Interplay research-education: impact on teaching

ASSESSMENT: overall reasoning

- How is the balance between teaching and research?
- Are there established linkages between the research and the study programmes offered by the institution?
- Does the institution have a focus /strategy to secure / improve the interplay of teaching and research?
- How are eventual challenges addressed and handled?
- To what extent are students involved in staff research?

1.1.7 Societal relevance and impact

ASSESSMENT: reasoning + identify best cases

- Does the institution have strategies for dissemination, user-involvement and knowledge exchange? How do you review the strategies?
- Does the institution document relevant dissemination/knowledge exchange activities?
- Does the ongoing research at the institution have a linkage/association to thematic priorities set out in the Norwegian Government's Long-Term Plan for Research and Higher Education and other relevant policy documents?
- To what extent does research in the area benefit the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia? What is your overall view?

1.1.8 An overall review on profile, scientific quality and impact on institutional level

ASSESSMENT: overall reasoning

1.1.9 Feedback

1.2 Evaluation of [Research group A]

Short description of the research group.

ASSESSMENT: overall score 5-1

1.2.1 Organisation, leadership and strategies

ASSESSMENT: overall reasoning

- How do you review the leadership of the research group?
- How do you view the group's intellectual focus and strategy to reach them? Please take into account its publication strategies, the national and international research collaboration.
- Does the group make use of external research funding, and eventually how? Are the use of the external funding reasonable, and/or is there room for improvements?
- Does the research group contribute to the institution's overall goals or not?
- To which extent does the institution pursue policies to improve and facilitate scientific performance of high quality?
- Does the institution provide adequate resources and infrastructure, and how does the research group make use of them?

1.2.2 Research personnel: including recruitment, training, gender balance and mobility

ASSESSMENT: overall reasoning

- How is the group's hiring and career development practices? Are they consistent with best practice?
- How to you view the training and mentoring of PhD candidates and post-docs?
- Is the balance among the research personnel appropriate in terms of gender, age and diversity?
- How is the national and international mobility of researchers? Is it sufficient /insufficient and in which way(s)?

1.2.3 Research production and scientific quality

- How is the productivity of the research group, the degree of originality and its international profile?
  Has the group contributed to advancing the state of the art in its discipline(s)? If yes, how?
- Does the group make use of interdisciplinary approaches, where these are relevant? How?

- How do you review the quality of the research overall?

1.2.4 Networking

ASSESSMENT: overall reasoning

- Does the group make good use of collaboration, nationally and internationally, to advance its strategy and produce high-quality, relevant research?

1.2.5 Interplay research-education: impact on teaching (if relevant)

ASSESSMENT: overall reasoning

- Does the research group contribute to educational activities?
- To what extent is the research of the group relevant for the study programmes at the host institution or other institutions?

1.2.6 Societal relevance and impact (if relevant)

ASSESSMENT: overall reasoning

- Does the research group document relevant dissemination/knowledge exchange activities?
- To what extent does research in done by the research group benefit the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia? What is your overall view?

1.2.7 Overall assessment

ASSESSMENT: overall reasoning

- What is the overall profile, and scientific quality of the research group?
- To what extent is the research group linked to / have an impact on the research environment at its institution?
- What is the overall significance of the research group in a national research area context?

1.2.8 Feedback

Appendix J: Template for an assessment of the ten most important publications listed by the institutions

Template for an overall assessment of the ten most important publications listed by the institution

The institutions have been invited to submit a list of ten most important publications. These publications are listed as the attachment of the institutional self-evaluation, and also available as pdf or open access links for further information.

The assessor should provide an overall assessment of these listed publications by the institution. The assessment is overarching, however, the publications can be consulted if/when relevant.

The overall assessment should be provided with the grading scale for scientific quality, along with reasoning.

Note that not all of the questions involve a quality criterion (for instance, to what extent are the publications interdisciplinary or co-authored does not imply a normative judgement), these criteria are proposed to link the assessment of publications to the overall assessment of the institutional aims and strategies for the field.

How would you assess the selected publication outlets (i.e. significance and quality of journals, publishers, book series)?
How would you assess the originality and significance of the publications within its designated field, nationally and/or internationally?
Are the submitted ten publications representative of the discipline in this institution? (i.e. do the publications represent few/many of the researchers and sub-themes of the discipline in this institution?)
If relevant: **To what extent do the publications contribute to interdisciplinary research?**
If relevant: **To what extent do the publications include co-authoring with significant researchers on the field (nationally and internationally)?**
To what extent do the publications reflect the stated thematic, theoretical and/or methodological foci of the institution?
How would you in broad terms assess these ten publications?

Appendix K: Template for an assessment of the publications of listed members at the research groups

Template for an overall assessment of the publications of listed members at the research groups

The research groups have been invited to submit one publication per member listed in the evaluation. The publication could be a scientific article or a book chapter. For monographs and other publications exceeding 30 pages, the main ideas and findings of the publication should be indicated. The selected chapter(s) should not exceed 50 pages. The panel will consider when external referees are needed for further assessment of the publications.

The assessors should review all the submitted publications in terms of their quality, and provide a single assessment for all of the publications submitted by the research group, following the template underneath. The assessment should be written with the assumption that parts of the text can be used for the section with the title "Research production and scientific quality".

Please provide an overall assessment using the grading scale for scientific quality (5-1), as well as a short reasoning for the grade.

Note that not all of the questions involve a quality criterion (for instance, to what extent are the publications interdisciplinary or co-authored does not imply a normative judgement), these criteria are proposed to link the assessment of publications to the overall assessment of the research group aims, scope and strategies.

How would you assess the selected publication outlets, i. e. significance and quality of journals and other venues for publications.
How would you assess the scientific quality of the publications in terms of coherence of argument, methodology and overall analysis?
How would you assess the empirical contributions of the publications?
How would you assess the analytical and/or theoretical contributions of the publications?
If relevant: **To what extent do the publications contribute to interdisciplinary research?**
How would you assess the originality of the publications within its field, nationally/internationally?
If relevant: **To what extent do the publications include co-authoring with significant researchers on the field, nationally and internationally?**
How would you assess overall coherence of the research group publication output, that is, the level of shared thematic, theoretical and/or methodological foci in the group? **To what extent do the publications reflect the stated thematic, theoretical and/or methodological foci of the research group?**
Overall evaluation of the quality of publication output (reasoning and assessment scale for scientific quality)

Appendix L: Societal impact: good practice cases

Case	Reasoning
NHH, LEMO-CIO: Media	Has substantial underpinning research, clear channels of impact in a variety of venues (the competition commission, private sector consulting, public debate), and some good actual influence is claimed either on a specific decision or in terms of shaping debate.
UiO, Economics: Environmental Economics, and Taxation of Oil Companies	In both cases, there is a clear thread from research-based arguments published in scientific journals and books, through committee and other work, to actual changes to government policy. Although the main immediate impact is above all on Norwegian policies, the impact goes beyond national borders.
UiO, Oslo Fiscal Studies: Childcare	An impressive report on how studies of public childcare in Norway (using register data) facilitate the identification of various short and long-run effects on both parents and children. The study points to the importance of universal child care programmes in explaining differences in earnings inequality and income mobility, and it has influenced various policy documents in Norway, as well as the debate in other countries, and also documents by the World Bank, UN and IMF.
UiO, Frisch Centre: Green Tax	The case describes the impact of a report on green taxation to which researchers from the Frisch Centre have contributed. The report draws on past research at the centre, in particular in the domain of environmental (and climate) economics. The case shows that the report was frequently used in the debate on green taxation in the Norwegian parliament; in future, this report may also affect decision-making on green taxation. The impact may even go beyond Norway.

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