RESEARCH MASTER

MULTIDISCIPLINARY ECONOMICS

FACULTY OF LAW, ECONOMICS AND GOVERNANCE

UTRECHT UNIVERSITY

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This report was finalised on 26 September 2017

REPORT ON THE RESEARCH MASTER'S PROGRAMME MULTIDISCIPLINARY ECONOMICS OF UTRECHT UNIVERSITY

This report takes the NVAO's Assessment Framework for Limited Programme Assessments as a starting point (19 December 2014).

ADMINISTRATIVE DATA REGARDING THE PROGRAMME

Research Master's programme Multidisciplinary Economics

Name of the programme:	Multidisciplinary Economics
CROHO number:	60907
Level of the programme:	Research Master
Orientation of the programme:	academic (WO)
Number of credits:	120 EC
Location(s):	Utrecht
Mode(s) of study:	fulltime
Language of instruction:	English
Expiration of accreditation:	4 July 2018

The visit of the assessment panel Multidisciplinary Economics to the Faculty of Law, Economics and Governance of Utrecht University took place on 6 and 7 June 2017.

ADMINISTRATIVE DATA REGARDING THE INSTITUTION

Name of the institution:	Utrecht l
Status of the institution:	Funded
Result institutional quality assurance assessment:	Positive

COMPOSITION OF THE ASSESSMENT PANEL

The NVAO has approved the composition of the panel on Multidisciplinary Economics. The panel that assessed the research master's programme Multidisciplinary Economics consisted of:

Prof.dr. Henri L.F. de Groot (chair), Professor of Regional Economic Dynamics at Vrije Universiteit Amsterdam (VU)

- Prof.dr. Frank Witlox, Professor of Economic Geography at Ghent University (UGent)
- Prof.dr. Tim Barmby, Emeritus Professor Political Economy at University of Aberdeen (UK)
- Prof.dr. Fieke van der Lecq, Professor of Pension Markets at Vrije Universiteit Amsterdam (VU)
- Hugo van Buggenum MSc, research master student Economy at Tilburg University

The panel was supported by dr. Alexandra Paffen, who acted as secretary.

Appendix 1 contains the curricula vitae of the panel members.

University

WORKING METHOD OF THE ASSESSMENT PANEL

Preparation

The project manager/secretary of QANU met with staff members of the research master on 21 February for a preparatory meeting. QANU received the critical reflection of the research master's programme Multidisciplinary Economics on 11 April and made it available to the panel members. The panel members read the critical reflection and prepared (written) questions, comments and remarks prior to the site visit. The secretary collected these questions in a document and organized them into topics to be discussed during the site visit.

In addition, all panel members read recent theses from the programme. In consultation with the chair of the panel, fifteen theses were selected, covering the full range of marks given and representing the wide range of topics studied by the students. Theses were selected from the academic years 2011-2016. The panel members also received the grades and the assessment forms filled out by the examiners and supervisors. An overview of all documents and theses reviewed by the panel is included in Appendix 6.

The secretary drafted a programme for the site visit. This was discussed with the chair of the panel and the programme director. As requested by QANU, the programme director carefully selected discussion partners. A schedule of the programme for the site visit with all discussion partners is included in Appendix 5.

Site visit

The site visit took place on 6 and 7 June 2017 at Utrecht University. In a preparatory meeting the panel members discussed their findings based on the critical reflection. Furthermore, the panel discussed its findings with regard to the theses and the questions and issues to be raised in the interviews with representatives of the programme and other stakeholders.

During the site visit, the panel studied documents provided by the policy advisor(s). These documents included course descriptions, course materials, written exams, assignments and other assessments.

Furthermore, the panel interviewed the programme management, students, alumni, staff members, members of the Programme Committee and members of the Examination Board. Prior to the site visit, both staff members and students were informed about the opportunity to speak to the panel confidentially during the 'consultation hour'. One request was received for the consultation hour and the panel met with this person. The outcome of this conversation has been incorporated into this report.

After the concluding meeting with the management, the panel members extensively discussed their assessment of the programme and prepared a preliminary presentation of the findings. The site visit was concluded with a presentation of these preliminary findings by the chair for an audience with the management of the programme, supporting staff and interested staff members and students and alumni.

Report

After the visit, the secretary produced a draft version of the report. She submitted the report to the panel members for comments. The secretary processed corrections, remarks and suggestions for improvement provided by the panel members to produce the revised draft report. This was then sent to Utrecht University to check for factual errors. The comments and suggestions provided by the programme management were discussed with the chair of the assessment panel and, where necessary, with the other panel members. Based on the panel's comments the secretary compiled the final version of the programme report.

Decision rules

In accordance with the NVAO's Assessment framework for limited programme assessments, the panel used the following definitions for the assessment of both the standards and the programme as a whole.

Generic quality

The quality that can reasonably be expected in an international perspective from a higher education master's programme.

Unsatisfactory

The programme does not meet the current generic quality standards and shows serious shortcomings in several areas.

Satisfactory

The programme meets the current generic quality standards and shows an acceptable level across its entire spectrum.

Good

The programme systematically surpasses the current generic quality standard.

Excellent

The programme systematically well surpasses the current generic quality standard and is regarded as an international example.

SUMMARY JUDGEMENT

Standard 1. Intended learning outcomes

The research master's programme Multidisciplinary Economics (RMMDE) is part of the Utrecht University School of Economics (U.S.E.). Key to the mission of the U.S.E. is its real-world perspective: economics education should align with real-world problems, which should be dealt with from multiple perspectives. This approach is translated into the U.S.E. Tjalling C. Koopmans Research Institute (TKI) and the research master's programme Multidisciplinary Economics. The panel appreciates the courage of the programme management to create, maintain and constantly improve a multidisciplinary economics programme within the predominantly monodisciplinary field of economics. The multidisciplinary approach distinguishes this economic research master's programme from ones at other universities, both nationally and internationally. The panel advises the programme management to work out a clearer strategy. For instance, the international benchmark of the programme could be made stronger. The exit requirements of the programme are ambitious, of a research master's level and meet international standards. The panel shares the programme's vision and believes in the added value of both the real-world perspective and the multidisciplinary approach. However, it urges the programme management to connect the real-world perspective with the multidisciplinary approach and translate this specific "Utrecht twist" more clearly in the exit requirements.

The panel assesses Standard 1 as 'satisfactory'.

Standard 2. Teaching-learning environment

The first year of the programme focuses on core courses (Microeconomics, Macroeconomics, and Game Theory) and quantitative methodology courses such as Mathematics and Econometrics. The multidisciplinary approach is mainly covered by two core content courses (Multidisciplinary Economics and Institutions Think Tank) and one methodology course (Experiments in Economics and Business). The programme also pays considerable attention to the training of research skills. The research track in the programme replicates on a smaller scale the process that students will go through in their professional lives when they carry out a PhD or another research project. The second year is very flexible. Students can choose five electives (a total amount of 25 EC) to deepen their knowledge. The panel clearly recognizes the structure of the programme, with core courses in the first year and a second year mainly devoted to research and the preparation for a career in research. The research skills courses are sound. The panel studied the information on the courses in the study guide and concluded that the learning objectives and the exit requirements are clearly outlined for each course. Students are taught only by senior staff members who combine excellent research skills (as reflected by the number of international publications) with excellent teaching skills (as indicated by the number of teachers who have obtained the Senior Teaching Qualification). The MDE research programme received a positive assessment in 2015.

The panel thinks the research and didactical skills of the staff are strong and the quality of the courses is impressive and gives the students a solid basis in both state-of-the-art economics as well as methodology. Furthermore, a number of courses are especially designed to give the students a multidisciplinary perspective on real-world problems. Finally, a clearly outlined research skills track prepares students well for a research position within or outside academia. There are a number of positive effects because of the small scale of the programme: the staff and students are enthusiastic and dedicated, contacts are informal, the staff is accessible, and tailor-made solutions for problems are possible. The small number of students also makes the programme vulnerable. The small scale of the appointments of the lecturers and the limited time spent on other activities besides teaching and supporting students, seems to affect the coherency of the programme. The small scale of the programme also affects the quality control, which seems to be working well, but is mostly informal. The Degree Programme Committee (DPC), the official name used by the Utrecht University for the 'opleidingscommissie' (in Dutch), functions at the level of the Faculty of Law, Economics and Governance and serves all their research master's programmes. The programme could benefit from more formal ways of quality control and putting some sort of educational committee nearer the heart

of the programme. Notwithstanding the scope for these further improvements, the panel was very impressed by the teaching-learning environment of the RMMDE programme and the way students feel challenged and supported by it.

The panel assesses Standard 2 as 'good'.

Standard 3. Assessment

The panel can confirm that for each course, the forms of assessment, the weighting of the different types of assessments, the learning objectives and the exit requirements are outlined in the study guide. This makes the forms of assessment transparent for the students. The forms of assessments vary according to the content and level of the courses. The thesis procedures and criteria are well established, and from the new evaluation forms it was clear to the panel how the grade was achieved. However, there are some irregularities between the exit requirements, the thesis requirements and the criteria on the evaluation forms. The management and Board of Examiners (BoE) should harmonise them. The programme could benefit from an assessment plan. The panel trusts that in the very near future the BoE will make substantial progress by aligning the procedures and preparing an assessment plan.

The U.S.E. has a Board of Examiners (BoE) that supervises all bachelor's and (research) master's programmes. According to the panel, both committees working on quality control, the DPC and the BoE, are not yet involved enough in the programme, especially content-wise, because of the level at which they function. Furthermore, the panel would advise the BoE to take more responsibility in case of the quality control of the theses. It should for example take samples of theses on a more regular basis and have them reassessed by an external member. The panel trusts that the management and BoE can work this out together.

The panel assesses Standard 3 as 'satisfactory'.

Standard 4. Achieved learning outcomes

For the master's thesis (30 EC) students conduct independent research and report the outcome in a research report. To determine if the intended learning outcomes are achieved, the panel studied a sample of fifteen theses and their assessment forms and interviewed a number of alumni during the site visit. In general, the theses were solid pieces of work that reflected the appropriate research master's level. However, two of the main criteria of the theses, namely the multidisciplinary perspective and the manner in which the theses are deemed publishable, were not sufficiently met by the sample of theses the panel read. The panel believes the programme management should see to it that these criteria are met, although it agrees with the management that exceptions should always be possible. In addition, the panel wondered if the graduates lack substantial knowledge, because of their research background in multidisciplinary economics. It was reassured by both students, alumni and staff that this is not the case. The exit requirements are achieved and the output of the programme seems to be impressive: more than 80% of the alumni pursued or are pursuing a PhD position. Furthermore, the multidisciplinary background also helps alumni to find a position outside academia or the field of economics.

The panel assesses Standard 4 as 'satisfactory'.

The panel assesses the standards from the *Assessment framework for limited programme assessments* in the following way:

Research master's programme Multidisciplinary Economics

Standard 1: Intended learning outcomes Standard 2: Teaching-learning environment Standard 3: Assessment Standard 4: Achieved learning outcomes

General conclusion

satisfactory good satisfactory satisfactory

satisfactory

The chair and the secretary of the panel hereby declare that all panel members have studied this report and that they agree with the judgements laid down in the report. They confirm that the assessment has been conducted in accordance with the demands relating to independence.

Date: 26 September 2017,

de groot

Prof. dr. Henri L.F. de Groot

dr. Alexandra Paffen

DESCRIPTION OF THE STANDARDS FROM THE ASSESSMENT FRAMEWORK FOR LIMITED PROGRAMME ASSESSMENTS

Standard 1: Intended learning outcomes

The intended learning outcomes of the programme have been concretised with regard to content, level and orientation; they meet international requirements.

Explanation:

As for level and orientation (bachelor's or master's; professional or academic), the intended learning outcomes fit into the Dutch qualifications framework. In addition, they tie in with the international perspective of the requirements currently set by the professional field and the discipline with regard to the contents of the programme. Insofar as is applicable, the intended learning outcomes are in accordance with relevant legislation and regulations.

Findings

The research master's programme Multidisciplinary Economics is part of the Utrecht University School of Economics (U.S.E.). Key to the mission of the U.S.E. is its real-world perspective: economics education should align with real-world problems, which should be dealt with from multiple perspectives. The U.S.E. wants its research and educational programmes to be relevant for contributing to a better society and to educate students to become responsible citizens. This real-world perspective leads to a multidisciplinary approach which is translated into the U.S.E. Tjalling C. Koopmans Research Institute (TKI) and the research master's programme Multidisciplinary Economics (RMMDE).

Research performed by the TKI is strongly connected to the Utrecht University (UU) research theme of Institutions for Open Societies and also has a growing interaction with the research theme of Sustainability. In 2015 the research of the Economic Faculties of six Dutch universities was assessed. The assessment committee noted among other things that the U.S.E. had a clear focus on multidisciplinary research and thereby established a special position within economics research.

The U.S.E. started the RMMDE programme in 2006 with the specific aim to train students as multidisciplinary-oriented research economists, who address real-world questions and are aware of the relevance of other disciplines in answering such questions. Students are being prepared for a research position (either as a PhD student or in a non-academic environment), obtain a thorough understanding of economic research methods, a solid set of academic research skills and state-of-the-art knowledge of the discipline of economics, and are able to apply a multidisciplinary perspective to the field of economics.

The panel appreciates the courage of the programme management to create, maintain and constantly improve a multidisciplinary economics programme within the predominantly monodisciplinary field of economics. It studied the exit requirements and the Domain-Specific Framework of Reference. According to the panel, the exit requirements reflect the Dublin descriptors and the Domain-Specific Framework of Reference. Furthermore, they are of a research master's level, are thorough, extensive and ambitious, and meet commonly accepted international standards. However, the multidisciplinary approach could be outlined more strongly in the exit requirements. More importantly, if the real-world perspective is key to the school and programme, it should be connected to the multidisciplinary approach and translated more explicitly in the exit requirements.

The multidisciplinary approach distinguishes this economic research master's programme from ones at other universities both nationally and internationally. While most other universities offer a separate business economics research master's programme, the RMMDE programme differs in its aim to integrate business economics with general economics. Although the RMMDE has quite a unique profile, it could further strengthen its profile and benchmarking by making more alliances with other programmes, both nationally and internationally. The panel applauds the successful collaboration of

the RMMDE with the University of Groningen as well as the recent partnership development with Aarhus University (Denmark).

Considerations

The panel concludes that the exit requirements are ambitious, of a research master's level and meet international standards. It advises the programme management to work out a clearer strategy. For instance, the international benchmark of the programme could be made stronger by seeking more "partners" and putting more effort into forming coalitions with other comparative programmes both nationally and internationally. The panel shares the programme's vision and believes in the added value of both the real-world perspective and the multidisciplinary approach. However, it urges the programme management to connect the real-world perspective with the multidisciplinary approach and translate this specific "Utrecht twist" more clearly in the exit requirements.

Conclusion

The panel assesses Standard 1 as 'satisfactory'.

Standard 2: Teaching-learning environment

The curriculum, staff and programme-specific services and facilities enable the incoming students to achieve the intended learning outcomes.

Explanation:

The contents and structure of the curriculum enable the students admitted to achieve the intended learning outcomes. The quality of the staff and of the programme-specific services and facilities is essential to that end. Curriculum, staff, services and facilities constitute a coherent teaching-learning environment for the students.

Findings

Programme: content and design

The first year of the programme focuses on core courses (Microeconomics, Macroeconomics, and Game Theory) and quantitative methodology courses such as Mathematics and Econometrics (for an overview of the programme, see appendix 4). The multidisciplinary approach is mainly covered by two core content courses (Multidisciplinary Economics and Institutions Think Tank) and one methodology course (Experiments in Economics and Business). The Multidisciplinary Economics and Institutions Think Tank courses also address other, more qualitative, research methodologies.

The goal of Multidisciplinary Economics (5 EC) is to make students realize that real-world economic problems cannot be fully understood or analysed by taking a monodisciplinary perspective. The course addresses a number of real-world questions and puts them into a historical perspective. Furthermore, it uses geographical, anthropological, political and philosophical insights to understand economic growth and development. The Institutions Think Tank course puts the multidisciplinary approach into practice, since it is a joint venture of several researchers from different research programmes of the UU (e.g. History, Law, Philosophy and Sociology). All these research programmes participate in the UU research theme Institutions for Open Societies. The course is taught by a multidisciplinary team of researchers and starts by addressing the different methodologies employed in the various scientific fields. Furthermore, students are expected to analyse the impact of institutions on social phenomena. The students work in multidisciplinary teams on a specific social issue (or real-world problem) such as the refugee crisis or global health inequality.

The panel studied the information on the courses in the study guide and concluded that the learning objectives and the exit requirements are clearly outlined for each course. It took a closer look at the Advanced Macroeconomics, Institutions Think Tank and Advanced Behavioral and Experimental Finance courses. All three courses had an extensive bibliography, and the students were assessed in different ways. The panel was particularly impressed by Multidisciplinary Economics and Institutions Think Tank. These courses show how the real-world perspective and multidisciplinary approach are

operationalized in the programme. The students also spoke with great enthusiasm about Multidisciplinary Economics and Institutions Think Tank. By working with students from other disciplines, the Institutions Think Tank course made them realize what an economic perspective can add, how valuable that is, and what its limits are. They also got acquainted with methods from other disciplines. The only suggestion they had, and the panel can support this, is to perhaps pay more attention to the geographical dimension in both courses. It is clear to the panel that the multidisciplinary perspective brings something new, valuable and unique into the programme.

The programme also pays considerable attention to the training of research skills. The research track in the programme replicates on a smaller scale the process that students will go through in their professional lives when they carry out a PhD or another research project. The first set of research skills (data handling) is part of the first-year core course on Econometrics. The track continues with the courses Research Skills 2 (Literature Study and Academic Writing) in the first year, Research Skills 3 (Research Proposal and Presentation Skills) in the second year, and the thesis. In order to find a research topic, students in the first year of the programme attend three sessions with presentations by key U.S.E. researchers. By the end of the first year, students should be matched with a supervisor. The literature study allows students to identify gaps within the literature of their research topic and to write a research proposal as part of the third research skills course. This proposal is written in a NWO format and allows students to apply for a PhD position.

The second year is very flexible. Students can choose five electives (a total amount of 25 EC) to deepen their knowledge. The electives should reflect their research topic. For a number of electives the U.S.E. collaborates with the UU Department of Mathematics and the Research Master in Economics and Business at the University of Groningen. Because of these alliances, students can become acquainted with sub-disciplines (e.g. Monetary Economics and International Trade). All electives are related to the main research lines within the U.S.E. The coordinator of the programme has an individual meeting with each student about their choice of electives at the end of the first year. The students appreciate the focus they can bring to their study programme with the electives. The alumni told the panel that they had all followed courses at the University of Groningen. However, except for the Institutions Think Tank course, the students did miss the interaction with other research master students in the first year of the programme. The panel appreciates the relationships with other research master's programmes that have been developed so far, but would challenge the management to engage in new partnerships (as was already suggested under standard 1). A successful exchange policy with other (comparable) economic research masters can have a stimulating effect on the learning environment and can also strengthen the multidisciplinary ambitions of the programme.

The panel clearly recognizes the structure of the programme, with core courses in the first year and a second year mainly devoted to research and the preparation for a career in research. The research skills courses are sound. One of the appendices of the self-assessment report contains a student chapter, which summarizes the input given by all students who were enrolled in the programme at the time the self-assessment report was written. The student chapter stresses the overall satisfaction with the structure of the programme. However, the structure of the programme as well as the connection between the courses could be improved. Maybe due to the major revision last academic year, some students felt that the programme is constantly changing and developing. This sometimes means the course material is very recent and therefore not yet optimally developed. At the same time, the flexibility is also seen as a strength of the programme. The panel can empathise with the students' concerns, but also applauds the programme for its continuous attempt to improve itself and try to make a difference.

Admission

The programme wants to attract excellent students with a high GPA (in general, 3.4 or higher), quantitative skills and proficiency in English. Furthermore, candidates are required to provide a letter of motivation and two letters of recommendation. Candidates are also interviewed individually in order to manage their expectations. The students told the panel that they were well informed about the programme before they started. However, the programme management is still confronted with a substantial number of students who drop out in the first months of the programme. The panel questioned the management, degree programme committee and students at length about this issue. They all take it very seriously, and the programme management has undertaken a number of actions, for instance by bringing prospective students in contact with current students. According to the students and alumni, many students decide within the first few months, for a number of reasons, to switch to a regular master's programme. The panel appreciates the possibility for students to scale back to a regular one-year master's programme. The students and alumni all agreed that the workload of the programme is high. A lot is expected from them, and the students themselves also set the bar high. But although the programme is challenging, most students see that their hard work pays off, which is satisfying.

The main issue that was raised by the assessment panel during the last visitation in 2011 concerned the viability of the programme, given the small number of students. A number of actions has been taken to increase those numbers: some U.S.E. PhD positions are now reserved for RMMDE graduates, and the programme has improved its marketing strategy. The panel thinks that a different and more extended exchange policy (as mentioned before) can also have a positive impact on the viability. During the site visit the panel was informed that the numbers for the academic year 2017-2018 are promising: 14 students have been admitted. During the rebuttal procedure it became clear that the number of students that started the first of September was 17. The panel questioned the programme management at length about the viability and the effect the low student numbers have on the learning environment. The programme management, lecturers and students informed the panel that the small group size is also one of the strengths of the programme. Students receive personal attention, and tailor-made solutions for problems are possible. The small-scale community that characterizes the programme contributes to its high quality.

Staff and academic context

Students are taught only by senior staff members who combine excellent research skills (as reflected by the number of international publications) with excellent teaching skills (as indicated by the number of teachers who have obtained the Senior Teaching Qualification). As was mentioned under standard 1, the MDE research programme received a positive assessment in 2015. The conclusions of the research assessment were that the quality and social relevance of the research were "very good" and "that the unit had been able to achieve an excellent number of scientific publications". The small class size allows the lecturers to experiment with innovative teaching forms. For instance, one of the lecturers designed a new business economics course with new content and new methods that pays specific attention to entrepreneurship. The panel applauds the experimentation with innovative teaching formats. In the student chapter, the high quality of the teaching staff is a point of unanimous agreement. According to the students, all teachers are willing to invest time, are accessible and try to accommodate them as much as possible. Furthermore, the students feel respected and taken seriously by the teachers. Both staff members and students (and alumni) informed the panel that there is a real sense of community among students as well as very good contacts between teachers and students. The students also become part of the PhD student's community and are, for instance, invited to PhD seminars.

The panel was impressed by the state-of-the-art knowledge, skills, enthusiasm and dedication of the staff. However, most staff members of the RMMDE only have small appointments and seem to have limited time to spend on activities (such as e.g. staff meetings) besides their specific RMMDE courses and students. All lecturers reassured the panel that they do not feel burdened by the research master. On the contrary, they feel energized because they can teach and tutor such talented and highly motivated students. Furthermore, they get something in return: for instance, some of the students

become teaching assistants. Since the lecturers have small appointments, the programme is at risk for a lack of contact, fine-tuning and calibration between the lecturers, according to the panel. The students also indicated that the structure of the programme could be strengthened. The programme's management needs to ensure that the coherence and structure of the programme are safeguarded.

This can also be accomplished by a more involved educational committee. The Degree Programme Committee (DPC), the official name used by the UU for the 'opleidingscommissie' (in Dutch), functions at the level of the Faculty of Law, Economics and Governance and serves all their research master's programmes. Staff members of all the research master's programmes as well as one RMMDE student member are represented on the DPC. It currently meets twice a year but is planning to increase the number of meetings. There is a lot of informal contact between the members of the DPC.

Although there is a formal DPC, because of the small scale of the programme, feedback is asked and given mostly informally during and after the courses. The programme management and lecturers take the feedback from students very seriously, and sometimes change the programme accordingly. The panel understands that, because of the small scale of the programme, the evaluation loop depends much on informal forms of quality control, and the programme has a tendency to rely on that. It seems to be working well, but the panel recommends the programme management think about a professionalization and intensification of the system of quality control. The panel feels the DPC is too detached from the programme. To improve the quality of the programme further and incorporate more checks and balances, the panel would suggest the programme management put some sort of educational committee nearer the heart of the programme.

Considerations

The panel thinks the programme has a lot to be proud of. The research and didactical skills of the staff are strong. The quality of the courses is impressive and gives the students a solid basis in both state-of-the-art economics as well as methodology. Furthermore, a number of courses are especially designed to give the students a multidisciplinary perspective on real-world problems. Finally, a clearly outlined research skills track prepares students well for a research position within or outside academia. There are a number of positive effects because of the small scale of the programme: the staff and students are enthusiastic and dedicated, contacts are informal, the staff is accessible, and tailor-made solutions for problems are possible. Notwithstanding the scope for further improvements that the panel has identified, it was very impressed by the teaching-learning environment of the RMMDE programme and the way students feel challenged and supported by it.

Conclusion

The panel assesses Standard 2 as 'good'.

Standard 3: Assessment

The programme has an adequate assessment system in place.

Explanation:

The tests and assessments are valid, reliable and transparent to the students. The programme's examining board safeguards the quality of the interim and final tests administered.

Findings

To meet the exit requirements, students of the RMMDE programme are assessed in a variety of ways (e.g. exams, individual and group assignments, presentations, participation, and papers). At the beginning of each course, samples of exams or assignments are made available to them. The core economics and methodological courses of the first year's programme are mainly assessed by written exams. As the programme continues, the focus of the assessments shifts more to paper assignments and presentations with an increasing focus on research. This shift reflects the students' development and is in line with the exit requirements. Given the primary goal of performing research independently

in a research master's programme, there are three key assessments: the literature study at the end of the first year, the research proposal in the first semester of the second year, and the final thesis.

All courses are presented in the course catalogue. The forms of assessment, the weighting of the different types of assessments, the learning objectives and the exit requirements are clearly outlined for each course. As described under standard 2, the panel examined the study guide and looked at three courses in depth and can confirm that the course material is transparent to the students, including the learning objectives, exit requirements and forms of assessment.

The U.S.E. has a Board of Examiners (BoE) that supervises all bachelor's and (research) master's programmes. The role of the BoE is twofold: (i) it has to guarantee that graduates have attained the achieved learning outcomes (exit requirements), and (ii) it supervises the quality of the grading system. The BoE is responsible for ensuring that individual courses have specified grading criteria and that these criteria are respected by the specific coordinators. The BoE selects a sample of RMMDE courses and asks the coordinators to submit all assessments (including instructions for assignments and grading sheets) along with a grading analysis of their courses. The BoE will check, for instance, if there are inconsistencies between the assessments and the exit requirements. Every RMMDE course is selected at least once every five years.

According to the self-assessment report, the BoE can act as an independent entity, since it does not include staff with management positions (at the U.S.E.). It also contains an external member from outside the school. The BoE pays separate attention to the theses: it takes samples of theses and has them reassessed by academics outside of the U.S.E. If the external grade deviates significantly from the original grade, this is reported to the board of the Tjalling C. Koopmans Research Institute (TKI). The panel found that the thesis procedure and criteria are clearly described in the study guide and very transparent for the students. However, it noted inconsistencies between the exit requirements, the requirements of the thesis which can be found in the study guide (for instance "Has the level of a publishable article in a scientific journal or a design for the first chapter of a dissertation" and "Is written in clear English") and the thesis evaluation forms. The programme management and BoE should align the exit requirements with the requirements in the study guide and the criteria on the evaluation forms.

The BoE told the panel it had developed an assessment plan procedure (by linking the learning objectives to the tests) for the bachelor's and master's programme, but it was not yet fully developed for the research master's programme. The panel wants to stress the importance of an assessment plan, because only then can it be made fully transparent how the exit requirements (as for instance "working with others" or "autonomous self-development") are being tested. The panel trusts the programme management and BoE to take on this responsibility.

The panel found that in general the feedback on the thesis evaluation forms was clear, and has improved over time. The evaluation forms have been greatly improved during the past years, and with the new forms the panel can clearly identify how a grade is established. The alumni confirmed that the thesis feedback was transparent as well as extensive. The grading system could be made even more transparent if the programme worked with grading rubrics.

Finally, the panel would advise the BoE to take more responsibility in case of the quality control of the theses. It should for example take samples of theses on a more regular basis and have them reassessed by an external member. The panel trusts that the management and BoE can work this out together.

Considerations

For each course, the forms of assessment, the weighting of the different types of assessments, the learning objectives and the exit requirements are outlined in the study guide. This makes the forms of assessment transparent for the students. The forms of assessments vary according to the content and level of the courses. The thesis procedures and criteria are well established, and from the new evaluation forms it was clear to the panel how the grade was achieved. However, there are some irregularities between the exit requirements, the thesis requirements and the criteria on the evaluation forms. The management and BoE should harmonise them. It seems to the panel as if both committees working on quality control, the DPC and the BoE, are not yet involved enough in the programme, especially content-wise, because of the level at which they function. Also for that reason, the programme would benefit from an assessment plan. The panel trusts that in the very near future the BoE will make substantial progress by aligning the procedures and preparing an assessment plan.

Conclusion

The panel assesses Standard 3 as 'satisfactory'.

Standard 4: Achieved learning outcomes

The programme demonstrates that the intended learning outcomes are achieved.

Explanation:

The level achieved is demonstrated by interim and final tests, final projects and the performance of graduates in actual practice or in post-graduate programmes.

Findings

For the master's thesis (30 EC) students conduct independent research and report the outcome in a research report. They may perform research on a subject of their own choosing, within the context of one of the research programmes of the participating departments, or perform research at an external research institute, the government, or a company. Students are expected to write a thesis on a topic that enables the use and insights from a second discipline of choice (e.g. Geography, Social Sciences, History or Law) and/or the combination of economics with business economics. The thesis is required to be of sufficient quality to serve as the basis for an international scientific article. Students who have done a research internship at a research institute and who do not plan to enrol in a PhD position are expected to write a discussion paper or a research memorandum.

To determine if the intended learning outcomes are achieved, the panel studied a sample of fifteen theses and their assessment forms and interviewed a number of alumni during the site visit. In general, the panel thought the theses were solid pieces of work that reflected the appropriate research master's level. However, as also noted above, it found some irregularities between the learning objectives of the theses and the exit requirements. Two of the main criteria of the theses, namely the multidisciplinary perspective and the manner in which the theses are deemed publishable, were not sufficiently met by the theses the panel read. Although most theses take a real-world case as their starting point, they had a mono-disciplinary focus and remained within an empirical economic framework and paradigm. The panel thinks that the programme management and thesis instructors should try harder to make sure the thesis is written from a multidisciplinary approach, although the panel understands that this is not always possible (e.g. in case of a specific PhD position). The panel realises that it can be more difficult to get a research paper with a multidisciplinary approach published, since many journals have a mono-disciplinary perspective. However, it recommends that the management and instructors make more of an effort to get this accomplished, since it is part of the programme's own criteria and overall profile. The panel specifically asked the alumni about the publication of their final project: for most of them, the thesis formed part of their PhD (for instance, a chapter). For one alumnus, the thesis was used and published as a marketing strategy for a company. The panel agrees with the management team and lecturers that the final project should be deemed publishable.

A more fundamental point of discussion was whether graduates with a research background in multidisciplinary economics are properly prepared for a mono-disciplinary PhD position. The panel wondered if the graduates lack substantial knowledge of, for instance, microeconomics and macroeconomics. It was reassured by both students, alumni and staff that this is not the case. The management team stressed that graduates are first and foremost research economists, who are concerned with real-world issues and aware of the relevance of other disciplines in addressing such issues and as such have a multidisciplinary perspective. Furthermore, the exit requirements are achieved according to the management: 83% of the 40 alumni pursued or are pursuing a PhD position. Although there are not a lot of PhD positions available at the U.S.E, most graduates can obtain a PhD position outside the U.S.E. or outside the UU because of their multidisciplinary background. Of the 16 alumni who already finished their PhD, four are working as assistant professor, five as postdocs, and the rest is working in the professional field of finance. Because of their multidisciplinary background, some graduates are working outside the field of economics or at other research departments: for instance, one obtained her PhD in Economic History, one is a postdoc at the Department of Sociology and another at the Yale Law School. The alumni told the panel they feel well prepared for a career in academic research as well as for a wider range of jobs. It is clear to the panel that the students and alumni really gain from the multidisciplinary approach, both academically and professionally.

Considerations

In general, the panel thought the theses were solid pieces of work that reflected the appropriate research master's level. However, two of the main criteria of the theses, namely the multidisciplinary perspective and the manner in which the theses are deemed publishable, were not sufficiently met by the sample of theses the panel read. The panel believes the programme management should see to it that these criteria are met, although it agrees with the management that exceptions should always be possible. The output of the programme seems to be impressive: more than 80% of the alumni pursued or are pursuing a PhD position. The multidisciplinary background also helps alumni to find a position outside academia or the field of economics.

Conclusion

The panel assesses Standard 4 as 'satisfactory'.

GENERAL CONCLUSION

The exit requirements of the RMMDE programme are of a research master's level, are ambitious and meet international standards. The international benchmark of the programme could be made stronger by forming more coalitions with other programmes, both nationally and internationally. The panel shares the programme's vision of combining the real-world perspective and the multidisciplinary approach. This could be connected even better and translated more clearly in the exit requirements. The quality of the courses is impressive and gives the students a solid basis in both state-of-the-art economics and methodology. A number of courses are especially designed to give students a multidisciplinary perspective on real-world problems. Finally, a research skills track prepares them well for a research position within or outside academia. The research and didactical skills of the staff are excellent. The positive effects of the small scale of the programme are: the enthusiasm and dedication of staff and students, the informal contacts, the accessibility of the staff, and the possibility of tailor-made solutions for problems. The small number of students also makes the programme vulnerable. The small scale of the appointments of the lecturers and the limited time spent on other activities besides teaching and supporting students, seems to affect the coherency of the programme. The coherency could improve if lecturers confront each other on a more regular basis and carry out more peer review. The small scale of the programme also affects the quality control, which is mostly informal. The programme could benefit from more formal ways of quality control and putting some sort of educational committee nearer the heart of the programme. For each course, the forms of assessment, the weighting of the different types of assessments, the learning objectives and the exit requirements are outlined in the study guide and are therefore transparent

for the students. The forms of assessments vary according to the content and level of the courses. The thesis procedures and criteria are well established, and from the new evaluation forms, it was clear to the panel how the grade was achieved. There are some irregularities between the exit requirements, the theses requirements and the criteria on the evaluation forms. The management and BoE should harmonise them, and an assessment plan could help. In general, the theses were solid pieces of work that reflected the appropriate research master's level. However, two of the main criteria of the theses, namely the multidisciplinary perspective and the manner in which the theses are deemed publishable, were not always sufficiently met. The programme management should see to it that these criteria are met, although in special circumstances exceptions should be possible. The output of the programme seems to be impressive: more than 80% of the alumni pursued or are pursuing a PhD position. Furthermore, it is clear that the multidisciplinary background also helps alumni to find a position outside academia or even outside the field of economics.

Conclusion

The panel assesses the research master's programme Multidisciplinary Economics as 'satisfactory'.

APPENDICES

APPENDIX 1: CURRICULA VITAE OF THE MEMBERS OF THE ASSESSMENT PANEL

Prof.dr. Henri L.F. de Groot (chair), is Professor of Regional Economic Dynamics at Vrije Universiteit Amsterdam in the department of Spatial Economics since May 2010 (sponsored by Ecorys NEI). His research focuses on regional and urban economics, agglomeration, meta-analysis, empirics of economic growth, trade and development, and environmental and energy economics. He teaches courses in Economics of Globalization, Microeconomics, Regional and Urban Economics (at Bachelor, Master and MPhil level), and Meta-analysis and the Empirics of Economic Growth (at the Ph.D. level). Also, he is programme director of the BSc Economics and Business Economics and Crown appointed Member of the Social and Economic Council of the Netherlands (SER).

Prof.dr. Frank Witlox, is Senior Full Professor of Economic Geography at the Department of Geography of Ghent University (UGent). He heads (together with Ben Derudder) the Social and Geography (SEG) Economic Research group at the Department of Geography (http://geoweb.ugent.be/seq). His research focuses on travel behavior analysis and modeling, travel and land use, sustainable mobility issues, business travel, crossborder mobility, city logistics, global commodity chains, globalization and world city-formation, polycentric urban development, and locational analysis of corporations. He teaches at Bacherlor level: Transport Geography; Economic Geography; Spatial Modelling Techniques; at Master level: Urban Mobility and Logistics; Geography of the Enterprise and Transport Economics and Policy. He is also a Visiting Professor at the Faculty of Science and Technology (Department of Geography) of the University of Tartu (Estonia). As of November 2016 he is an appointed Foreign Expert at the Nanjing University of Aeronautics and Astronautics (NUAA), College of Civil Aviation.

Prof.dr. Tim Barmby, is Emeritus Professor Political Economy at University of Aberdeen and an empirical labour economist. He held academic posts at Newcastle and Durham before taking up the Jaffrey Chair of Political Economy at the University of Aberdeen which he held until 2016 when he retired and was made Emeritus. In the latter part of his career he developed an interest in economic history, and in particular the labour contracts of lead miners in Allendale and the Northern Pennines. He is now continuing to conduct research on the labour market of metal miners in the 18th and 19th centuries, and has an interest in how academic work can inform and be informed by Industrial Heritage and Industrial Archaeology.

Prof. dr. Fieke van der Lecq, is part time Professor of Pension Markets since 2008 at the Vrije Universiteit Amsterdam. She focuses on the workings of several markets within the pensions sector and studies developments in both pension funds and pension insurance industry. She founded a successful full year semi-academic executive pensions program and taught, e.g. an MA course on Financial Sector Regulation. She is a member of several supervisory boards, e.g. of a listed insurance firm (both life and general insurance) and of a real estate investor on behalf of pension funds. She is chairman of the supervisory boards of two pension funds. She is advisor to the Financial Markets Authority on financial reporting and auditing. She is an independent ('crown') member of the Social and Economic Council of the Netherlands (SER) and chairman of its working groups on the new Dutch hybrid pension plan and pensions for self-employed. Finally she holds several advisory positions, mostly in the financial sector, e.g. on sustainable investment.

Hugo van Buggenum, MSc (student-member), is working as a PhD researcher at Tilburg University. His PhD research focuses on the interaction between monetary economics, macroeconomics and banking. He obtained his bachelor's degree (cum laude) in 2014 and obtained his master's degree in 2015 in Economics (cum laude) with a thesis on business cycles and monetary integration. In 2017, he finished the research master in Economics with a thesis on fiscal and monetary policy (cum laude). During his studies, he was a student-assistant for an introductory micro economics course at TiSEM (Tilburg University).

APPENDIX 2: DOMAIN-SPECIFIC FRAMEWORK OF REFERENCE

Domain Specific Requirements Economics

Introduction and benchmark

A domain-specific Economics benchmark for 2009 was created in order to assess the standard of all BSc and MSc degree programmes at Dutch universities that fall within the scope of the Economics 2009 cluster. The benchmark outlines the minimum requirements for academic degree programmes in the Economics field or subfield. Because of the diversity of degree programmes within the cluster, it was decided that the benchmark should not be prescriptive. The benchmark thus offers degree programmes the latitude to develop their own profiles, giving variable weight to specific aspects of the programmes depending on the central aims and the approach taken. This framework requires degree programmes to justify the choices made by proving that they meet the criteria of the NVAO accreditation framework. Explicit references to the domain-specific Economics benchmark for 2009 can be used to explain deviations.

Economics as a discipline

Economics is the social science that analyses the production and distribution of scarceresources. Many economists study the factors which drive agents to act in markets and within organizations. Such analyses focus on the important role played by the allocation of scarce production factors and the impact this has on the prosperity of society as a whole. General economics takes a primarily social perspective, whereas business economics goes deeper into the various business processes. Another key focus area is the study of business process management. Methodology is another important aspect of this domain: this is where subjects such as decision-making, econometrics and mathematics come into play.

Aims, level and orientation of the degree programmes

In general, the committee expects the aims of the degree programmes to express the fact that they aim to train students both in the chosen discipline (i.e. in relation to the field in question) and academically. This means that students should gain knowledge and understanding of the field and acquire both relevant subject-related and general academic skills. Hence the programmes emphasise the characteristics and value of academic research, the importance of knowledge and understanding of theory and methodology, and the relative nature of interpretations; they also offer a framework within which students can learn to apply that knowledge and understanding appropriately.

A BSc degree programme offers a broad, general education to an elementary academic standard. Students who have completed a BSc degree meet the criteria for entry to an MSc degree programme. An MSc programme offers the opportunity to go deeper into a particular field, subfield or combination of subfields than is possible in a BSc programme. An MSc programme also focuses more on the future working environment, for instance research institutes, government institutions or the business world.

The various degree programmes also prepare students for careers in society at large, where the knowledge and skills gained during their studies may be put to use. Generally speaking, this is not so much a case of preparation for specific career paths; rather, it is about acquiring an academic attitude and a box of academic tools. These should dovetail with the expectations society has of graduates of the degree programmes assessed in the context of the Economics 2009 assessment. This means that the degree programmes highlight both academic and social aspects and do not merely concentrate on current developments within the field of study. The BSc degree

programme is the cornerstone of the development of a general academic way of thinking. During this period students learn not only to cast the net further than their own subfield; they also learn to view subject-specific issues in a wider social context. Considering the importance of the BSc degree programme for the development of academic skills, facilities to prepare students with a BSc degree in Higher Professional Education to transfer to a university MSc degree must concentrate on developing an academic way of thinking. This covers issues such as bolstering students' understanding of the relationship between the various fields of knowledge, familiarizing them with research methods and applying those methods in practice, and learning to take the time to consider the results of their own or other's research.

Skills

Subject-specific skills

The skills acquired by students on an Economics degree programme depend on the subfield and specialization of the programme in question.

A degree programme referred to as 'Economics' must give students a coherent understanding of economic concepts that goes further than an 'Introduction to...' course. These concepts encompass general economics (for example macroeconomics, microeconomics, public sector economics and international economics), business economics (for example reporting, finance, marketing, organization, information science and strategy) and the methodological subjects (mainly statistics and mathematics). Methodological courses are by definition core parts of the Econometrics and Decision-making field. A BSc degree programme provides students with the basic tools needed to study one or more disciplines in depth.

The subject-specific skills of students on MSc degree programmes build on the skills they acquired in the BSc degree programme. In the spirit of the Treaty of Bologna, and given the increasing international character of degree programmes, quality standards must be as 'international' as possible.

Use of proper terminology

Students on a BSc degree programme learn how to use their knowledge when confronted with a relatively straightforward economics problem in the realm of business or public policy. They must also be able to put what they've learned into perspective. For instance, this can be achieved by comparing one theory with another, or by confronting economics concepts with approaches from other relevant fields. Students with a BSc degree in Economics will have acquired the following skills:

Reproduction and interpretation – graduates can reproduce conceptual and methodological principles of economics, and can discuss them with colleagues.

Analysis and explanation – graduates can analyse and explain phenomena and problems using the conceptual and methodological principles of economics.

Graduates of an MSc degree programme in Economics meet the following profile:

Graduates are able to work independently, and can formulate relevant research questions themselves and draft a plan of action in justification. This includes sourcing and using relevant subject-specific literature, and plugging any gaps there may be in the knowledge required to answer the research question.

Graduates are able to read and understand recent articles from journals and relevant sections of renowned academic publications and put their own research question in the context of existing literature. Graduates should also be able to analyse variations on existing models to some extent.

The ability to make a contribution to the development of the field by means of research

Graduates of a BSc degree programme can collect, collate and interpret relevant insights gleaned from literature in the field. Research in the MSc degree programme focuses much more on testing and developing theories. Graduates of an MSc degree programme in Economics should have the following skills in this respect:

- Formulation of aim and problem definition graduates can formulate a problem definition relating to economics based on academic concepts and theories.
- Choice of research design graduates can choose a research design that suits the problem definition.
- Selection of methods for collecting and processing data graduates can choose one or more suitable methods for collecting and processing data.
- Drawing conclusions graduates can make pronouncements about the initial problem definition on the basis of the results.

The ability to develop policy from knowledge and understanding gleaned from the field

At the level of a BSc degree, the opportunities for developing policy are limited to the formulation of a plan of action for one specific problem. At the level of an MSc degree programme, however, more attention should be paid to the wider context, whether that be in relation to business or public policy. Graduates of an MSc degree programme in Economics should have the following skills in this respect:

- Drafting policy advice documents graduates can draw up a proposal for solving economics problems, based on economics concepts and theories.
- Strategic activities graduates are able to assess whether their policy recommendations are feasible and practical.

General skills

General skills comprise knowledge, skills and attitudes which, although they are developed within the context of a degree programme, are not a specific product of the programme in question. These general academic skills form the basis for later academic thinking patterns and attitudes. The fact that many degree programmes – even those in the field of economics – are not specifically tailored to the requirements of the job market means that many students soon find themselves working in jobs that make no demands on their know-how in the field. The following three subject-specific skills in particular contribute to the desired general skills: the hypothetical-deductive nature of economics, the different decision-making methodologies and the importance attached to empirical research.

The committee expects the learning outcomes of all the BSc degree programmes it assesses to communicate the fact, either implicitly or explicitly, that graduates have acquired academic, research and communicative skills to a basic standard. In addition, it expects the learning outcomes to be related to the admission requirements of at least one MSc degree programme and, where applicable, the professional sphere. The committee expects the learning outcomes of all the MSc degree programmes it assesses to communicate the fact that graduates have developed academic, research and communicative skills to an advanced level, and that these learning outcomes have a bearing on the professional sphere.

Academic skills

• Graduates of BSc degree programmes have the skills needed to devise and sustain arguments and to solve problems within the field of study. Graduates of MSc degree

programmes are able to apply the same skills to new or unfamiliar circumstances within a wider, or multidisciplinary, context within the field of study.

- Graduates of BSc degree programmes have a general understanding of the nature and function of academic research. Graduates of MSc degree programmes have an in-depth knowledge of their subject.
- Graduates of BSc degree programmes are able to collect and interpret relevant information from a range of sources and subfields. Graduates of MSc degree programmes are able to assimilate knowledge and deal with complex subject matter.
- Graduates of BSc degree programmes are able to form an opinion that is at least partly based on a comparative assessment of relevant social, scientific or ethical aspects. Graduates of MSc degree programmes are able to form an opinion based on incomplete or limited information, taking into account the aforementioned aspects when applying their own knowledge and judgement.
- Graduates of BSc degree programmes are able to work independently under supervision and as part of a team. Graduates of MSc degree programmes are able to work both independently and as part of a multidisciplinary team.

Research Skills

- Graduates of BSc degree programmes are, under supervision, able to set up and carry out a modest literature search or other research on a limited scale that has a reasonable and realistic programme. Graduates of MSc degree programmes are able independently to set up and carry out an academic research project that meets the requirements of the field of study.
- Graduates of MSc degree programmes have a thorough understanding of the relevant research methods and techniques in the field of study. Graduates of BSc degree programmes have a passive understanding of all these methods, and an active understanding of some of them.

Communication Skills

- Graduates of BSc degree programmes are able to communicate information, ideas and solutions to both specialist and non-specialist audiences. Graduates of MSc degree programmes are able to draw conclusions and use their knowledge, understanding, motivation and considered reasoning to substantiate these conclusions and convey them to similar audiences.
- Graduates of BSc degree programmes are able to summarise the results of research on a limited scale orally or in writing, in a way that is clear and precise. Graduates of MSc degree programmes are able to do the same for research where the scope and complexity matches the level of the degree programme.

Relationship with the professional sphere

The learning outcomes are tailored to the expectations of future employers, regardless of diversity or otherwise.

• Graduates have the necessary skills to perform work in which an academic education to BSc level or MSc level is required or preferred.

Graduates of BSc degree programmes are aware of the possible relevance and use of academic insights in their field of study in relation to social issues and needs. Graduates of MSc degree programmes are able to make a considered judgement on the possible relevance or use of academic insights within their field of study in relation to social issues and needs.

• Graduates will have been able to consider the options for possible future work at the appropriate level.

Learning environment

A salient feature of academic degree programmes is that they encourage students to do things that enrich their academic experience. Stimulating independence and allowing students to work in teams without undue external influence are important in this regard

APPENDIX 3: INTENDED LEARNING OUTCOMES

1. Being able to look at economics from a multidisciplinary perspective

At the end of the Master's phase, the student, among other things, is capable of:

 \Box assessing whether own and others' research meets the standards of academic integrity (data handling, citing, presenting one's research results) as formulated at the level of the department, the university, and internationally;

□ applying discipline-specific economic knowledge and expertise in social, professional and economic contexts;

 \Box applying (international) economic theories and models for the testing and / or developing of economic policies of organisations and governmental bodies;

 \Box assessing the (international) economic policies, based on the international academic parameters of the discipline;

 \Box giving advice concerning economic issues and economic policy, considering the specific multidisciplinary dimensions;

□ critically appraising an academic argument;

□ responding to academic critique in a scholarly way;

□ forming opinions based on incomplete information, while accounting for social and ethical responsibilities connected with putting one's own knowledge and views into practice;

□ making substantiated economic forecasts;

 \Box demonstrating the specific academic attitude that one is expected and required to have within the domain of Economics and the combination discipline.

2. Being capable of independently performing domain-specific research with the purpose of generating new knowledge for the further development of the domain of Economics and / or the domain where Economics and the combined discipline intersect.

At the end of the Master's phase, the student, among other things, is capable of:

 \Box rendering objectives, hypotheses and values of the development of scholarly knowledge within the domain of Economics;

 \Box assessing results, arguments and defined problems in a study based on insights acknowledged within the domain of Economics;

 \Box being aware of insights into scholarly and technological developments that are important to the domain of Economics;

□ generating new knowledge through research;

□ selecting relevant research methods and justifying the choice made;

□ selecting relevant techniques and methods for analyses and justifying the choices made;

□ translating research results into societal, professional and economic contexts;

□ positioning his/her research within (international) economic academia;

 \Box translating his/her own research results into advice, accounting for its ethical, normative and societal consequences;

□ domain-specific research skills;

 \Box defending the research results in English.

3. Being capable of solving problems in a broad (multidisciplinary) context from a discipline-specific economic perspective, while considering relevant social, societal and ethical aspects.

At the end of the Master's phase, the student, among other things, is capable of:

 \Box solving problems according to academic standards within a broad, multidisciplinary context and from an economic perspective;

 \Box working with others at the academic level in order to solve a problem (interdisciplinary or multidisciplinary);

□ testing solutions against social, societal and ethical aspects;

□ giving advice regarding the social, societal and ethical consequences of solutions.

4. Working with others at an academic level in an interdisciplinary and/or multidisciplinary context and/or within international teams

At the end of the Master's phase, the student, among other things, is capable of:

 \Box working with fellow scholars within an area that exceeds one's own domain (inter/multi/trans disciplinary);

□ sharing his/her knowledge and experience within an interdisciplinary or multidisciplinary or international team and applying relevant knowledge and experience shared;

 $\hfill\square$ synthesis: combining all team input and restructuring this into a coherent and scholarly sound unity;

 \Box generating innovative knowledge with the team.

5. Communicating in English at an academic level.

At the end of the Master's phase, the student, among other things, is capable of:

 \Box debating with fellow economists and other scholars on (international) economic issues, theories and research, in English;

□ writing a paper or research report in English;

 \Box giving an oral presentation in English of conclusions and the insights and motivations on which these are based to an audience of specialists or non-specialists.

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6. Being capable of autonomous self-development.

At the end of the Master's phase, the student, among other things, is capable of:

- □ independently keeping track of (international) academic developments in the area of economics;
- □ independently taking steps within the scope of his/her own development and/or career;

□ evaluating and, if necessary, adjusting his/her own views in terms of their internal consistency;

□ giving proof of being a responsible and scholarly professional;

 $\hfill\square$ assessing his/her own performance based on self-reflection, and taking steps to improve his/her performance;

 \Box taking action within the scope of career development.

APPENDIX 4: OVERVIEW OF THE CURRICULUM

First year	ECTS
Multidisciplinary Economics	5
Mathematics	5
Econometric Methods 1	5
Econometric Methods 2 and	5
Research Skills 1: Data Handling	
Multidisciplinary Microeconomics and	5
Game Theory	
Advanced Macroeconomics	5
Advanced Microeconomics	5
Advanced Business Economics	5
Thinktank Institutions	5
Research Skills 2: Literature Study	5
and Academic Writing	
Advanced Corporate Finance	5
Experiments in Economics and	5
Business	
Total year 1	60
	••
-	
Second year	ECTS
Second year Electives *1	ECTS 25
Second year Electives *1 Research Skills 3: Research Proposal	ECTS
Second year Electives *1 Research Skills 3: Research Proposal and Presentation Skills	ECTS 25 5
Second year Electives *1 Research Skills 3: Research Proposal and Presentation Skills Thesis	ECTS 25 5 30
Second year Electives *1 Research Skills 3: Research Proposal and Presentation Skills	ECTS 25 5
Second year Electives *1 Research Skills 3: Research Proposal and Presentation Skills Thesis Total year 2	ECTS 25 5 30
Second year Electives *1 Research Skills 3: Research Proposal and Presentation Skills Thesis Total year 2 Electives second year	ECTS 25 5 30 60
Second year Electives *1 Research Skills 3: Research Proposal and Presentation Skills Thesis Total year 2 Electives second year Advanced Behavioural Economics	ECTS 25 5 30 60 ECTS 5
Second year Electives *1 Research Skills 3: Research Proposal and Presentation Skills Thesis Total year 2 Electives second year Advanced Behavioural Economics Applied Macroeconometrics	ECTS 25 5 30 60 ECTS 5 5
Second year Electives *1 Research Skills 3: Research Proposal and Presentation Skills Thesis Total year 2 Electives second year Advanced Behavioural Economics Applied Macroeconometrics Advanced Industrial Organisation	ECTS 25 5 30 60 ECTS 5 5 5 5
Second year Electives *1 Research Skills 3: Research Proposal and Presentation Skills Thesis Total year 2 Electives second year Advanced Behavioural Economics Applied Macroeconometrics	ECTS 25 5 30 60 ECTS 5 5
Second year Electives *1 Research Skills 3: Research Proposal and Presentation Skills Thesis Total year 2 Electives second year Advanced Behavioural Economics Applied Macroeconometrics Advanced Industrial Organisation Managing Innovation Advanced Behavioural and	ECTS 25 5 30 60 ECTS 5 5 5 5 5 5
Second year Electives *1 Research Skills 3: Research Proposal and Presentation Skills Thesis Total year 2 Electives second year Advanced Behavioural Economics Applied Macroeconometrics Advanced Industrial Organisation Managing Innovation	ECTS 25 5 30 60 ECTS 5 5 5 5 5 5
Second year Electives *1 Research Skills 3: Research Proposal and Presentation Skills Thesis Total year 2 Electives second year Advanced Behavioural Economics Applied Macroeconometrics Advanced Industrial Organisation Managing Innovation Advanced Behavioural and Experimental Finance Advanced Labour Economics	ECTS 25 5 30 60 ECTS 5 5 5 5 5 5 5
Second year Electives *1 Research Skills 3: Research Proposal and Presentation Skills Thesis Total year 2 Electives second year Advanced Behavioural Economics Applied Macroeconometrics Advanced Industrial Organisation Managing Innovation Advanced Behavioural and Experimental Finance	ECTS 25 5 30 60 ECTS 5 5 5 5 5 5 5 5 5

APPENDIX 5: PROGRAMME OF THE SITE VISIT

Deelnemers visitatie Research master Multidisciplinary Economics, Utrecht University				
6 June 2017 - Spinoza Hall 107				
13.00	14.00	Arrival panel; lunch		
14.00	16.00	Preparatory meeting (including critical reflection + theses)		
		Reading additional documentation		
16.00	16.45	Interview with programme management		
		- Prof. Dr. Janneke Plantenga		
		- Prof. Dr. Wolter Hassink		
		- Dr. Kris De Jaegher		
16.45	17.00	Break		
17.00	17.30	Interview with alumni		
		- Marieke Boudeling MSc		
		- Michail Moatsos MSc		
		- Jordy Meekes MSc		
		- Zori Kambourova MSc		
		- Michiel de Roo MSc		
		- Dr. Joyce Delnoij		
		- Bono van Dooren MSc		
17.30	18.00	Short debriefing (naming focal points for day 2)		
18.00	20.30	Diner panel		
		noza Hall 107		
08.45	09.15	Internal meeting panel		
09.15	10.00	Interview with students		
		First-year students:		
		- Pedja Ignjacevic		
		- Daan Rademaker		
		- Lotte Muller		
		- Filippo Ricci		
		Second-year students:		
		- Ronja Röttger		
		- Bora Lancee		
		- Irida Gouvala		
10.00	10.45	Interview with lecturers		
10.00	10.10	- Dr. Mark Sanders		
		- Prof. Dr. Stephanie Rosenkranz		
		- Prof. Dr. Jeroen de Jong		
		- Dr. Isabelle Salle		
10.45	11.00	Break		
11.00	11.45	Interview with Degree Programme Committee (students + teaching staff)		
11.00	11.40	- Dr. Bastian Westbrock		
		- Sebastiaan Tieleman (student)		
		- Prof. mr. Janneke Gerards		
		- Drs. Lolita van Toledo		
11.45	12.30	Interview with Board of Examiners		
11.45	12.00	- Dr. Johan den Hertog LLM		
		 Prof. Dr. Stephanie Rosenkranz 		
		- Mr Frans Pieter Sprik		
12.30	13.30			
		Lunch and internal meeting panel; open office hour (13.00-13.30hrs)		
13.30	14.15	Interview with programme management (including dean)		

		- Prof. Dr. Janneke Plantenga
		- Prof. Dr. Wolter Hassink
		- Dr. Kris De Jaegher
14.15	16.00	Internal meeting panel
16.00	16.15	Presentation of preliminary findings (Spinoza Hall 106)

APPENDIX 6: THESES AND DOCUMENTS STUDIED BY THE PANEL

Prior to the site visit, the panel studied the theses of the students with the following student numbers: 3176924, 3409295, 3287270, 3348571, 3483568, 3900029, 3511227, 3641716, 3714411,

3702626, 3732169, 4103467, 5498392, 3484513, 3673693

During the site visit, the panel studied, among other things, the following documents (partly as hard copies, partly via the institute's electronic learning environment):

- Course materials of the following courses:
 - Advanced Macroeconomics,
 - Thinktank Institutions
 - Advanced Behavioral and Experimental Finance
- Annual report of the Board of Examiners (2015-2016)
- Education and Examination Regulations (OER 2016-2017)