

Assessment report  
Limited Programme Assessment

**Bachelor Economics and Business Economics**

Erasmus University Rotterdam

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## 1. Executive summary

In this executive summary, the panel presents the main considerations which have led to the assessment of the quality of the programme Bachelor Economics and Business Economics of Erasmus University Rotterdam, which has been assessed according to the NVAO Assessment Framework.

The panel observes programme management has taken a wide range of measures in response to the recommendations made in the previous external assessment in 2009 and in the internal evaluation in 2012. Programme management has, among others, revised the programme intended learning outcomes, intensified the skills training and redesigned the Examination Board responsibilities.

The panel regards the programme to be especially focused on teaching students thoroughly the basics of economics and more advanced knowledge in one of the sub-disciplines. The programme objectives are to educate students in the economics discipline, to introduce them to academic research and to train them to acquire analytical skills. The panel welcomes the two tracks of the programme, allowing students to opt for education in Dutch or in English. The major specialisations enable students to prepare for one of the master specialisations of Erasmus School of Economics or of other institutions. The panel approves of the double degree programmes, as these constitute opportunities for students to combine programmes.

The programme intended learning outcomes meet the programme objectives, exhibiting, among others, disciplinary knowledge and understanding, academic research competencies, analytical skills and professional skills. In the panel's opinion, the learning outcomes are consistent with the domain-specific reference framework, which was drafted by Erasmus School of Economics and the economics programmes of Vrije Universiteit Amsterdam and of Wageningen University, and correspond to the bachelor level programme requirements. The panel considers the programme learning outcomes to adequately prepare students for master specialisations or programmes in this domain or for junior positions in the labour market. Few students select the latter option.

Programme management conducted a sound comparison to other economics and business economics bachelor programmes in the Netherlands and abroad. From this comparison, the programme profile as a programme covering the full breadth of the economics discipline, is evident.

The panel feels the involvement of the professional field through the Advisory Boards of the Erasmus School of Economics master programmes is satisfactory, as the School's programme management will direct relevant recommendations to this bachelor programme.

The admission requirements and processes, such as the study check procedures, are adequate for this programme. The emphasis on mathematical skills required is appropriate for admission.

The curriculum reflects all of the programme learning outcomes adequately. The curriculum is very well designed and effective in teaching students the fundamentals of the economics discipline, statistics and mathematics subjects and academic and research skills. Supporting programme management plans, the panel recommends to intensify and increase the coherence in the students' skills training.

The panel approves of the educational principles and the study methods of the programme, as they foster the students achieving the intended learning outcomes. The student-to-staff ratio is not very favourable. Students and lecturers are, however, positive about the small-scale dimension of the programme. The panel welcomes the *Tutor Academy* as an effective means to deploy more teaching capacity.

Programme management has taken important steps to raise the student success rates. The panel regards the success rates to be appropriate and encourages programme management to try and raise these further. The panel recommends to improve the information provided to the students, as students are not always adequately informed about, among others, internships and opportunities for exchange.

The panel is very positive about the lecturers' research track records. The panel also approves of their educational capabilities, as may be deduced from the proportion of lecturers holding the BKO-certificate.

The panel is positive about the examination and assessment policies and rules and regulations of the Erasmus School of Economics, in force for this and the other programmes of the School. They ensure the validity of the examinations, the reliability of the assessments, the competencies and expertise of examiners and the transparency of the examination processes. The Examination Board works along the lines as intended by Dutch applicable law. The Board monitors the examination and assessment processes, analyses the examinations and regularly inspects the theses.

The panel approves of the examination methods. The diversity of examination methods in courses and across courses allows for the assessment of both knowledge and skills, relevant to the programme.

The thesis process is satisfactorily organised. This will be further improved, when the *Thesis Workflow System* is implemented. The panel recommends, however, to inform students more clearly and more comprehensively about the thesis process and the thesis assessment. The assessment of the theses is a reliable process, as two examiners are involved and sound assessment forms with relevant assessment criteria are used. As the thesis processes and thesis assessments differ to a certain extent across the major specialisations, the panel recommends to align the processes and to establish more homogeneity therein.

The panel regards the examinations of the courses to be challenging and to definitely meet the courses' learning goals. Students will have achieved the programme intended learning outcomes, if they have passed all of these examinations. The panel studied ten theses of students in the programme. Initially, six theses were selected, of which two theses proved to be unsatisfactory. Thereupon, four extra theses in the lower grade bracket were selected and reviewed. The four extra theses are regarded by the panel to be satisfactory. Having conferred extensively with the thesis examiners, the panel considers the supervision and assessment processes to ensure reliable thesis assessments. The panel has no doubts about the quality of these processes and concludes these to be adequate and effective for assessing the theses, ensuring reliable assessments. The panel regards the two unsatisfactory as outliers, not representative of the general quality of the theses nor of the course examinations.

The panel assesses the programme Bachelor Economics and Business Economics of Erasmus University Rotterdam to be satisfactory and recommends NVAO to grant re-accreditation to this programme.

Rotterdam, 6 March 2017

Panel chair  
Prof. dr. T.J. Wansbeek

Secretary  
drs. W. Vercouteren RC

## 2. Assessment process

Certiked VBI received a request to conduct a limited programme assessment for the re-accreditation of the academic degree programme Bachelor Economics and Business Economics. This request was submitted by Erasmus University Rotterdam.

Certiked requested the approval by NVAO of the proposed panel of experts to conduct this assessment. NVAO have given their approval. The panel composition was as follows (for more detailed information please refer to Annex 4: Assessment panel composition):

- Prof. dr. T.J. Wansbeek, Emeritus Professor of Statistics and Econometrics, University of Groningen (panel chair);
- Prof. dr. J. Hartog, Emeritus Professor of Microeconomics with visiting scholar position, University of Amsterdam (panel member);
- Prof. dr. R. Kabir, Professor and Chair of Corporate Finance and Risk Management, University of Twente (panel member);
- S.M. van den Hoek, student Bachelor programme Tax Economics, University of Amsterdam (student member).

On behalf of Certiked, drs. W. Vercouteren RC was responsible for the process coordination and for drafting the panel's report. All panel members and the secretary signed a statement of independence and confidentiality.

The panel conducted this assessment on the basis of the NVAO Assessment Framework of 19 December 2014 (Staatscourant nr. 36791). Regarding the selection of the theses, the panel proceeded in line with the NVAO Guidelines for the assessment of final projects during external assessments of 18 February 2015. On 19 September 2016, NVAO determined the number of theses to be studied by the panel in this case.

The following procedure was adopted. The panel members of the panel studied the documents presented beforehand by programme management, including a number of theses (please refer to Annex 2 and 3: Documents reviewed and Theses reviewed). At first, the panel studied six theses. As two of these proved to be unsatisfactory, another four theses with lower grades were selected and studied by the panel.

Before the date of the site visit, the panel chair and the panel secretary met to discuss the assessment procedures. On 30 November 2016, the panel had a meeting to discuss the preliminary findings concerning the quality of the programme. Beforehand, the panel members had sent in a number of questions to be put to the programme representatives during the site visit.

During the meeting on 30 November 2016, the findings of the panel members, including those concerning the theses, were discussed. On the basis of the input of the panel, the secretary summarised the questions, which served as a starting point for the discussions with the programme representatives during the site visit.

On 1 December 2016 and on 2 December 2016, the panel conducted the site visit on the Erasmus University Rotterdam campus. The site visit was conducted in accordance with the schedule drawn up beforehand (please refer to Annex 1: Site visit schedule). Prior to the site visit, programme management communicated the open office hours to the students in the programme and the staff. No one called on the panel.

A draft version of this report was finalised by the secretary, having taken into account the information presented as well as the findings and considerations of the panel. The panel members studied the draft report and made a number of changes. Thereupon, the secretary drew up the final report. This report was presented to programme management to be corrected for factual inaccuracies. After having been corrected for these factual inaccuracies, the report was sent to the institution's Board to accompany their request for re-accreditation.

### 3. Overview of the programme

#### 3.1 Basic information about the programme

*Administrative information about the programme:*

Name programme in CROHO: Bachelor Economics and Business Economics  
 Orientation, level programme: Academic Bachelor  
 Grade: BSc  
 Number of credits: 180.0 EC  
 Specialisations: N.A.  
 Location: Rotterdam  
 Mode of study: Dutch-taught track (full-time, three years)  
 International, English-taught track (full-time, three years)  
 Registration in CROHO: 50950

*Administrative information about the institution:*

Name of institution: Erasmus University Rotterdam  
 Status of institution: Government-funded university  
 Institution's quality assurance: Approved

*Quantitative data about the programme*

Cumulative proportion of students who dropped out after one, two or three years (vwo matriculation)

| Cohort                          | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 |
|---------------------------------|------|------|------|------|------|------|
| Drop-out rate after one year    | 38 % | 37 % | 23 % | 36 % | 39 % | 24 % |
| Drop-out rate after two years   | 41 % | 41 % | 26 % | 37 % | 40 % |      |
| Drop-out rate after three years | 42 % | 41 % | 26 % | 39 % |      |      |

Cumulative proportion of students who continued their study in the second year and who completed the programme after three, four, five and six or more years (vwo matriculation)

| Cohort                               | 2009 | 2010 | 2011 | 2012 |
|--------------------------------------|------|------|------|------|
| Success rate after three years       | 32 % | 33 % | 39 % | 44 % |
| Success rate after four years        | 67 % | 70 % | 70 % |      |
| Success rate after five years        | 84 % | 83 % |      |      |
| Success rate after six or more years | 87 % |      |      |      |

Percentage of students who continued their studies in the second year and who completed the programme after three, four, five and six or more years (all students)

| Cohort                               | 2009 | 2010 | 2011 | 2012 |
|--------------------------------------|------|------|------|------|
| Success rate after three years       | 32 % | 36 % | 38 % | 49 % |
| Success rate after four years        | 59 % | 66 % | 66 % |      |
| Success rate after five years        | 74 % | 76 % |      |      |
| Success rate after six or more years | 78 % |      |      |      |

#### Lecturers' qualifications

| Qualification           | MSc   | PhD  | BKO* |
|-------------------------|-------|------|------|
| Percentage of lecturers | 100 % | 76 % | 63 % |

\*BKO means having obtained Dutch University Teaching Qualification. In the figure exemptions are included. Of the lecturers, additional 12 % are in the process of obtaining the BKO-certificate.

The student-to-staff ratio is 50 : 1 for the Dutch track and 45 : 1 for the international track (study year 2015 – 2016).

#### Number of contact hours per week for each of the years of the programme

| Year of the programme            | Year 1 | Year 2 | Year 3 |
|----------------------------------|--------|--------|--------|
| Number of contact hours per week | 14     | 14     | 8*     |

\*Individual thesis supervision hours are not included. As students have many options in the third year, the actual number of contact hours may deviate.

### 3.2 Main facts about the institution

The degree programme Bachelor Economics and Business Economics is a programme of Erasmus School of Economics of Erasmus University Rotterdam.

In its own words, Erasmus University Rotterdam is a research University, with a pronounced social orientation in its education and research. Academics and students at the university are expected to endeavour to solve global social challenges, drawing inspiration from the metropolis Rotterdam. The university spearheads in education and research are health (from molecule to human to society and back), wealth (sustainable economic growth), governance (the organization of companies and society) and culture (happiness and identity in the modern urban society). According to its strategic plan for 2014 – 2018, Erasmus University Rotterdam has set as a goal to strengthen the international impact and relevance of its education and research. The University works together closely with Delft University of Technology and Leiden University.

Erasmus University Rotterdam employs more than 2,700 staff, lecturers as well as support staff. Over 26,000 students study at this University, being composed of more than 16,000 bachelor students and more than 10,000 master students.

Erasmus University Rotterdam is composed of seven faculties, these being Erasmus School of Economics, Erasmus School of Law, Faculty of Social Sciences, Erasmus Medical Centre, Faculty of Philosophy, Erasmus School of History, Culture and Communication and Rotterdam School of Management. In addition, the university includes the Institute of Health Policy & Management, the International Institute of Social Studies and the Institute for Housing and Urban Development Studies.

On the website, Erasmus School of Economics expresses to be an internationally renowned institute that contributes scientific knowledge to future economic issues and aims to answer currently relevant issues of concern to government and firms. The School's focus is on the creation, the dissemination and the application of scientific knowledge, all from an economic perspective. Erasmus School of Economics' portfolio of programmes includes three bachelor programmes, four master programmes, two research master programmes and four postgraduate programmes. The School employs nearly 500 staff, whereas about 4,500 students study at the School.

### 3.3 Intended learning outcomes

The intended learning outcomes of the programme are as follows.

- Students possess in-depth knowledge of the field of economics and business economics.
- Students analyse and explain phenomena and issues in the economics of government and business by using their knowledge of the theories and methods of economics and business economics.
- Students formulate problem statements and research questions based on scientific concepts and theories.
- Students select a research set-up appropriate to the research question.
- Students select or create one or more suitable methods for data collection and analysis.
- Students make statements about the initial problem statement based on the results of their research.
- Students propose solutions for issues of a (business) economics nature, based on relevant concepts and theories from the field.
- Students propose strategic actions to be taken by companies or a government based on their analysis of phenomena and issues in economics.
- Students select relevant research questions and information from a complex reality and are able to get to the heart of the matter in a given context.
- Students draw logical conclusions based on the given assumptions.
- Students base statements about reality on reliable data.
- Students use different interpretation frameworks in making statements about reality.
- Students cooperate professionally and effectively in teams, acknowledging each other's interests, position and values.
- Students communicate effectively, both in writing and verbally, with people and groups of a diverse nature.
- Students show themselves to be responsible, academically trained professionals who have the learning skills to engage in a continued degree programme that assumes a high level of autonomy.



### 3.4 Outline of the curriculum

In the table below, the programme curriculum is presented.

| Courses   | Credits  |
|---|----------|
| Take-Off  | 0.0 EC   |
| Mathematics 1   | 4.0 EC   |
| Accounting  | 8.0 EC   |
| ICT   | 4.0 EC   |
| Microeconomics  | 8.0 EC   |
| Mathematics 2   | 4.0 EC   |
| Macroeconomics  | 8.0 EC   |
| Applied Statistics  | 4.0 EC   |
| Marketing   | 8.0 EC   |
| Organisation and Strategy   | 8.0 EC   |
| Skills and Guidance (across the year)   | 4.0 EC   |
| First year  | 60.0 EC  |
| Economics of the Welfare State (international track) or<br>Fiscal Economics (Dutch track)         | 4.0 EC   |
| International Economics   | 8.0 EC   |
| Applied Statistics  | 4.0 EC   |
| Finance   | 8.0 EC   |
| History of Economic Thought   | 4.0 EC   |
| Applied Microeconomics  | 8.0 EC   |
| Introduction to Behavioural Economics   | 4.0 EC   |
| Methods & Techniques  | 8.0 EC   |
| Research Project  | 4.0 EC   |
| Intermediate Accounting   | 8.0 EC   |
| Second year   | 60.0 EC  |
| Minor (12.0/15.0 EC) or Internship (12.0 EC) and Electives (12.0/9.0 EC) or<br>Exchange (24.0 EC) | 24.0 EC  |
| Major courses (3 x 4.0 EC)  | 12.0 EC  |
| Major Seminar   | 12.0 EC  |
| Philosophy of Economics   | 4.0 EC   |
| Bachelor Thesis   | 8.0 EC   |
| Third year  | 60.0 EC  |
| Total credits of the programme  | 180.0 EC |

#### 4. Overview of assessments

| Standard                                  | Assessment   |
|---|--------------|
| Standard 1. Intended learning outcomes    | Satisfactory |
| Standard 2: Teaching-learning environment | Good         |
| Standard 3: Assessment                    | Satisfactory |
| Standard 4: Achieved learning outcomes    | Satisfactory |
| Programme                                 | Satisfactory |

## 5. Findings, considerations and assessments per standard

### 5.1 Standard 1: Intended learning outcomes

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

#### *Findings*

In preparation of this external assessment, the Erasmus School of Economics in collaboration with the management of the economics programmes of Vrije Universiteit Amsterdam and Wageningen University updated the domain-specific reference framework for economics. The current reference framework is an update on a number of non-essential points of the 2009 edition, which was approved by the Deans of all Economics Faculties in the Netherlands. The major change has been the removal of sections referring to business administration.

The programme is offered in two separate tracks, the Dutch track and the international track. In terms of intended learning outcomes and curriculum contents and structure, these tracks are identical, with the exception of one course in the second year and a few electives in the third year. The main difference is the language of instruction, this being Dutch, obviously, in the Dutch track and English in the international track.

Students may choose the Bachelor Economics and Business Economics as it is or may take one of the double degree programmes, offered by Erasmus School of Economics. These double degree programmes allow students to complete this bachelor programme and the Bachelor Econometrics and Operations Research programme, the Bachelor in Philosophy programme or the Master in Law programme at the same time. The study duration is four years for the combined bachelor programmes and six years for the combined master programmes.

The objectives of the programme are to prepare students for one of the subsequent master specialisations or programmes in the economics domain and to train them for junior positions in the labour market. Most students tend to opt for continuing their studies at master level. The programme is meant to provide students with a broad basis in the economics discipline, to train them in the accompanying analytical skills and to educate them in academic research. The programme offers a range of major specialisations in the third year, giving students the opportunity to select the major specialisation of their preference and allowing them to prepare for one of the subsequent master specialisations. These major specialisations are *Accounting and Finance, Economics of Management and Organisation, Financial Accounting, Financial Economics, Industrial Dynamics and Strategy, International Economics, Management Accounting, Marketing, Policy Economics* and *Urban, Port and Transport Economics*.

Programme management drafted the programme intended learning outcomes. These specify disciplinary knowledge and understanding, analytical skills, research skills and professional skills, such as collaborative and communication skills and students' professional attitude. Disciplinary knowledge and understanding are to be achieved by students at the basic level for the economics domain in a broad sense and at the more advanced level for the major specialisation students have chosen.

The intended learning outcomes of the programme have been compared to bachelor programmes in economics and business economics in the Netherlands and in other countries. From this comparison, this programme emerges as a programme educating students broadly in economics. Other programmes may have a more limited scope. The major specialisations testify to the broadness of the programme.

Programme management drafted a table, to show the correspondence of the intended learning outcomes of the programme to the Dublin-descriptors for bachelor programmes. From this table may be deduced the programme intended learning outcomes match these Dublin-descriptors.

For the Erasmus School of Economics master programmes, Advisory Boards with representatives of the professional field have been installed. These Advisory Boards are asked for advice on the intended learning outcomes and the curricula of these programmes. Recommendations on their part filter through via Erasmus School of Economics programme management to this bachelor programme and may affect the learning outcomes and the curriculum of this programme.

#### *Considerations*

The panel welcomes the efforts of Erasmus School of Economics and of the economics programmes of Vrije Universiteit Amsterdam and of Wageningen University to draft the update of the 2009 domain-specific reference framework.

The panel supports the objectives of the programme, to educate students in the economics discipline, to introduce them to academic research and to train them to acquire analytical skills. The panel regards the programme to be especially focused on training students thoroughly in the fundamentals of economics. The panel is positive about the programme being offered in two separate tracks, allowing students to either be educated in Dutch or to opt for the international, English-taught programme. The panel, also, welcomes the major specialisations, allowing students to prepare for one of a range of master programmes of Erasmus School of Economics or of other institutions.

The panel studied the intended learning outcomes of the programme and observes these to meet the programme objectives, exhibiting, among others, disciplinary knowledge and understanding, academic research competencies, analytical skills and professional skills. In the panel's opinion, the programme learning outcomes are consistent with the domain-specific reference framework. The panel considers the intended learning outcomes of the programme to adequately prepare students for master specialisations or programmes in this domain as well as to prepare them for junior positions in the labour market. Only few students opt for the latter career. The panel ascertains the intended learning outcomes of the programme to match the Dublin-descriptors for bachelor programmes and, therefore, to meet the requirements of a bachelor level programme.

In the panel's view, programme management conducted a sound comparison to other economics and business economics bachelor programmes in the Netherlands and abroad. The profile of this programme as a programme covering the full breadth of the economics discipline, is evident.

The panel feels the involvement of the professional field through the Advisory Boards of the Erasmus School of Economics master programmes is satisfactory, as Erasmus School of Economics programme management will direct relevant recommendations to this bachelor programme.

*Assessment of this standard*

These considerations have led the assessment panel to assess standard 1, *Intended learning outcomes* to be satisfactory.

## 5.2 Standard 2: Teaching-learning environment

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

### *Findings*

The responsibility for all of the programmes of the Erasmus School of Economics rests with the Dean of the School. The Vice Dean is the programme director of all of these programmes. Consequently, the quality of all of the programmes of the School is his responsibility. For each of the bachelor programmes, the bachelor coordinator monitors the processes of these programmes. The master coordinator takes care of the organisation of all of the master programmes. Academic directors are responsible for the curriculum and the teaching in the master specialisations. Programme management, being the programme director, the bachelor coordinators and the master coordinator, meet very regularly to discuss the organisation and the processes of the programmes. The academic directors meet to discuss the contents of the master specialisations. In each of the bachelor and master programmes, an Educational Committee, being composed of an equal number of lecturers and students, advises programme management on the programme quality. For all of the School's programmes, an Examination Board has the responsibility to monitor the examinations' and assessments' quality.

The number of students enrolling in the Dutch track of the programme remained rather stable over the last six years, going from an influx of 508 students in 2011 to an influx of 515 students in 2016. The number of students enrolling in the international track grew drastically from an influx of 140 students in 2011 to an influx of 299 in 2016. In addition, 58 students started in 2016 in the double degree programme Economics and Econometrics. The other double degree students are included in the enrolment figures given. The number of Dutch and foreign students is balanced for educational reasons. Dutch students are to pass a selection procedure to enrol in this track.

The entry requirements for applicants are the Dutch *vwo-diploma*, with the required level of mathematics (Mathematics A or B). Students without Mathematics A have to pass a deficiency test, before being admitted. Foreign students should have an equivalent diploma and should be proficient in English. In case of doubt about the mathematical skills, these students have to pass the deficiency test as well. Applicants have to do the study check to see whether they would fit the programme requirements and may succeed in the programme. Mathematical skills are checked, as they are considered to be an important determinant for study success.

Programme management presented tables in which the relations between the intended learning outcomes and the curriculum components for all of the major specialisations have been specified. From these tables, it may be deduced that for each of the major specialisations all of the intended learning outcomes are addressed in one or more courses.

The first two years of the curriculum are the same for all the students. In these years, students are taught the basics of the economics and business economics disciplines and are introduced to sub-disciplines in core courses. In addition, students learn to master mathematics and statistics in support courses. As to the academic and research skills, students acquire writing skills, research skills and presentation skills in the first-year course *Skills and Guidance*, write a modest literature research paper in the second-year course *History of Economic Thought* and write a research report in the second-year course *Research Project*. In the first part of the third year, students either take a minor or internship and electives or participate in an international exchange programme. In the second part, students take their major specialisation, which is composed of three specialisation courses (each 4.0 EC) and a seminar (12.0 EC). The specialisations prepare for the master specialisations and have been listed under standard 1. At the end of the third year, students complete their bachelor thesis, usually addressing a topic, related to their specialisation. The students with whom the panel spoke during the site visit, expressed being very positive about the contents of the curriculum, describing it as providing a profound and broad training in economics.

The coherence of the curriculum in the first year and the second year is discussed on a regular basis by the bachelor coordinator and the lecturers, whereas the curriculum coherence in the third year is a topic for discussion between the major specialisations coordinators and the major thesis coordinators.

The educational principle of the programme is mainly directed towards enabling students to achieve the intended learning outcomes. Study methods are plenary lectures, tutorials and exercise lecturers. The subject matter of the courses is presented in the plenary lectures, whereupon in the tutorials, students are taught aspects of the course subjects more in-depth. In the exercise lecturers, students are practically trained in doing specific economic exercises and assignments. In the plenary lectures, the groups of students are relatively large, whereas the tutorials and exercise lecturers are much more small-scale. In the third-year seminars, the groups are equally small and students work intensively on real-life assignments. The student-to-staff ratio in the Dutch track is 50 : 1 and in the international track, it is 45 :1. The students with whom the panel met, regarded the tutorials, exercise lecturers and the seminars to ensure relatively small-scale teaching in the programme. The number of contact hours is 14 hours per week in the first two years and 8 hours per week in the third year. The programme director explained Erasmus School of Economics to be experimenting with new study methods, such as MOOC's. Implementation of these methods has just started.

Programme management has taken a number of measures to foster the students' study pace and to raise the student success rates. In the study check procedures, the mathematical skills of prospective students are thoroughly screened. In the first year, students should report 60.0 EC. This measure, being a major change in recent years at Erasmus University Rotterdam, is not so much meant to lower the drop-out rates but more to encourage good students to go one step further and collect all the credits of the first year. In some cases, students may compensate fails, provided the grades are at least 4.5. If students fail to collect 60.0 EC, they will have to leave the programme. The proportion of students completing the programme in three years rose from 32 % to 49 %, whereas the figure for completion in four years went up from 59 % to 66 % (figures for last three or four cohorts). Erasmus School of Economics has set the target of 75 % of the students graduating within four years.

Lecturers are appointed at one of Erasmus School of Economics departments, being the Departments of Applied Economics, Business Economics, Econometrics or Economics. Lecturers are to qualify for one of the research institutes of the School. The panel studied the list of publications by staff members, lecturing in the programme. Lecturers are to demonstrate their skills in education by obtaining the BKO-certificate. Lecturers may have an exemption, if they have been rated 3.5 on a 5-point scale in student evaluations of five separate courses. Course evaluations are part of the annual lecturers' performance interviews. Of the lecturers, 76 % have obtained a PhD, whereas 63 % are in possession of the BKO-certificate or have been exempt. Another 12 % of the lecturers are in the process of obtaining this certificate.

To accommodate growing student numbers, while at the same time maintaining small-scale teaching, in the context of the so-called *Tutor Academy*, 5.0 FTE additional staff have been recruited, primarily to select and train a substantial number of student-assistants as tutors.

#### *Considerations*

In the panel's view, the admission requirements and the admission processes, such as the study check procedures, are adequate for this programme. The emphasis on mathematical knowledge and skills is appropriate, this being a sound predictor for study success.

The curriculum reflects all of the intended learning outcomes of the programme adequately and evenly. The panel considers the curriculum to be very well designed and effective in teaching students the fundamentals and the principles of the economics discipline, the supporting statistics and mathematics subjects and the academic and research skills. The students are very positive about the curriculum contents. Supporting the intentions of programme management, the panel recommends to intensify and increase the coherence in the students' skills training, such as study skills and academic writing and presentation skills, as these appear to be somewhat scattered across the curriculum.

The panel approves of the educational principles and the study methods of the programme, as they foster the students achieving the intended learning outcomes. Although the student-to-staff ratio is not very favourable, students and lecturers expressed being positive about the small-scale dimension of the programme. The panel feels the programme to be well managed in this respect. The panel welcomes the *Tutor Academy* as an effective means to deploy more teaching capacity in the programme.

Programme management has taken important steps to raise the student success rates. The panel regards the student success rates to be appropriate and encourages programme management to try and raise these further. The panel recommends to improve the information provided to the students. Students are not always adequately informed about internships and opportunities for exchange. For the communication, the School uses various platforms (Blackboard, Sin-online, Osiris), which is not very transparent for students.

The panel finds the research records of the lecturers impressive, as may, among others, be deduced from the list of their publications. In addition, the panel approves of the lecturers' educational capabilities. The proportion of lecturers holding the BKO-certificate is quite substantial.

#### *Assessment of this standard*

These considerations have led the assessment panel to assess standard 2, *Teaching-learning environment* to be good.



### 5.3 Standard 3: Assessment

*The programme has an adequate assessment system in place.*

#### *Findings*

The examinations and assessments of this programme, as of all the other programmes of the Erasmus School of Economics, are governed by the Erasmus School of Economics Examination Policy. This Examination Policy provides the framework for the examinations and assessments for each of the bachelor and master programmes of the School. In addition, the Examination Board publishes each academic year the Rules and Regulations for the examinations and assessments. These may deviate on certain points from the Rules and Regulations of the previous year. The examination regulations and procedures are very similar, if not identical for all of the programmes of the School.

For all the programmes of the Erasmus School of Economics, one single Examination Board has been installed. The Examination Board works in accordance with applicable Dutch law. The Board, among others, assures the quality of examinations and assessments, appoints examiners, grants exemptions, handles cases of fraud, advises on the Teaching and Examination Regulations and ensures programmes complying with these Regulations.

In the context of the Examination Policy of the School and the Rules and Regulations of the Examination Board, a number of measures have been taken by programme management to ensure the validity of examinations, the reliability of assessments and the transparency of the examination processes. To enhance the validity of the examinations, each of the examinations is prepared by one of the lecturers and is presented to another lecturer for review. On recommendation by the management of the various programmes, the Examination Board appoints the examiners for the course examinations and for the thesis assessments. The examiners meet specific requirements, set by the Examination Board. In the case of master theses, one of the examiners should hold a PhD. The results of each of the examinations in the School are analysed. Should the pass rate be outside of the 50 % – 90 % range, the Examination Board will inspect the examination more closely to check the reliability of the assessment. Every year, the Examination Board inspects about 40 theses from this and other programmes of Erasmus School of Economics to verify if these meet the requirements set and have been assessed in a correct way. The grades of the theses in the sample range from 5.5 to 7.0 and 9.0 and more. About eight members of the Board are involved, covering the various sub-disciplines of the programmes. If the Examination Board finds one or more of the theses unsatisfactory, these will be discussed with the director of the department and through him or her with the examiners. To promote the transparency of the examinations, students are informed about the assessment criteria of the courses, are provided with model examinations and may inspect the grading of their work.

Examination methods include written examinations with open questions, multiple-choice examinations, mid-term tests, oral examinations, individual and group assignments and presentations. Only in the first two years of the Bachelor Economics and Business Economics programme, multiple-choice examinations are used to test the students' knowledge. In most of the courses, multiple examinations are to be taken by the students and the final grade of the courses is a composite grade, this being the weighed outcome of the grades of the course components.

At the end of the programme, students are required to complete their thesis. For each of the major specialisations as well as for each of the master specialisations, a thesis manual has been drafted by the thesis coordinator of the department or section involved. Students are entitled to guidance during the thesis writing process by a supervisor, being a lecturer in the programme. The Erasmus School of Economics is in the process of implementing the *Thesis Workflow System*. This system has already been implemented in the master programmes of the School. The bachelor programmes will follow in the coming years. This system is an ICT-system, allowing to monitor the thesis writing process and the thesis assessment process more consistently and in a more organised way. The thesis proposal is to be approved by the thesis supervisor, before the student can start writing the thesis. The student needs to present drafts of the thesis to be discussed with the supervisor. In the Thesis Workflow System, the supervisor may check more easily the progress of the student and his meeting the requirements in the process, such as uploading the approved proposal. The students with whom the panel met, were not very content with the information about the thesis process and the thesis assessment.

Theses are assessed by both the thesis supervisor and the second assessor. The assessment criteria for the thesis are the same across the major specialisations in the bachelor programmes and for the master specialisations, taking the difference in level into account, obviously. These criteria are to be assessed using a Likert-scale, ranging from unsatisfactory to excellent. The supervisor assesses the thesis process, including the degree of independent work on the part of the student and assesses the report. The second assessor only assesses the written report. These two examiners review and grade the thesis independently and meet to arrive at the final grade. The bachelor thesis process may be concluded with an interview of the student by the two examiners. In the master programmes, an oral defence of the thesis by the student is mandatory. With the implementation of the Thesis Workflow System, the two examiners assessing the thesis independently is ensured better than before. Theses are checked for plagiarism and plagiarism scores are mentioned on the assessment form.

#### *Considerations*

The panel approves of the examination and assessment policies and rules and regulations of the Erasmus School of Economics, in force for this and the other programmes of the School. They ensure the validity of the examinations, the reliability of the assessments, the competencies and expertise of examiners and the transparency of the examination processes.

The panel considers the Examination Board to have the responsibilities and to work along the lines as intended by Dutch applicable law. The Board monitors the examination and assessment processes, analyses the examinations and regularly inspects the theses.

The panel approves of the examination methods programme management has selected. The diversity of examination methods in courses and across courses allows for the assessment of both knowledge and skills, relevant to the programme.

In the panel's view, the thesis process is satisfactorily organised. This will be further improved, when the Thesis Workflow System is implemented. The panel recommends to inform students more clearly and more comprehensively about the thesis process and the thesis assessment. The assessment of the theses is a reliable process, as two examiners are involved and sound assessment forms with relevant assessment criteria are used. The panel noted the thesis processes and thesis assessments to differ to a certain extent across the major specialisations. Therefore, the panel recommends to align these processes across the specialisations and to establish more homogeneity therein. In addition, the panel recommends considering using weighted criteria in the thesis assessment.

*Assessment of this standard*

The considerations have led the assessment panel to assess standard 3, *Assessment* to be satisfactory.

## 5.4 Standard 4: Achieved learning outcomes

*The programme demonstrates that the intended learning outcomes are achieved.*

### *Findings*

In 2014 – 2015, the average grade for the bachelor theses as estimations for the learning outcomes achieved by the graduates, was 7.4 in the Dutch track and 7.7 in the international track.

As has been mentioned when discussing standard 1, most of the graduates of the programme do not enter the labour market, but proceed with their studies at master level. This proportion is more than 90 % for students in the Dutch track and somewhat less for students in the international track. The majority of the graduates continue their studies at Erasmus School of Economics master programmes. Students who continue their studies at other universities, may do so at prestigious institutions.

### *Considerations*

The panel studied the examinations of a number of courses in the programme. The panel establishes these examinations to be of adequate quality and of an appropriate level. The examinations are considered by the panel to be challenging and well elaborated and to definitely meet the courses' learning goals. As the panel observed, students will have achieved the programme intended learning outcomes, if they have passed all of these examinations.

The panel studied ten theses of students in the programme. Initially, six theses were selected and studied. In the panel's view, two of these theses proved to be unsatisfactory. Thereupon, the panel selected and reviewed four extra theses in the lower grade bracket. In total, the panel studied 22 theses of the bachelor programmes of Erasmus School of Economics. Of these, a total of two, being the two mentioned, are considered unsatisfactory. The four extra theses in this programme are regarded by the panel to be satisfactory. During the site visit, the panel conferred extensively with the thesis examiners of the programme about the thesis supervision and thesis assessment processes. The panel has no doubts about the quality of these processes and concludes these to be adequate and effective for assessing the theses, ensuring reliable assessments. Therefore, the panel regards the two unsatisfactory theses to be outliers, not representative of the general quality of the theses nor representative of the level achieved by the students, when they have passed the examinations of the courses in the programme.

### *Assessment of this standard*

The considerations have led the assessment panel to assess standard 4, *Achieved learning outcomes* to be satisfactory.

## 6. Recommendations

In this report, a number of recommendations have been listed. For the sake of clarity, these are brought together below. The recommendations are the following.

- To intensify the students' skills training and to increase the coherence thereof within the curriculum, in support of the plans of programme management.
- To improve the information provided to the students about internships and exchange programmes, so students may benefit more from these opportunities.
- To inform students more clearly and more comprehensively about the thesis process and the thesis assessment.
- To align the thesis processes and the thesis assessments across the major specialisations and to establish more homogeneity in these processes.
- To consider using weighted criteria in the thesis assessments.

## Annex 1: Site visit schedule

The site visit was conducted in Rotterdam on 1 December 2016 and on 2 December 2016.

Site visit schedule for 1 December 2016.

|                     |  |
|---------------------|--|
| 08.30 h. – 09.00 h. | Arrival and deliberations panel (closed session)   |
| 09.00 h. – 09.45 h. | Board<br>Prof. dr. Ph.H.B.F. Franses (Dean Erasmus School of Economics), prof. dr. I.J.M. Arnold (Vice Dean Erasmus School of Economics, programme director), W. Rowaan MA (senior policy adviser Education Erasmus School of Economics)   |
| 09.45 h. – 10.45 h. | Programme management/core lecturers Bachelor Economics and Business Economics<br>Programme management/core lecturers Master Economics and Business<br>Dr. B. Hoogendoorn (bachelor coordinator, Bachelor), dr. N.L. van der Sar (lecturer, Bachelor), dr. J. Delfgaauw (academic director Economics and Organisation track, Master), prof. dr. K.I.M. Rohde (academic director Behavioural Economics track, Master), prof. dr. J.T.J. Smit (academic director Financial Economics track, Master), prof. dr. T.G.M. van Ourti (academic director Health Economics track, Master)                            |
| 11.00 h. – 11.45 h. | Lecturers/thesis examiners Bachelor Economics and Business Economics<br>Lecturers/thesis examiners Master Economics and Business<br>Dr. B. Karreman (lecturer/thesis examiner, Bachelor/Master), dr. V. Volosovych (lecturer/thesis examiner, member Education Committee, Bachelor/Master), dr. B.S.Y. Crutzen (lecturer/thesis examiner, Bachelor), dr. S.H. Bijkerk (lecturer/thesis examiner, Bachelor/Master), dr. A.C. Gielen (lecturer/thesis examiner, Bachelor/Master), dr. E.M. Bosker (lecturer/thesis examiner Bachelor/Master), dr. V.G. Hariharan (lecturer/thesis examiner, Bachelor/Master) |
| 11.45 h. – 12.30 h. | Students and alumni Bachelor Economics and Business Economics<br>Students and alumni Master Economics and Business<br>D. Vodegel (student, member Education Committee, Dutch track, Bachelor), D.O. Anshah (student, member Education Committee, international track, Bachelor), R.T. van den Oord BSc (alumnus), T. Koning BSc (student, Master), M.A.J. van Hulsen BSc (student, Master), A.M.R. Woodend MSc (alumna), T. Reijnen MSc (alumnus)  |
| 12.30 h. – 13.30 h. | Lunch panel (closed session), open office hours 12.30 h. – 13.00 h.  |
| 13.30 h. – 14.30 h. | Programme management/core lecturers Bachelor Econometrics and Operations Research<br>Programme management/core lecturers Master Econometrics and Management Science<br>Dr. H.J.W.G. Kole (bachelor coordinator, Bachelor), prof. dr. D.J.C. van Dijk (academic director Quantitative Finance track, Master), prof. dr. A.P.M. Wagelmans (lecturer Operations Research and Quantitative Logistics track, Master), prof. dr. D. Fok (academic director Business Analytics Quantitative Marketing track, Master), prof. dr. R. Paap (academic director Econometrics track, Master)                            |

- 14.30 h. – 15.15 h.      Lecturers/thesis examiners Bachelor Econometrics and Operations Research  
Lecturers/thesis examiners Master Econometrics and Management Science  
Dr. C. Heij (lecturer/thesis examiner, chair Education Committee, Bachelor), dr. W. van den Heuvel (lecturer/thesis examiner, member Education Committee, Bachelor/Master), prof. dr. P.J.F. Groenen (lecturer/thesis examiner, Bachelor/Master), dr. R. Spliet (lecturer/thesis examiner, member Education Committee, Bachelor/Master), dr. M. van de Velden (lecturer/thesis examiner, Bachelor/Master), dr. E. Oldenkamp-Bazsa (lecturer/thesis examiner, Bachelor)
- 15.30 h. – 16.15 h.      Students and alumni Bachelor Econometrics and Operations Research  
Students and alumni Master Econometrics and Management Science  
T.T. Wiemann (student, member Education Committee, international track, Bachelor), L. Li (student, Dutch track, Bachelor), M.T. Graftiaux (student, international track, Bachelor), M. van Breugel BSc (student, member Education Committee, Master), H.S. Doytchinova BSc (student, Master), L.W. Maassen MSc (alumnus), O.R. Pidenko MSc (alumna)
- 16.15 h. – 17.45 h.      Deliberations panel (closed session)
- Site visit schedule for 2 December 2016.
- 09.00 h. – 10.00 h.      Examination Board, all programmes  
Prof. dr. J.M.A. Viaene (chair Examination Board), prof. dr. A. Dur (vice-chair Examination Board), drs. V.H.M. Beerkens (secretary Examination Board), K. Goudzwaard-Noot MSc (secretary Examination Board)
- 15.30 h. – 15.45 h.      Board (second meeting)  
Prof. dr. Ph.H.B.F. Franses (Dean Erasmus School of Economics)
- 15.45 h. – 17.00 h.      Deliberations panel (closed session)
- 17.00 h. – 17.30 h.      Main findings presented by panel chair to Dean and programme management

## **Annex 2: Documents reviewed**

The panel studied the following documents, presented prior to the site visit

- Self-Assessment Report Bachelor Economics and Business Economics
- Areas and actions for improvement
- Domain-specific reference framework
- Matrix Dublin descriptors and intended learning outcomes
- Relation intended learning outcomes and curriculum
- Overview of curriculum
- Double degree programmes
- Organisational structure of programme
- Overview teaching staff
- List of theses 2014 – 2015 and 2015 – 2016
- Teaching and Examination Regulations
- Annual Report of Examination Board
- Erasmus School of Economics Education Statistics
- Publication List Erasmus School of Economics

Prior to the site visit, panel members were given access electronically to course manuals and course material

On the day of the site visit, programme management presented the following documents

- Course material of a number of selected courses of the programme
- Examinations of a number of selected courses of the programme
- Programme Committee reports
- Examination analyses



### **Annex 3: Theses reviewed**

The theses of the following ten students have been selected for review by the panel.

- 370402
- 368659
- 387317
- 373097
- 375809
- 376559
- 348694
- 333352
- 367170
- 358873

## Annex 4: Assessment panel composition

The assessment panel had the following composition:

- Prof. dr. T.J. Wansbeek, Emeritus Professor of Statistics and Econometrics, University of Groningen (panel chair);
- Prof. dr. J. Hartog, Emeritus Professor of Microeconomics with visiting scholar position, University of Amsterdam (panel member);
- Prof. dr. R. Kabir, Professor and Chair of Corporate Finance and Risk Management, University of Twente (panel member);
- S.M. van den Hoek, student Bachelor programme Tax Economics, University of Amsterdam (student member).

Prof. dr. T.J. Wansbeek, panel chair

Mr. Wansbeek is Emeritus Professor of Statistics and Econometrics at University of Groningen. He took his doctorate from University of Leiden. Among others, he held positions as Professor of Microeconomics at University of Amsterdam, as the Dean of the Faculty of Economics and Business of University of Amsterdam and as the Dean of the Faculty of Economics of University of Groningen. He was and is an editorial board member of a series of academic journals, such as *Journal of Econometrics*. Mr. Wansbeek held and holds a number of visiting scholar positions at, among others, University of Southern California, United States and Zhejiang University, China.

Prof. dr. J. Hartog, panel member

Mr. Hartog is Emeritus Professor of Microeconomics at University of Amsterdam, holding a visiting scholar position at this university. He took his doctorate from Erasmus University Rotterdam. At this university, he held the position of researcher and associate professor, subsequently becoming Professor of Microeconomics at University of Amsterdam. He held a number of visiting positions at universities in countries Europe, the United States and Asia. He also was an editor and referee for a number of international academic journals. Mr. Hartog is a member of the Royal Netherlands Academy of Sciences.

Prof. dr. R. Kabir, panel member

Mr. Kabir is Professor and Chair of Corporate Finance and Risk Management at University of Twente and Head of the Department of Finance and Accounting. He took his doctorate from Maastricht University. He held visiting scholar positions at, among others, Central University of Finance and Economics, Beijing, China, New York University, United States and University of Melbourne, Australia. Before becoming Professor at University of Twente, Mr. Kabir was Associate Professor of Finance at Tilburg University and Professor of Finance at University of Stirling, United Kingdom.

S.M. van den Hoek, student member

Ms. Van den Hoek is a student in the Bachelor programme Tax Economics of University of Amsterdam. She has taken on a number of extra-curricular activities, such as being the chair of the Student Association of her programme and being a member and the chair of the Student Council of the Faculty of Economics and Business of University of Amsterdam. In addition, Ms. Van den Hoek is employed by Canal Company as a guide and a host.