

Research Review
Tilburg School of
Economics and Management

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Report on the research assessment of the Tilburg School of Economics and Management at Tilburg University

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Preface

This report summarizes the results of the peer review assessment of the research groups in economics and business of the Tilburg School of Economics and Management (TiSEM).

The Committee wants to express its gratitude for the efforts made by all involved to provide the necessary documentation, before and during the site visit. This documentation contained valuable information and formed a very useful basis for an objective evaluation procedure. The Committee also wishes to acknowledge the constructive atmosphere of the discussions during the site visit. All representatives were willing to share their opinions and concerns in a very open manner.

The organizational and administrative support by QANU and by TiSEM allowed the Committee to focus on the assessment in a well-organized manner.

As chair of the Committee, I would like to thank my fellow committee members for their commitment and dedication to this evaluation process. We have worked together as a real team, open-minded and thoughtful. We all realized the challenge of this task, and I am pleased to be able to conclude that this report reflects the common opinion of the Committee.

Berend Wierenga,
Chairman of the Committee

1. The review committee and the review procedures

Scope of the assessment

The Review Committee was asked to perform an assessment of the research groups in the Tilburg School of Economics and Management (TiSEM) at Tilburg University. This assessment covers the period 2008-2013. In accordance with the Standard Evaluation Protocol 2009-2015 for Research Assessment in the Netherlands (SEP), the Committee's tasks were to assess the quality of the institute and the research groups on the basis of the information provided by the institute and through interviews with the management and the research leaders, and to advise how this quality might be improved.

Composition of the Committee

The composition of the Committee was as follows:

- Prof. Berend Wierenga, Professor Emeritus of Marketing, Erasmus University Rotterdam, The Netherlands, Chair;
- Prof. Torben Andersen, Professor of Economics, Aarhus University, Denmark;
- Prof. Rommert Dekker, Professor of Operations Research, Quantitative Logistics and IT, Erasmus University Rotterdam, The Netherlands;
- Prof. Maarten Janssen, Professor of Microeconomics, University of Vienna, Austria;
- Prof. Ernst Maug, Professor of Corporate Finance, University of Mannheim, Germany;
- Prof. Paul Pavlou, Professor of Information Technology and Strategy, Fox School of Business, Philadelphia, PA, USA;
- Prof. Dirk Simons, Professor of Business Administration and Accounting, University of Mannheim, Germany;
- Prof. Frank Windmeijer, Professor of Econometrics, University of Bristol, UK;
- Prof. Maurizio Zollo, Professor of Strategy and Corporate Responsibility, Bocconi University, Milan, Italy.

Profiles of the Committee members are included in Appendix 1.

Dr. Marianne van der Weiden was appointed secretary to the Committee by QANU (Quality Assurance Netherlands Universities).

Independence

All members of the Committee signed a statement of independence to safeguard that they would assess the quality of the TiSEM and its research groups in an unbiased and independent way. There were no unacceptable relations or dependencies, and there was no specific risk in terms of bias or undue influence.

Data provided to the Committee

The Committee received detailed documentation consisting of the following parts:

- Self-evaluation report of the unit under review, including all the information required by the Standard Evaluation Protocol (SEP), with appendices.
- Copies of key publications of the research groups.

Procedure followed by the Committee

The Committee proceeded according to the Standard Evaluation Protocol 2009-2015 (SEP). Prior to their first meeting, Committee members independently formulated a preliminary assessment of the programs. The final assessments are based on the documentation provided by the TiSEM, the key publications and the interviews with the management, leaders and researchers of the programs. The interviews took place in Tilburg on 17 – 18 March 2014 (see the schedule in Appendix 3).

Prior to the interviews, the Committee was briefed by QANU about research assessment according to SEP, discussed the preliminary assessments, and decided upon a number of comments and questions. The Committee also agreed upon procedural matters and aspects of the assessment. After the interviews the Committee discussed the scores and comments. The draft version of the report was presented to the TiSEM for factual corrections and comments. The comments were discussed in the Committee. The final report was printed after formal acceptance by the Board of Tilburg University.

The Committee used the rating system of the Standard Evaluation Protocol 2009-2015 (SEP). The meaning of the scores is provided in Appendix 2. The Committee would like to state that it slightly adapted this rating scale as it was clear that the research of CentER is generally of a very good to excellent level, implying that most ratings involved the higher end of the scale. To allow differentiation in this rather narrow range, the Committee felt that it needed a more discriminating scale, which it achieved by also giving 0.5 marks. It spent some time discussing the meaning of the highest score, which is explained in the SEP as: ‘Research is world leading. Researchers are working at the forefront of their field internationally, and their research has an important and substantial impact in the field.’ In awarding this highest mark, the Committee took into account the different publication policies and output measures in sub-disciplines and the strength of international competition.

Furthermore, the Committee would like to emphasize that although it took into account the outcomes of the previous research assessment (2008), the scores given in this report cannot be compared directly with those of 2008. The present Committee has a different composition, CentER was part of a nationwide assessment in the previous assessment while it opted for a stand-alone assessment this year, and the programs have changed over the interim.

2A. Research review of Tilburg School of Economics and Management

1. The institute

TiSEM is the oldest and largest school of Tilburg University. It organizes education and research in the fields of business and economics and employs about 475 people (400 FTE), 360 (310 FTE) of whom are academic staff.

The Center for Research in Economics and Business (CentER) is TiSEM's primary research institute. CentER was established in 1988 in the fields of economics and econometrics and has since expanded into all major fields of business and economics. Since 1999, all funded research (except in fiscal economics) at TiSEM has been arranged through CentER. CentER's research covers eight research groups incorporating the research areas in the sub-disciplines at TiSEM: accounting, econometrics, economics, finance, information management, marketing, operations research, and organization & strategy. These eight research groups are the focus of the current research assessment.

In addition to CentER, TiSEM hosts or is a partner in several interdisciplinary research centers. The self-evaluation report lists eight: the Network for Studies on Pension, Aging and Retirement (NETSPAR), the Tilburg Law and Economics Center (TILEC), the Tilburg Institute for Behavioral Economics Research (TIBER), the Center for Innovation Research (CIR), the Research Institute on Flexicurity, Labor Market Dynamics and Social Cohesion (ReflecT), the European Research Institute in Service Science (ERISS), the Tilburg Sustainability Center (TSC), and the European Banking Center (EBC).

All faculty are assigned to academic departments. The Heads of Department are responsible for allocating capacity for education and research activities. Staff members can be a member of more than one research group. The current departments are Accounting, Economics, Econometrics & Operations Research, Finance, Fiscal Economics, Management, and Marketing. The Management Department is the result of a recent merger between the Information Management and Organization & Strategy Departments. Within the management teams of each department, a Research Coordinator and an Education Coordinator are appointed by the Head of Department.

Assessment

CentER was established as an exclusive entity within TiSEM to promote high-quality research in economics and business. The Committee notes that CentER developed into a prominent research institute and has been very successful in creating an active research community and environment, including effective graduate programs and excellent support facilities. At this point in time, however, the role of CentER is less clear. Almost all TiSEM staff members are a member of CentER, and a large part of its activities and decisions is delegated to the departmental level. CentER's main role now seems to be to organize the graduate programs and to offer research facilities such as Centerlab and Centerdata, and not so much to stimulate high-quality research. During the various discussions at the site visit, the Committee heard that virtually all staff members and PhD students identify themselves as members of a department, rather than of CentER. The Committee advises TiSEM to consider whether it is satisfied with the current situation and what role it wishes CentER to fulfil in the future vis-à-vis the departments and researchers.

Related to this, the issue of branding TiSEMS's research requires attention. While in the past CentER was the only research institute, TiSEM's researchers now also participate in several other institutes that were listed earlier in this report and prefer to identify themselves as members of a department instead of CentER. TiSEM's ambition is to produce research in the various fields of economics and business that is internationally prominent. The Committee advises TiSEM to consider whether marketing these research efforts would be furthered by a clear brand name, such as CentER used to be.

From the self-evaluation report and the discussions held during the site visit, the Committee understands that CentER prefers a bottom-up approach and is satisfied to define broad policy lines, which are worked out further by the Heads of Department, the Research Coordinators and their groups of researchers. CentER is currently evaluating its governance structure to stimulate this even more and to increase the involvement of all associated staff. The Committee is not in favor of a top-down approach, but is convinced that leadership is necessary to set out the future course of a research group, for example, to define the potential relevance of new sub-disciplines when one or more senior staff members depart. The current leadership structure is not clear in all groups. The Committee was surprised to note that in a number of departments, the roles of Education Coordinator and Research Coordinator are combined in one person (not always a full professor), and often the role was limited to that of organizing the seminars. Furthermore, it gained the impression that research is not always high on the agenda of all Heads of Department. It is of the opinion that this issue of leadership needs some attention.

2. Quality and academic reputation

Evidence of the quality of CentER's research is provided in the self-evaluation report for CentER and for each of its research groups, based on various criteria, such as key publications and their impact, prizes and awards, editorships, memberships of prestigious academies, research councils and review committees, the organization of international conferences, and success in obtaining NWO and EU research grants.

Assessment

The Committee recognizes the important work done in the previous years. The quality of most of the research is very good to excellent. CentER's ambition to be at a top level in all the main fields of research in business and economics, as measured by a score of 5 given to a research group, is achieved in four of its eight research groups.

In its meeting with the PhD candidates and tenure-track assistant professors, the Committee repeatedly heard that the reputation of CentER's specific research groups had attracted them to Tilburg.

The publication impact per program is measured by the number of citations of the group, the average number of citations of its members, and the H-index. In the 2007-2011 period the highest citation averages per fte were achieved by Econometrics (196), Operations Research (169), Finance (166), and Economics (161). The lowest average was seen in Accounting (26), but in this field there could be some differences in publication and citation practices. This may also hold for the H-index. High H-indices (20 and above) were recorded in all programs, except Accounting (5-6) and Information Management (11-14). The Committee also observes that taking the number of citations as a measure of quality favors older staff members and places groups with younger staff members at a disadvantage.

Quality should also be measured by the placement of PhD students in internationally leading universities. There is quite some differentiation between the groups along this dimension, but overall there still seems to be some way to go in order to belong to the top departments in the world.

As it seems there are varying publication standards across the programs, the Committee recommends taking a critical look at the journals that are classified as top core journals.

3. Resources

The self-evaluation report provides data on staff numbers and funding sources (see Appendix 4, tables 1, 2 and 3). Overall, the number of staff grew in 2008 and 2009, and remained fairly stable after that. For the different research groups, the development shows more variation. In 2012 and 2013, Accounting, Finance and Operations Research remained stable; Econometrics, Economics, Information Management and Marketing decreased; and Organization and Strategy is the only group with a consistently increasing number of staff.

The development of staff numbers is a reflection of the budget. At the institutional level the budget showed an increase until 2010, followed by a decrease thereafter. Personnel and other costs were not sufficiently covered by the revenues from direct, indirect and contract funding, which led to a financially difficult situation and a more or less general hiring freeze. In 2013 the budget was again balanced, and TiSEM expects that new investments will be possible from 2016 onwards.

There are marked differences between the research groups in their success rates of attracting indirect and contract funding. Econometrics, Economics, Finance, Marketing and Operations Research are moderately to very strong in the indirect funding. Information Management has been able to consistently attract more than half of its budget from contract funding, while the percentage of contract funding for Marketing has always been quite limited. For the other research groups the percentages fluctuate greatly over the years. The self-evaluation report notes that these fluctuations are often due to changes in, for example, institutional arrangements with multidisciplinary centers (e.g. NETSPAR).

Assessment

TiSEM was faced with a financial squeeze, partly as a consequence of the stagnation in direct funding. Because commitments made to staff members in the tenure track had to be fulfilled, tenured staff continued to grow. The Committee notes that this has led to saturation and has left little room to attract new talent. It found that the success rates for receiving tenure are generally high across departments and advises reconsidering making tenure and promotion criteria stricter. The new policy, effective as of 1 December 2013, takes a more comprehensive and less mechanical approach, which is a positive development. Some research groups informed the Committee that they set their publication requirements at a higher number of top core publications than others. The Committee advises tightening the criteria across the board and thinks this would be good policy in the context of TiSEM's ambition to be in the top 3 in Europe. Using one list of top core and top journals for all research groups may not be the best way to prove quality of performance, since the types of articles and acceptance policies differ significantly across the various sub-disciplines. In this context, TiSEM should also look at the criteria used at the very top schools to which TiSEM aspires to belong.

The allocation system of research funds and research time over the departments is quite complicated. The Committee found it difficult to grasp to what extent and in which way

research productivity (on the basis of past performance) leads to the allocation of research time. Apart from the fact that a simpler model might be helpful, the Committee thinks there are a number of imbalances in the current model. In the first place the model builds heavily on citations, which gives it an element of conservatism, as mentioned above: citations favor achievements of the past and are therefore disadvantageous for departments with young staff. Second, there may be an imbalance in teaching loads and research budgets between the business programs and those in economics, with the higher teaching load for business and more research income (on historical grounds) for Economics. The current model is apparently not able to address this imbalance. The Committee advises TiSEM to consider whether funds should be reallocated to highly productive, upcoming, smaller departments and to the departments with larger student numbers. It also recommends providing future evaluators with concise and more transparent information about TiSEM's processes for allocating resources.

The Committee heard during the site visit that the research groups and the individual researchers appreciate the support provided by CentER in identifying grant opportunities and in drafting and submitting grant proposals. It considers such support indispensable, given the growing importance of external funding.

4. Productivity

The data on productivity provided in the self-evaluation report are summarized in tables 4 and 5 of Appendix 4. The self-evaluation report shows that in terms of total multi-annual output in top journals in business, TiSEM maintained the number one position in the Netherlands and the number three to five position in Europe, while it is gradually moving into the top 30 institutes worldwide. For Economics, TiSEM remained number one in the Netherlands, again became one of the major players in Europe, and moved into the top 20 institutes worldwide.

Assessment

The Committee endorses CentER's policy to aim for high productivity in journals of the highest quality. The protected position of tenure-track staff members in terms of a guaranteed low teaching load is certainly helpful in this respect.

The Committee has calculated the trends in publications per research group over the years 2008-2013 and notes that Accounting, Finance, Information Management, and Organization & Strategy show a moderately positive trend in their number of top core, core and very good publications. For Economics, Marketing and Operations Research, the trend is more or less stable.

In addition to the articles in ISI journals, the research groups also publish books (chapters), proceedings, PhD theses, professional publications and ones aimed at the general public. The emphasis on these categories differs per research group, as can be seen in table 5 (Appendix 4). Overall, the Committee scores the productivity rate of CentER as very good to excellent.

Although the Committee does not doubt the figures in the report about the position of CentER compared to its competitors, it recommends having these figures provided by an independent institute of science studies in the future (for example, CWTS in Leiden). This would help to gain an objective picture of the competition.

5. Societal relevance

Indicators of societal relevance are TiSEM's involvement in research-based learning in bachelor and master programs, membership of CentER's researchers on national committees, councils and boards, five sponsored and nine endowed chairs, involvement in EU and applied research projects, appearances in national and international media, the establishment of the dissemination platforms *Me Judice* and *Econtrack*, and participation in a number of interdisciplinary research centers on topics that are not only academically but also socially relevant.

Assessment

The societal impact of CentER's research is a concern that is clearly taken seriously by all research groups. Opportunities provided by the current economic and political situation are grasped, and prominent researchers are visible on television and in newspapers. The Committee especially applauds the presence of professors in Economics and Finance on national and international committees and boards related to pressing issues such as competition policy, banking and pensions. Operations Research has won a prestigious prize twice for its involvement in a project on the Dutch dike heights (e.g. the Afsluitdijk) and could utilise this success more strongly to increase its visibility. Organization & Strategy has been able to attract a large amount of contract funding from varied sources in the market, which shows the relevance of its research to industry and business.

6. Strategy for the future

TiSEM has developed a strategy for the 2014-2017 period. Its research ambition is to be number one in the Netherlands and in the top three in Europe. The self-evaluation report lists its current strengths and weaknesses and the opportunities and threats for the future. It also describes a number of specific action lines and strategic initiatives.

Assessment

The Committee is of the opinion that CentER is in a good position to face the future. It can build on the strong national and international reputation of its research groups and is aware of the opportunities that are not yet fully exploited, such as attracting more indirect and contract funding. The extra support provided by a newly appointed fundraising officer is a good investment.

CentER is attractive for young, ambitious PhD students and staff with its Research Master scholarships, its good academic support and mentorship, and its tenure-track system. The relatively low salaries in the Netherlands are and will become even more of a threat to the sustainability of high-quality research in economics and business. It will be increasingly difficult to compensate the impossibility to offer competitive salaries with a stimulating research environment. It is crucial to keep this research atmosphere at the current high level, but at the same time be able to offer internationally competitive salaries. The incentive system should allow young and active groups to have a good chance to grow.

The Committee notes that staff is stimulated and supported in applying for grants, but that the downside risks (loss of valuable research time) fall onto the staff members while the upside benefits (income) are for the departments.

As mentioned above, staff members do not identify with CentER but with their individual research groups. TiSEM should consider what role it envisages for CentER in the future vis-à-vis the departments.

7. PhD training and supervision

CentER attracts approximately 35 PhD candidates per year. They have employee status and conduct their research under the authority of the institute with a view to graduating there. In addition, CentER makes it possible for unemployed candidates to obtain a PhD. The quality standards are the same as for the regular candidates. Each year approximately five such external candidates graduate and obtain their PhD. Some of the external candidates use the structure and facilities of the executive PhD program, set up with host organizations from outside the academic world, to enable candidates to write their dissertation on a part-time basis.

The graduate programs in business and economics consist of a two-year Research Master phase followed by a three-year PhD phase. All coursework is concentrated in the Research Master, offering two programs: Economics and Business. Within each program students can select a track or field of interest, which is related to a department. The PhD phase revolves entirely around original research, leading to a final dissertation. A PhD candidate works within a department and is supervised by CentER faculty members.

Candidates are recruited internationally. A number of full and partial scholarships is available for the Research Master. Some candidates have acquired external funding, for example from NWO. Depending on their background and qualifications, some candidates enter the program in the second year of the Research Master or in the PhD phase.

Assessment

The Committee was favorably impressed by the enthusiasm of the PhD candidates it met during the site visit. All of them praised the stimulating research environment and the supervision they were given by their professors.

The Committee noted flexibility in handling the delays that are sometimes unavoidable, by spreading the contracts over a longer period of time. Candidates are supported in finding a suitable position on the labor market after graduation. Two-thirds of those who graduated between 2008 and 2013 in business found a job in academia, one-third found a professional position. For Economics the distribution is three-quarters in academia and one-quarter in the professional field. Graduates have been able to secure positions in a wide range of universities around the globe and in institutes such as national central banks. PhD placements in top international schools seem to differ across departments, although information on this question was hard to obtain in the interviews. It seems several departments need to give their PhD placements more attention and must improve on this dimension in line with their ambition to be ranked as a top European school.

8. Conclusion

CentER hosts impressive researchers who are excited about their projects and who work together within and between research groups. Despite the drawbacks of a small university town and relatively low salaries, the strong international reputation of TiSEM has so far enabled it to continually attract excellent senior and junior researchers. Considering the increasing salary gap with the top international business schools, it is a point of concern about whether this is sustainable in the future.

Traditionally, CentER has invested in hiring high-quality staff without indicating in advance very specific topics that should be covered. It trusts that newly appointed staff will be able to be in the forefront of new developments in the various sub-disciplines. This strategy has apparently paid off well. Nevertheless, the Committee suggests that more leadership should

be promoted. When funding allows new hirings again in 2016, it is advisable to know where investments should go. The allocation and incentive systems should strike a better balance between rewarding past performance and realizing current potentials.

As is clear from the assessments of the individual research groups, a few groups have been somewhat less successful in this review period and need attention for that reason. However, overall, CentER and its research groups are still in a very good position.

2B. Program level

The committee assessed the following research groups of TiSEM:

		Quality	Productivity	Relevance	Viability
1	Accounting	5	5	4.5	5
2	Econometrics	5	5	4	4.5
3	Economics	4.5	4.5	5	4
4	Finance	5	5	5	4.5
5	Information Management	3.5	3.5	4	3.5
6	Marketing	5	5	4.5	5
7	Operations Research	4.5	4.5	4.5	4
8	Organization & Strategy	4	4.5	4.5	4

The detailed assessment per research group follows in the next section of this report.

2.B.1. Program: Accounting

Research coordinator: Prof. E. Cardinaels
Research staff: 8.59 fte (2.04 tenured, 2.55 non-tenured, 4.0 PhD)

Assessments:	Quality:	5
	Productivity:	5
	Relevance:	4.5
	Viability:	5

The Accounting Department is relatively small compared to other departments, but the group members are very active and research-oriented. Hence, they provide a broad portfolio of both topics and methods. With respect to the former, all relevant sub-disciplines of accounting, i.e., managerial accounting, financial accounting, taxation and auditing, are covered. In terms of methodology, mostly empirical-archival and experimental methods are applied. This is possible because the group is dedicated to the economic paradigm when addressing the underlying accounting issues. This feature is further fostered by focusing on methodology-oriented training for the younger research group members.

Quality

The relative position of the Accounting group in the professional field is among the top departments in Europe. However, the citation scores of the department are low in comparison with other research groups in Tilburg. The accounting experts in the evaluation committee argued that this is typical for the discipline of Accounting. The committee hesitated between 4.5 and 5, but in the end decided to award a 5.

As mentioned above, the group delivers a broad portfolio of topics and methods. In all fields of accounting, articles are placed in top core journals, like *Accounting Review*, *Journal of Accounting and Economics*, and *Journal of Accounting Research*. This performance is very impressive.

Furthermore, the department organizes fall and spring camps which deserve mentioning: the conference series has established itself as a major meeting point for accounting researchers from Europe.

In a similar manner, the department's PhD education is highly competitive. Candidates come from both locally and abroad, especially Asia. Here, the intake from the European market could be improved. Overall, the size of the cohorts is small, but the PhD candidates' success is remarkable, especially when they are placed in the US.

Overall, after the impressive turnaround mentioned in the previous report, the group managed to stay on track and to improve its quality even further.

Productivity

The department intended to aim at top core journals instead of having many articles being published in very good journals. This goal was achieved, especially when taking into account the relatively small size of the group. It was noteworthy that all members of the group contributed to this success, indicating that an inspiring research environment has been created.

Relevance

It became obvious that a highly relevant impact is provided. The published papers create an important and permanent transfer of knowledge to the public. Issues like corporate governance, corporate social responsibility or the support of national research activities via tax relief are discussed. Especially in the light of the financial crisis, the topics turned out to be crucial for a stable national economic environment.

Viability

The department still relies mainly on direct funding. However, some actions were taken. Given that the staff is rather young on average and the recent success, indirect funding is expected to increase.

Conclusion

The Accounting group has become one of the leading departments in Europe and the world. It realized an impressive turnaround, resulting in high-quality publications with a strong impact on the accounting world. Although the group created a very good strategy for further improvement, financial restrictions could become a threat. International and national competitors are investing in their accounting groups, meaning that external growth would be desirable.

2.B.2. Program: Econometrics

Research coordinator: Dr. M. Salm

Research staff: 22.91 fte (7.54 tenured, 1.16 non-tenured, 14.21 PhD)

Assessments:	Quality:	5
	Productivity:	5
	Relevance:	4
	Viability:	4.5

The Econometrics research group focuses its activities in three core areas, micro-econometrics, time-series econometrics, and econometric theory & statistics. It does theoretical research and research of an applied, empirical nature. Recently, a structural econometrics group was established. The research interests of the Econometrics group members make it ideally placed for cooperation with other research groups within TiSEM, and these links are being productively developed, e.g. with Economics, Finance, Operations Research, and Marketing.

Quality

The outputs of the Econometrics group are of a very high quality. There were a good number of top core publications during the assessment period. These top core publications include work that is truly world-leading and frontier-defining. The group also publishes frequently in top and very good journals, across a range of topics within the sub-programs of micro-econometrics, time-series econometrics, econometric theory & statistics, but also in the fields of finance and operations research. The number of citations is high, indicating a good academic impact of top-level papers.

Productivity

The Econometrics group has been very productive over the assessment period and published an excellent volume of articles in top core, top and very good journals, as well as in other ISI and non-ISI journals. The number of publications in the top journals per FTE is also high. There is a good number of PhD students and completed dissertations.

Relevance

The academic relevance is very high, as indicated by the large number of articles published in the top journals and the high citation count. There are also good links with other research groups within TiSEM. There is less direct evidence of how members of the Econometrics group provide societal relevance, e.g. how membership of NETSPAR and its research have directly influenced policy and industry, or resulted in publications aimed at the general public.

Viability

The resourcing of the econometrics group has been strong and is very likely to remain that way. The group has had a high success rate with NWO funding, was successful in obtaining EU funding, and also had substantial contract income, although NETSPAR funding may decrease. Its direct income is adequate and stable as the group provides substantial teaching services, and the number of successful PhD students is good. Staff turnover may lead to a smaller volume of top publications as two professors left the group towards the end of the assessment period (one through retirement) who were important contributors. The formal academic leadership structure could be improved. The departmental structure puts the Econometrics and Operations Research groups together in one department with the Head of Department coming from Operations Research. There are natural academic leaders for the

econometrics sub-programs among the professorial staff, but this has not been formulated as such within the research strategy.

Conclusion

The Econometrics group is very strong, producing world-leading research. The members and their research are therefore recognized internationally, and the group is one of the top institutions in Europe. In order to maintain this position, resources should be directed carefully to ensure that the volume of especially high-impact, top core publications remains at the same high level as during the assessment period.

2.B.3. Program: Economics

Research coordinators:	Prof. H. Huizinga, Prof. J. Boone		
Research staff:	43.64 fte (13.78 tenured, 6.33 non-tenured, 23.52 PhD)		
Assessments:	Quality:	4.5	
	Productivity:	4.5	
	Relevance:	5	
	Viability:	4	

The key research areas for Economics are: i) financial and monetary economics, ii) development economics, iii) public economics, iv) economic theory and game theory, v) industrial economics, vi) health and labor economics, vii) environmental economics, and viii) experimental economics. The strategy of the research group in economics is based on centers organizing subgroups of researchers around a specific thematic focus to attain critical mass, visibility, and a platform for fundraising.

Quality

The group maintains a high-quality research output and has a good international visibility. The group includes researchers who are clearly world leaders in their specialism. The level of journal publications is steady, but the importance of top 5 publications is not sufficiently stressed as there are other journals in the same top core classification as the top 5, and 7 other economics journals are also treated as top core or top journals. The objective to publish in top journals in business and finance seems to be odd for an economics group. The aim should be to publish in top journals in economics, preferably the top 5. Other publications are nice to have as additions. Given the large size of the group and the great diversity in research standing between different members, it is a challenge to ensure that a larger share of the research group publishes in top and top core journals.

Some of the suggestions made by the interim evaluation committee in 2010 were not followed. It had asked for impact scores related to the H-index of all faculty members and for the placement of PhD students. These are important measures of quality.

Productivity

The overall productivity is very good, but there is too little emphasis on top economics publications (at least in the self-evaluation report). The absolute number of publications should also be seen in light of the size of the department. It is a challenge to ensure a smaller diversity in productivity across members of the research group.

Relevance

The program clearly has a very strong focus on societally relevant questions and contributes significantly to them, particularly important applications related to pensions, financial markets, health, and competition and regulation. The outreach is exceptional and would deserve a 5+, but the focus may be too strong, with senior people being fully engaged in policy debates and attracting outside funding.

Viability

External financing (2nd stream) has dropped significantly. For many years, NETSPAR has contributed prominently to providing the economics group with external funding. This has not been continued. Where in the past external funding seems to have been abundant, it has fallen to a level that should worry the management of the group.

One particular concern is the composition of the group, with too many full professors in relation to the number of assistant and associate professors. Quite a few of the full professors also do not seem to be very active researchers.

The organization of the research group is not clear, particularly what the leadership does or is able to do to keep research in line with its reputation and the aim to belong to the European top. Although the Macroeconomic and Microeconomic groups have been merged into one Economics group, it is not quite clear how this has strengthened research. The interim review mentioned that the group should refocus to keep its leadership position in Europe and that there does not seem to be a sense of urgency. This is also the impression of the current review committee. Apart from the more traditional top schools in the UK, other European schools such as Stockholm, Pompeu Fabra, Mannheim, Bonn, and Paris seem to be well on their way to overtake Tilburg in Economics.

Conclusion

The Economics group has a very strong research reputation. Many members of the group publish in top journals and are internationally highly visible. The group is, however, top heavy, with some full professors not publishing in top journals over the evaluation period. One worry is that given the current financial situation, the group is not able to hire younger researchers. The group also needs to strengthen the research leadership.

2.B.4. Program: Finance

Research coordinator: Dr. M. Da Rin

Research staff: 30.21 fte (6.77 tenured, 3.05 non-tenured, 20.39 PhD)

Assessments:	Quality:	5
	Productivity:	5
	Relevance:	5
	Viability:	4.5

Research in the Finance program covers the areas of asset pricing, asset allocation, corporate finance, behavioral finance, and banking. The Finance group is large by European standards, and its research covers all main areas of financial economics. Specifically, the group has no strategy to focus on particular research areas or to recruit faculty to strengthen a particular area. The overarching goal of the group is research excellence, assessed in terms of publication success in the top three finance journals and the top five economics journals.

- Asset pricing research covers several subfields, including fund management, market microstructure, and behavioral finance.
- Research on banking addresses retail banking, banking regulation, bank mergers, and loan markets.
- Corporate finance covers entrepreneurial finance, corporate governance (specifically executive compensation and corporate social responsibility), and private equity.
-
- Research in the group is mostly empirical, in line with general practice in the profession.

Quality

The quality of the group is excellent. Publication success in the above-mentioned top journals is high, reflecting the group's ambition to produce high-impact research.

Productivity

Assessing productivity should take into account the size of the group, its significant overlap with the economics group, and joint appointments with other schools. Based on the somewhat obscure data in the report, precise calculations of productivity measures are difficult.

Nevertheless, the productivity of the group looks excellent and is spread evenly among faculty members, who are internationally well-connected and regularly present at the best international conferences in the field. The group is the best in the Netherlands and ranks among the top five European schools.

Relevance

The group has a strong impact on society by advising government bodies, regulators, and private-sector institutions. It is also involved in cooperative arrangements with the private sector through the participation of its members in NETSPAR and ECB. It is one of the few groups in Tilburg to reach beyond the borders of the Netherlands, e.g., through advising the Norwegian sovereign wealth fund. It also has two academic members in the European Corporate Governance Institute.

Viability

The group is large and has a sufficient size in all main areas of financial economics. The Committee commented on the large number of recent departures of senior faculty, in particular in the area of banking. The Finance group responded by stating that these departures occurred for idiosyncratic reasons, such as highly attractive offers from other European schools and family reasons. The Committee has some concerns that the Finance group continues to be challenged by attractive offers from schools located in major financial centers, as it cannot compete on salaries. As a consequence, it may take a while to recreate the group's strength in banking and financial intermediation. Still, the group seems to be able to compensate senior departures with junior recruitment. It has an excellent track record in attracting high-caliber junior researchers, who thrive in the Tilburg environment, but often seem to prefer other locations at later stages in their careers. The previous report for the 2001-2007 period mentions similar challenges, and the group has addressed them.

Conclusion

The Finance group performs very strongly overall and continues to produce high-quality research. The main challenge of the group is the lack of competitiveness in terms of salaries and the location of the Tilburg campus. The group has overcome similar challenges in the past, mainly through recruiting in the junior market and awarding tenure to most of its recently hired junior faculty members. The group may well be able to increase its standards for awarding tenure without jeopardizing the growth of its faculty. The Finance PhD program is of high quality and has an outstanding placement success in the best schools in Europe and North America.

2.B.5. Program: Information Management

Research coordinator: Prof. W. van den Heuvel

Research staff: 5.01 fte (1.82 tenured, 0.62 non-tenured, 2.57 PhD)

Assessments:	Quality:	3.5
	Productivity:	3.5
	Relevance:	4
	Viability:	3.5

The Information Management (IM) group studies the effects of the growth of powerful digital communications networks and modern IT applications on organizations and the individuals operating in them: how it affects business models, organizational structures, as well as group and individual decision-making. Two complementary methodological angles are used: IT Governance by the business angle, using behavioral research approaches, and Service Science, using the design science approach.

Quality

In general, the quality of the Information Management group is nationally and internationally visible, compared to other Information Management programs. Nevertheless, its academic reputation could be improved by increasing the size of the faculty, because it is naturally difficult for such a small group to make extensive and significant contributions in the field internationally. However, the group is competitive, and with only a few strategic hires it could become an internationally competitive and even leading group.

Productivity

Overall, the scientific output of the Information Management group is good, with greater emphasis on very good journals rather than top core journals. Its productivity in terms of academic publications in top core and top journals could be improved, and the group must emphasize the need for this. The Committee stresses the importance of focusing on business journals (such as *MIS Quarterly*, *Information Systems Research*) and not on technical journals (such as *Information Systems* that are not typically included by other competitive business schools, such as the UT Dallas journal list).

The Information Management group is very successful in attracting external competitive grants from various agencies, and this should continue. However, it is also important to translate the output of such grant-related work into academic publications. The external funds should be used to support outstanding PhD candidates, and there should be an increased emphasis on working with PhD candidates to publish jointly in top core and top journals in the field. The external funding should thus be a means to an end and used to increase the quality of the Information Management group with new senior and tenure-track faculty, publish the output of their research to top core and top academic journals, and recruit outstanding PhD candidates who can be placed in peer institutions to improve the international reputation of the group.

Relevance

The ability to attract competitive external funding from European agencies and major companies is a good indication of the practical relevance of the research conducted by the Information Management group. Nevertheless, the group should demonstrate the broader relevance of its work to managerial practice and its practical applications to society in general.

With the increased use of IT in society, the Information Management group is well positioned to make the output of its research applicable and relevant. Moreover, the recent merger with the Supply Chain group could promote the development of practical IT-enabled applications that could improve the quality of supply chains, transportation, and logistics in the Netherlands and worldwide.

Viability

The viability of the Information Management group is potentially strong given the increased need for understanding the role and use of IT in organizations and society. It is crucial that the recent merger with the Strategy & Organization department, including the integration with the Supply Chain, becomes a success. It is vital for the Information Management group to strategically hire 3-5 new faculty members in order to reach a necessary critical mass to pursue its mission in research and education. The new hires should preferably include a senior person who can play a leading role in the group in its new setting.

The Information Management group should pursue interactions with other disciplines in both business and economics, and it is vital to hire additional faculty members who can work across disciplines and promote an inter-disciplinary focus. Examples include cooperation with Marketing, Accounting, and Finance. In terms of methodological cooperation, for example in the area of supply chain management, the group should develop links with the Operations Research group.

Conclusion

The Information Management group is at a crossroads given the downsizing of the group and the recent merger with the Strategy & Organization Department. While the quality and productivity of the group have naturally suffered given the small faculty size, the recent merger provides unique opportunities by reconciling the division between organizational/behavioural and design science approaches within the group, integrating with appropriate areas within the new department, cooperating with other groups in TiSEM, and strategically hiring senior and tenure-track faculty. The future is bright for the Information Management area with its strong fundamentals and potential, but strategic faculty hires must be made to enable the Tilburg group to succeed and thrive.

2.B.6. Program: Marketing

Research coordinator: Dr. B. Deleersnyder

Research staff: 15.41 fte (7.01 tenured, 3.6 non-tenured, 4.8 PhD)

Assessments:	Quality:	5
	Productivity:	5
	Relevance:	4.5
	Viability:	5

The Marketing research group distinguishes the following three key areas: consumer behavior, marketing strategy, and marketing modeling. These labels are generally used to describe the main research areas in marketing. The group's contributions cover all three areas, with the strongest emphasis on consumer behavior and marketing modeling.

Quality

In the previous external evaluation (2008), the quality of this research group was considered 'outstanding'. The group has been able to maintain if not surpass this level in the current review period. The list of publications is impressive, in quality as well as quantity. Of the articles in ISI journals, 64% are in top core and top journals, which is the highest percentage of all the TiSEM research groups that the Committee evaluated. The group has a strong reputation in the international community of research in marketing, which is also reflected in the many positions that members of the group hold on the editorial boards of the leading journals in the field. Furthermore, the group has been very successful in attracting indirect funding (NWO). In 2013 this was 28% of its total research funding.

Productivity

Marketing is one of the smaller research groups at TiSEM, and considering their consistently large and high-quality output, the conclusion is that the productivity of this group is excellent. The group also has a well-organized PhD program with an excellent international recognition.

Relevance

The Marketing research group has an active network of practitioners, especially in the area of large databases and the development of new research and reporting methodologies. The group's researchers work with major manufacturers as well as large retailers. There is an emerging program on the effects of marketing activities on consumer well-being, but overall the interactions with practice are mainly limited to the issues of branding and to the sector of fast-moving consumer goods (FMCG).

Viability

The group is well-balanced in terms of the age distribution of its members. It offers an attractive environment for young researchers and has been able in recent years to attract new researchers at the junior and senior level. It is well-organized and in an excellent position for maintaining its success in the years to come.

Conclusion

The Marketing research group at TiSEM is of top quality. It is in the highest ranking among the research groups in Europe and very comparable to many of the best marketing groups in the USA.

2.B.7. Program: Operations Research

Research coordinator: Dr. R. Sotirov

Research staff: 15.94 fte (6.91 tenured, 0.6 non-tenured, 8.43 PhD)

Assessments:	Quality:	4.5
	Productivity:	4.5
	Relevance:	4.5
	Viability:	4

Research in the Operations Research (OR) group can be classified into four subfields, which are identified by the different methods and tools: stochastic operations research and simulation, deterministic operations research, combinatorial mathematics, and game theory. In many projects carried out by members of the OR group, these subfields are connected.

Quality

The OR group has published a number of papers in top core and top journals, but many more in the very good journals. The OR field is quite diverse, and the very good journals are often well respected and publish high-quality papers. The work on robust optimization has gained worldwide attention, especially since one of the key researchers is associated part-time with the group. It also appears from their editorial positions that the group has a good international reputation. The number of citations in total and per fte has been large, though not exceptional.

Productivity

The productivity is average when considering top and top core journals and large when including the very good and other journals. The total staff is large in numbers, but many have little research time allocated. So it seems that the productivity varies quite a lot within the group.

Relevance

The group has many connections with other research groups in TiSEM, through which their relevance is made evident. Most of the group's publications focus on mathematical methods, the relevance of which is not always very clear. In contrast, one application concerned a method to determine dike heights, and the related project gained the Edelman prize from the INFORMS Society. This is a very prestigious international prize and is reflected in the high score on relevance.

Viability

The group has very few tenure-track staff and much tenured staff. Hence, it needs to renew itself. Its policy is to hire excellent staff and let them excel methodologically. Their choice of research subjects seems somewhat traditional. It is not clear how the group will be able to attain the same level of funding in a more competitive world, where many new topics require attention. The Committee considers it to be good that the group is investigating business analytics, but that seems to be more a following than a leading approach.

Conclusion

The OR group concentrates on a wide spectrum of optimization problems, both deterministic, combinatorial, stochastic and game theory. Supply chain management topics receive some attention, but most are left to the Organization & Strategy group. The group

consists of staff with a good reputation in methodology, which is also visible in the recent appointments. Yet the group has many professors (17 in total) with a small research entitlement, which is somewhat surprising to the Committee. At the moment, there is only one researcher on a tenure track, a phenomenon which is also seen with other groups, and limits the visibility of Tilburg on the job market.

2.B.8. Program: Organization & Strategy

Research coordinator: Prof. T. Simons

Research staff: 17.7 fte (7.68 tenured, 2.67 non-tenured, 7.35 PhD)

Assessments:	Quality:	4
	Productivity:	4.5
	Relevance:	4.5
	Viability:	4

The group covers research in strategy, international business and organizational theory, with a smaller group focusing on supply chain management. The size of the group is relatively small with respect to most of the other ones in TiSEM, and especially compared to the size of similar departments at benchmark schools in Europe and the US. Entire areas of management research, such as organizational behavior and entrepreneurship, have not been covered during the period pertaining to this round of evaluation.

Quality

During the 2008-13 period, the group has produced a steady flow of 4-5 articles in top journals per year, and has significantly increased the production of work in second-tier journals. Thus, a significant amount of energy dedicated to increasing the total volume of production was not directed to output that had a potentially high impact on the field. Whereas the reputation of the group has remained very strong in Europe in international business, the group appears overly focused in its publication strategy on this sub-field, at the expense of a potential impact on the others.

Productivity

In terms of productivity, the group has seen its ratio of top journal articles per group member slowly fall due to its slow member growth during the period. The significant increase in the production of second-tier journal articles came at the expense of a potential focus on high-impact contributions. Overall, its productivity remains competitive, despite the loss of some very strong and prolific researchers, but could benefit from re-focusing the efforts on top-quality outlets.

Relevance

The group has maintained strong interactions with companies through its executive training and applied research activities. This is evidenced by a steady flow of contract research, especially important to replace the university support for the Center for Innovation Research. It will be important to enhance the collaboration, and even integration, with TIAS-NIMBAS in order to maintain, and further improve, the impact of the group's research work in practice.

Viability

The recent merger with the Information Management group and the successful tenure cases of three junior faculty members represent concrete, positive signs of vitality for the new Management group. The loss of very senior scholars (one during the period of observation and one at the end of the previous period) without clear replacement in their areas of expertise poses some questions for the future capacity of the group to attract senior talent in strategy and international business. The currently broader coverage of the management research field with the new breed of scholars in the group and the growth strategy aiming to

enter the promising, related fields of entrepreneurship and organizational behavior provide concrete reasons for optimism.

Conclusion

The Organization and Strategy group has gone through a significant change process during the period under review, in terms of both senior scholar leadership and growth in the research scope. This usually comes at the price of some temporary reduction in performance quality, but the directions of change are definitely promising for a rapid recovery and even improvement vis-à-vis the high peaks experienced in past evaluation exercises. The keys to future performance lie in the smooth integration and support of the Information Management group, and the creation of a solid coverage of the main areas of the management field through an appropriate hiring and development strategy. Equally critical for this group's sustainable success will be establishing stronger collaborative ties with the other departments on the business side of TiSEM (Marketing, Accounting and Finance, in particular) and with TIAS-NIMBAS.

Appendices

Appendix 1: Curricula vitae of the committee members

Berend Wierenga is Emeritus Professor of Marketing at Rotterdam School of Management (RSM), Erasmus University. His main research topics are marketing decision-making, marketing models, and marketing management support systems. He has published widely in the top journals of his field and also written many books. At RSM, he is the founder of the Department of Marketing Management and the founding editor of the *International Journal of Research in Marketing*. He was Dean of RSM twice. He also was the first Scientific Director of the Erasmus Research Institute of Management (ERIM), and he was on the Board of the Social Science Research Council of the Netherlands Organization for Scientific Research (Netherlands Science Foundation, NWO) for six years. As an emeritus professor, he continues to be active in research and publications, editorial work and international conferences. He also has a part-time appointment as a research professor at Bocconi University in Milan.

Torben Andersen is Professor of Economics, Department of Economics and Business, Aarhus University. He has published widely on labor economics, public sector economics and the economics of the welfare state. He is affiliated to a number of research centers including CEPR (London), CESifo (Munich) and IZA (Bonn). He has also been extensively involved in giving policy advice in Denmark, Finland, Norway, Sweden, Greenland and a number of other countries. He has been the chairman of the Danish Economics Council, the Welfare Commission, and deputy chairman of the Swedish Fiscal Policy Council.

Rommert Dekker is Professor of Quantitative Logistics and Operations Research at the Erasmus School of Economics at the Erasmus University Rotterdam. He started his career at Shell Research and moved to the Erasmus University in 1992. He holds teaching positions at the Inha University in Korea and Université de Rennes in France. His research interests concern OR models in green and reverse logistics, container logistics, inventory control and transport optimization. He has been a leader of an EU network on reverse logistics, Revlog, which helped to establish that field. He has published in many journals, including the top INFORMS ones. He has an H-factor of 27 and has been cited over 10,500 times according to Google Scholar and 2800 times according to ISI. Presently, he is associate editor of *Operations Research* and *Maritime Economics and Logistics*.

Maarten Janssen is Professor of Microeconomics and Head of the Economics Department at the University of Vienna. Before joining the University of Vienna, he was Professor of Microeconomics at Erasmus University Rotterdam and Director of the Tinbergen Institute. His main research area is the theory of industrial organization, where he is known for his work in consumer search and auctions. He created the Vienna Graduate School of Economics, is an elected foreign member of the Royal Holland Society of Sciences and Humanities and a guest professor at the Higher School of Economics (Moscow).

Ernst Maug is Professor of Corporate Finance at the University of Mannheim, where he has taught since February 2006. He was Professor of Business Administration at the Department of Business and Economics at Humboldt University in Berlin. In his previous positions he served as Assistant Professor of Finance at the Fuqua School of Business at Duke University from 1996 to 2000 and at London Business School from 1993 to 1996. He obtained his PhD from the London School of Economics in 1993, where he was a member of the Financial Markets Group. His main research interest is in corporate finance with a particular emphasis on corporate governance. Recent work has analyzed executive compensation contracts,

corporate boards, and shareholder voting. His research has been published in leading economics and finance journals.

Paul Pavlou is the Milton F. Stauffer Professor of Information Technology and Strategy at the Fox School of Business at Temple University. He is also the Fox School's Chief Research Officer and Associate Dean of Research, Doctoral Programs, and Strategic Initiatives. He was ranked first in the world in the number of publications in the two top MIS journals (MISQ and ISR) for 2010-2013. His research has appeared in *MIS Quarterly* (MISQ), *Information Systems Research* (ISR), *Journal of Marketing*, *Journal of Management Information Systems* (JMIS), *Journal of the Association of Information Systems* (JAIS), *Journal of the Academy of Marketing Science* (JAMS), and *Decision Sciences*. His work has been cited over 11,000 times by Google Scholar and over 3,000 times by the Institute of Scientific Information (ISI).

Dirk Simons is Professor for Business Administration and Accounting at the University of Mannheim since 2004. He previously worked as Professor for Accounting at the Otto von Guericke University in Magdeburg and as an assistant professor at the University of Bielefeld, from which he obtained his PhD. His research papers cover the fields of accounting, auditing and corporate governance. When discussing problems of information endowment and incentives, he relies on principal agent models and game theory. A recent paper was awarded the best paper award for the best international publication of the year 2012 in Germany. He is a member of several editorial boards. Since 2008 he has served as Academic Director of the Center for Doctoral Studies in Business at the Graduate School of Economic and Social Sciences funded by the excellence initiative of the German government.

Frank Windmeijer is Professor of Econometrics at the University of Bristol, and Head of the Department of Economics. His research covers Econometrics theory, methods and practice. He is a member of the Centre for Market and Public Organisation (CMPO) and the Integrative Epidemiology Unit (IEU). He was co-director and is now a Research Fellow of the Centre for Microdata Methods and Practice (CeMMAP).

Maurizio Zollo is Professor of Strategy and Corporate Responsibility at Bocconi University, Milan, Italy, and President of the European Academy of Management. He holds a part-time chair appointment at the Vienna School of Economics and Business (WU Vienna), in the Strategy and Innovation Department. He is also a visiting professor in the Management Science Department at the Sloan School of Management (MIT). Before joining Bocconi University in September 2007, he served for ten years on the faculty of INSEAD in the Strategy Department. His research interests focus on Mergers & Acquisitions, Corporate Strategy, Strategic Alliances, Organizational Learning, and Corporate Sustainability.

Appendix 2: Explanation of the SEP-scores

Excellent (5)	Research is world leading. Researchers are working at the forefront of their field internationally and their research has an important and substantial impact in the field.
Very Good (4)	Research is nationally leading. Research is internationally competitive and makes a significant contribution to the field.
Good (3)	Research is internationally visible. Work is competitive at the national level and makes a valuable contribution in the international field.
Satisfactory (2)	Research is nationally visible. Work adds to our understanding and is solid, but not exciting.
Unsatisfactory (1)	Work is neither solid nor exciting, flawed in the scientific and/or technical approach, repetitions of other work, etc.

Quality is to be seen as a measure of excellence and excitement. It refers to the eminence of a group's research activities, its abilities to perform at the highest level and its achievements in the international scientific community. It rests on the proficiency and rigour of research concepts and conduct; it shows in the success of the group at the forefront of scientific development.

Productivity refers to the total output of the group; that is, the variegated ways in which results of research and knowledge development are publicised. The output needs to be reviewed in relation to the input in terms of human resources.

Societal relevance covers the social, economic and cultural relevance of the research. Aspects are:

- societal quality of the work. Efforts to interact in a productive way with stakeholders in society who are interested in input from scientific research, and contributions to important issues and debates in society.
- societal impact of the work. Research affects specific stakeholders or procedures in society.
- valorisation of the work. Activities aimed at making research results available and suitable for application in products, processes and services. This includes interaction with public and private organisations, as well as commercial or non-profit use of research results and expertise.

Vitality and feasibility. This dual criterion regards the institute's ability to react adequately to important changes in the environment. It refers to both internal (personnel, research themes) and external (developments in the field, in society) dynamics of the group. On the one hand, this criterion measures the flexibility of a group, which appears in its ability to close research lines that have no future and to initiate new venture projects. On the other hand, it measures the capacity of the management to run projects in a professional way. Policy decisions and project management are assessed, including cost-benefit analysis.

Appendix 3: Program of the site visit

MARCH 17

- 08.00-09.00 Breakfast meeting
08.00-08.30: Welcome by Philip Eijlander (Rector) and Lex Meijdam (Dean)
- 09.00-10.00 CentER management
Arjen van Witteloostuijn (Vice-dean of Research), Luc Renneboog (Program Director Business), Charles Noussair (Program Director Economics)
- 10.00-11.00 Economics group
Henk van Gemert (HoD), Harry Huizinga, Jan Boone (RCs), Daan van Soest, Peter Kooreman
- 11.00-12.00 Econometrics group
Henk Norde (HoD), Martin Salm (RC), John Einmahl, Jaap Abbring, Bertrand Melenberg, Arthur van Soest
- 12.00-13.00 Staff meeting economics groups
Tenure trackers: Bettina Drepper (Etrics), Florian Schütt (ECO), Gonzague Vannoorenberghe (ECO)
Associate professors: Otilia Boldea (Etrics), Tobias Klein (Etrics), Manuel Oechslin (ECO), Sigrid Suetens (ECO)
- 13.00-14.00 Lunch
- 14.00-15.00 Accounting group
Jeroen Suijs (HoD), Eddy Cardinaels (RC), Laurence van Lent, Willem Buijink
- 15.00-16.00 Finance group
Joost Driessen (HoD), Marco Da Rin (RC), Luc Renneboog, Frank de Jong, Oliver Spalt, Lieven Baele
- 16.30-17.30 Information Management group
Niels Noorderhaven (HoD), Anne-Francoise Rutkowski, Willem-Jan van den Heuvel (RCs), Mike Papazoglou, Piet Ribbers, Henk Akkermans
- 17.30-18.30 Marketing group
Inge Geyskens (HoD), Barbara Deleersnyder (RC), Marnik Dekimpe, Joachim Vosgerau, Bart Bronnenberg
- 19.00-21.00 Dinner

MARCH 18

- 08.00-09.00 Breakfast
- 09.00-10.00 Operations Research group
Henk Norde (HoD), Renata Sotirov (RC), Edwin van Dam, Etienne de Klerk, Peter Kort, Herbert Hamers, Hans Schumacher
- 10.00-11.00 Organization & Strategy group
Niels Noorderhaven (HoD), Tal Simons (RC), Geert Duijsters, Bart Vos, Jeroen Kuilman, Adam Tatarynowicz
- 11.00-12.00 Staff meeting business groups
Tenure trackers: Bart Dierynck (ACC), Rik Frehen (FIN), Anne Klesse (MAR), Juan Vera (OR)
Associate professors: Stephan Hollander (ACC), George Knox (MAR), Louis Mulotte (O&S)
Project researcher: Geert Monsieur (IM)
- 12.00-13.00 PhD students
Economics: Hong Li (Etrics), Stefan Hubner (Etrics), Ata Can Bertay (ECO), Inge van den Bijgaart (ECO)
Business: Zorka Simon (FIN), Yan Wang (IM), Uwe Treutsch (OR), Korcan Kavusan (O&S)
- 13.00-14.00 Lunch
- 14.00-14.30 Clarification meeting
Lex Meijdam, Arjen van Witteloostuijn, Luc Renneboog, Charles Noussair, Manon Osseweijer
- 14.30-15.30 Wrap-up
- 15.30-16.00 Preliminary results meeting
Lex Meijdam, Arjen van Witteloostuijn, Luc Renneboog, Charles Noussair, Manon Osseweijer, Jeroen Suijs (ACC), Harry Huizinga (ECO), Bas Werker (ETRICS), Marco Da Rin (FIN), Anne-Francoise Rutkowski and/or Willem-Jan van den Heuvel (IM), Inge Geyskens (MAR), Renata Sotirov (OR), Niels Noorderhaven and/or Tal Simons (O&S), and other interested people

- ACC: Research group Accounting
ECO: Research group Economics
ETRICS: Research group Econometrics
FIN: Research group Finance
IM: Research group Information Management
HoD: Head of Department
MAR: Research group Marketing
OR: Research group Operations Research
O&S: Research group Organization & Strategy
RC: Research Coordinator

Appendix 4: Quantitative data

Table 1. Research staff at institutional level (allocated fte)

	2008	2009	2010	2011	2012	2013
Tenured staff	39.15	40.78	42.80	46.28	49.87	53.55
Non-tenured staff	90.20	106.57	117.23	113.45	111.14	105.85
.. of whom CentER PhDs	65.39	80.31	86.52	83.08	85.38	85.27
Total	129.35	147.35	160.03	159.73	161.01	159.40

Table 2. Research staff at program level

	2008		2009		2010		2011		2012		2013	
	#	fte	#	fte	#	fte	#	fte	#	fte	#	fte
Accounting												
Tenured staff	9	1.20	7	1.19	8	1.48	7	1.23	7	1.28	8	2.04
Non-tenured	10	4.74	12	5.27	11	6.07	13	6.29	13	7.42	12	6.55
... of whom CentER PhDs	6	2.34	6	2.47	4	2.27	5	2.41	6	3.87	6	4.00
Total	19	5.94	19	6.46	19	7.55	20	7.52	20	8.70	20	8.59
Econometrics												
Tenured staff	17	3.91	20	4.57	20	5.89	21	7.20	19	7.96	18	7.54
Non-tenured	33	17.54	34	19.08	36	16.48	32	16.36	28	16.55	28	15.37
... of whom CentER PhDs	25	14.52	25	15.96	27	13.72	25	14.58	24	15.30	25	14.21
Total	50	21.45	54	23.65	56	22.37	53	23.56	47	24.51	46	22.91
Economics												
Tenured staff	44	12.07	42	12.25	44	10.15	44	10.27	46	12.72	45	13.78
Non-tenured	50	23.58	58	30.76	65	36.50	63	34.63	56	29.99	5	29.85
... of whom CentER PhDs	30	15.68	33	21.53	40	24.96	40	23.35	38	21.54	38	23.52
Total	94	35.65	100	43.01	105	46.65	107	44.90	102	42.71	99	43.64
Finance												
Tenured staff	26	5.06	32	5.75	38	6.66	37	6.64	38	6.61	36	6.77
Non-tenured	34	19.83	43	21.62	44	25.36	41	24.61	42	26.21	43	23.44
... of whom CentER PhDs	25	14.88	32	17.75	35	21.79	34	20.61	36	22.61	36	20.39
Total	60	24.89	75	27.37	82	32.02	78	31.25	80	32.82	79	30.21
Information Management												
Tenured staff	10	2.43	11	2.38	9	2.07	9	1.76	9	1.93	11	1.82
Non-tenured	10	5.26	12	7.75	15	9.45	14	7.61	12	5.49	9	3.19
... of whom CentER PhDs	10	5.26	12	7.75	14	9.45	10	7.13	7	4.80	5	2.57
Total	20	7.69	23	10.13	24	11.52	23	9.37	21	7.42	20	5.01
Marketing												
Tenured staff	7	5.13	8	4.53	9	5.55	11	7.03	9	6.77	11	7.01
Non-tenured	12	7.80	18	9.52	20	10.33	20	9.55	14	8.24	16	8.40
... of whom CentER PhDs	7	4.80	9	6.00	11	6.19	11	5.80	7	5.07	8	4.80
Total	19	12.93	26	14.05	29	15.88	31	16.58	23	15.01	27	15.41

	2008		2009		2010		2011		2012		2013	
	#	fte	#	fte	#	fte	#	fte	#	fte	#	fte
Operations Research												
Tenured staff	31	6.32	34	6.96	34	7.76	31	7.87	28	7.64	28	6.91
Non-tenured	11	6.15	9	5.23	10	4.01	9	6.20	12	7.41	16	9.03
... of whom CentER PhDs	9	5.21	8	4.86	9	3.76	8	5.60	10	6.80	15	8.43
Total	42	12.47	43	12.19	44	11.77	40	14.07	40	15.05	44	15.94
Organization & Strategy												
Tenured staff	14	3.03	14	3.15	16	3.24	16	4.28	15	4.96	18	7.68
Non-tenured	11	5.30	14	7.34	15	9.03	16	8.20	19	9.83	24	10.02
... of whom CentER PhDs	6	2.70	7	3.99	7	4.38	8	3.60	9	5.39	15	7.35
Total	25	8.33	28	10.49	31	12.27	32	12.48	34	14.79	42	17.70

Table 3. Research output at institutional level

		2008	2009	2010	2011	2012	2013
English (scientific)	Top & very good journals	108	96	86	117	121	95
	Other ISI journals	99	98	95	121	124	111
	Other non-ISI journals	47	45	52	30	37	31
	Books authored	3	6	4	1	4	3
	Books edited	3	3	2	4	2	2
	Book chapters	34	35	30	26	45	34
	Proceedings	13	8	7	18	19	4
Dutch	Journals	50	50	35	55	51	35
	(Edited) books	2	2	6	3	6	3
	Chapters & proceedings	13	13	5	11	8	10
PhD theses	CentER series	20	15	14	34	32	31
	Non-CentER series	7	2	4	0	0	0
Other	Professional publications	51	44	27	56	29	30
	Aimed at the general public	72	94	86	96	60	85
	CentER Discussion Papers	107	94	143	143	95	78
Total		629	605	596	715	633	552

Table 4. Research output at program level

		2008	2009	2010	2011	2012	2013
Accounting							
English (scientific)	Top & very good journals	10	1	5	2	6	5
	Other ISI journals	0	2	1	0	2	1
	Other non-ISI journals	0	0	1	0	0	0
	Books authored	0	0	0	0	0	0
	Books edited	1	0	0	0	0	0
	Book chapters	2	1	0	0	0	0
	Proceedings	0	0	0	0	0	0
Dutch	Journals	5	6	5	5	15	6
	(Edited) books	0	0	0	1	0	0
	Chapters & proceedings	0	1	0	0	0	0
PhD theses	CentER series	1	1	0	0	1	1
	Non-CentER series	0	0	0	0	0	0

		2008	2009	2010	2011	2012	2013
Other	Professional publications	0	1	0	1	0	0
	Aimed at the general public	34	20	8	12	18	18
Total		53	33	20	21	42	31
Econometrics							
English (scientific)	Top & very good journals	19	12	7	11	15	3
	Other ISI journals	10	12	9	15	11	11
	Other non-ISI journals	1	4	4	1	5	2
	Books authored	0	1	1	0	0	0
	Books edited	0	0	0	1	0	0
	Book chapters	5	3	7	3	4	0
	Proceedings	0	0	0	0	0	0
Dutch	Journals	2	1	1	0	1	1
	(Edited) books	0	0	0	0	0	0
	Chapters & proceedings	0	0	0	0	0	0
PhD theses	CentER series	3	1	2	8	7	7
	Non-CentER series	1	0	0	0	0	0
Other	Professional publications	4	0	1	2	0	1
	Aimed at the general public	1	0	0	0	0	0
Total		46	34	32	41	43	25
Economics							
English (scientific)	Top & very good journals	32	27	15	28	33	24
	Other ISI journals	40	48	38	45	50	38
	Other non-ISI journals	21	20	15	7	6	9
	Books authored	0	1	2	0	2	2
	Books edited	0	1	0	0	2	2
	Book chapters	7	8	4	6	22	12
	Proceedings	0	0	0	0	0	0
Dutch	Journals	35	35	21	32	25	21
	(Edited) books	1	2	2	0	4	3
	Chapters & proceedings	10	8	2	6	4	6
PhD theses	CentER series	10	2	0	10	9	10
	Non-CentER series	4	0	0	0	0	0
Other	Professional publications	8	16	4	9	7	4
	Aimed at the general public	30	65	28	36	37	63
Total		198	233	131	179	201	194
Finance							
English (scientific)	Top & very good journals	14	22	14	33	23	26
	Other ISI journals	13	4	2	13	15	16
	Other non-ISI journals	5	8	11	3	2	4
	Books authored	0	2	0	1	0	0
	Books edited	1	0	0	1	0	0
	Book chapters	11	5	5	8	6	11
	Proceedings	0	0	0	0	0	0
Dutch	Journals	4	0	0	8	0	0
	(Edited) books	0	0	1	1	1	0
	Chapters & proceedings	1	0	0	4	1	0

		2008	2009	2010	2011	2012	2013
PhD theses	CentER series	2	5	4	10	6	7
	Non-CentER series	1	0	1	0	0	0
Other	Professional publications	0	4	4	10	2	2
	Aimed at the general public	0	0	28	31	2	1
Total		52	50	70	123	58	67
Information Management							
English (scientific)	Top & very good journals	5	4	2	9	7	6
	Other ISI journals	3	1	4	1	4	5
	Other non-ISI journals	5	4	5	1	8	1
	Books authored	0	0	1	0	0	0
	Books edited	1	1	0	2	0	0
	Book chapters	1	6	2	2	1	0
	Proceedings	8	4	5	14	10	1
Dutch	Journals	0	0	1	0	0	0
	(Edited) books	0	0	0	0	0	0
	Chapters & proceedings	0	2	0	0	0	0
PhD theses	CentER series	0	1	2	1	4	2
	Non-CentER series	1	2	1	0	0	0
Other	Professional publications	11	6	6	11	5	5
	Aimed at the general public	0	0	0	0	0	0
Total		35	31	29	41	39	20
Marketing							
English (scientific)	Top & very good journals	10	10	17	12	14	15
	Other ISI journals	6	4	3	5	3	1
	Other non-ISI journals	2	0	1	0	3	1
	Books authored	0	1	0	0	0	0
	Books edited	0	0	1	0	0	0
	Book chapters	3	1	1	0	4	0
	Proceedings	0	1	0	0	0	0
Dutch	Journals	0	0	1	0	0	1
	(Edited) books	0	0	0	0	0	0
	Chapters & proceedings	2	2	1	0	0	0
PhD theses	CentER series	1	1	2	1	4	1
	Non-CentER series	0	0	0	0	0	0
Other	Professional publications	1	2	1	3	1	1
	Aimed at the general public	0	1	1	0	0	0
Total		25	23	29	21	29	20
Operations Research							
English (scientific)	Top & very good journals	11	12	15	15	15	11
	Other ISI journals	26	19	29	26	20	18
	Other non-ISI journals	8	6	4	1	6	7
	Books authored	3	0	0	0	1	0
	Books edited	0	0	0	0	0	0
	Book chapters	0	6	5	1	4	6
	Proceedings	5	3	2	4	1	2

		2008	2009	2010	2011	2012	2013
Dutch	Journals	1	0	1	1	1	0
	(Edited) books	0	0	0	0	1	0
	Chapters & proceedings	0	0	0	0	0	0
PhD theses	CentER series	2	2	3	1	1	2
	Non-CentER series	0	0	0	0	0	0
Other	Professional publications	8	5	6	12	6	6
	Aimed at the general public	0	0	0	0	0	0
Total		64	53	65	61	56	52
Organization & Strategy							
English (scientific)	Top & very good journals	7	8	11	7	8	5
	Other ISI journals	1	8	9	16	19	21
	Other non-ISI journals	5	3	11	17	7	7
	Books authored	0	1	0	0	1	1
	Books edited	0	1	1	0	0	0
	Book chapters	5	5	6	6	4	5
	Proceedings	0	0	0	0	8	1
Dutch	Journals	3	8	5	9	9	6
	(Edited) books	1	0	3	1	0	0
	Chapters & proceedings	0	0	2	1	3	4
PhD theses	CentER series	1	2	1	3	0	1
	Non-CentER series	0	0	2	0	0	0
Other	Professional publications	19	10	5	8	8	11
	Aimed at the general public	7	8	21	17	3	3
Total		49	54	77	85	70	65