## **Research Review** Erasmus Research Institute of Management

**Erasmus University Rotterdam** 

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De Onderzoekerij Vondellaan 58 2332 AH Leiden The Netherlands

Phone: +31 6 24 81 21 76 E-mail: info@onderzoekerij.nl Internet: www.onderzoekerij.nl

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## **Executive Summary**

This report summarises the assessment of ERIM at the Institute level, the five research programmes, and the doctoral programme. Overall, the committee believes that ERIM continues to make great strides in being one of the leading research centres in Europe and the world. Erasmus has been able to attract and retain a large number of very active research scholars in all of the programmes whose research is known globally. ERIM members interviewed expressed high levels of satisfaction with the support received both financially and from other resources such as databases and the experimental laboratory. In addition, ERIM support has helped to protect the research time of its scholars. A main conclusion is that while the research output of ERIM's scholars is world-class, there are opportunities to improve its impact. The committee feels that the doctoral programme is a key strength of ERIM's research activities and contributes to its research productivity. It also helps recruiting faculty as many scholars want to be affiliated with a school that has a strong doctoral programme. It is clear that the ERIM has taken the recommendations made by previous committees seriously and has attended to many of the areas where improvements could be made. The International Peer Review Committee unanimously feels that that ERIM has contributed significantly to global thinking and practice in management and offers 10 recommendations for further improvements.

Prof. Russell Winer Chair of the Committee

## 1. Introduction

### 1.1 The scope of the assessment

The quality assessment of research in management is part of an assessment system as specified in the Standard Evaluation Protocol For Public Research Organizations of 2015 by the Association of Universities in The Netherlands (VSNU), the Netherlands Organization for Scientific Research (NWO), and the Royal Netherlands Academy of Arts and Sciences (KNAW).

The review committee was asked to assess the quality and relevance to society of the research conducted by the Erasmus Research Institute of Management (ERIM), the research programmes and the doctoral programme, their strategic targets and the extent to which they are equipped to achieve them.

This report describes findings, conclusions and recommendations of this external assessment of ERIM.

### **1.2 The Review Committee**

The Board of the Erasmus University has appointed the following members of the committee for the research review:

- Russell Winer (chair)
- Marjorie Lyles
- Ailsa Röell
- Andreas Georg Scherer
- Luk Van Wassenhove

More detailed information about the members of the committee can be found in Appendix A. The Board has appointed Annemarie Venemans as the committee secretary.

### **1.3 Independence**

All members of the committee signed a declaration and disclosure form to safeguard that the panel members judge without bias, personal preference or personal interest, and the judgment is made without undue influence from the institute, the programmes or other stakeholders. Any existing professional relationships between committee members and programmes under review were reported. The committee concluded that there was no risk in terms of bias or undue influence.

### 1.4 Data provided to the Committee

The committee received detailed documentation consisting of the following parts:

- Self-assessment report 2010-2015
- Standard Evaluation Protocol 2015-2021
- Key publications
- ERIM midterm report
- ERIM evaluation report 2004-2009

### **1.5 Procedures followed by the Committee**

The final assessment is based on the documentation provided by the institute and the interviews with the management and with the leaders of the programmes. The interviews took place on 12 and 13 January 2017 (see appendix B).

The texts for the assessment report were finalised through email exchanges. The final version was presented to the ERIM management for factual corrections and comments.

## 2. Assessment of the institute

Founded in 1998, the Erasmus Research Institute of Management (ERIM) is a researchfocused organisation combining the strengths of two units of Erasmus University—the Rotterdam School of Management (RSM) and the Erasmus School of Economics (ESE). Research conducted within ERIM focuses on the domain of management and does not include all research conducted at the two schools. Approximately 70% of the faculty associated with ERIM are in the RSM and the remaining 30% in the ESE. The allocation of funding to support ERIM from the two schools is in roughly the same proportion. ERIM was originally accredited in 1999 by the Royal Netherlands Academy of Arts and Sciences (KNAW) and has been re-accredited several times since then, the latest in 2010 with a subsequent internal mid-term evaluation conducted in 2013.

## 2.1 Mission and Goals

The stated mission of ERIM is to enhance scientific research that enables organisations to assess and improve their business processes in order to perform in a profitable and responsible way. ERIM's main objectives are to support and produce internationally-recognised research and to offer a doctoral programme that produces outstanding young scholars for the general field of management.

More specifically, its general goals are:

- To be a high quality institute with high visibility and a strong reputation among its peers in the international community of researchers in management;
- To produce scientific publications with high impact on research in management;
- To offer high quality doctoral education through an internationally competitive Doctoral Programme;
- To attract, develop and retain top research talent in all stages of their careers.

ERIM is organised through the establishment of 5 research programmes that span both RSM and ESE:

- Business Processes, Logistics and Information Systems (LIS)
- Organisation (ORG)
- Marketing (MKT)
- Finance & Accounting (F&A)
- Strategy & Entrepreneurship (S&E)

ERIM has a transparent system of membership with different tiers depending upon a faculty member's research profile. For faculty these tiers are Member, Associate Member, Fellow, Visiting Member, Affiliate Member, and Honorary Member. The transparent system has stated standards that must be met to qualify for each tier. The system is based entirely on research output in ERIM-qualified journals rated EP and EP\*.

ERIM's strategic priorities for the period 2010-2015 were the following:

- Further strengthen academic performance: invest in a research environment that attracts, develops and retains quality researchers;
- Further increase the quality and international appeal/placement possibilities in the doctoral programme;
- Invest in capabilities to broaden and increase the research funding base;

• Strengthen output of research in management; the relevance for society at large and academic reputation should be visible and shared worldwide.

Overall, the committee thinks that ERIM continues to make great strides in being one of the leading research centres in Europe and the world. Erasmus has been able to attract and retain a large number of very active research scholars in all of the programmes whose research is known globally. ERIM members interviewed, expressed high levels of satisfaction with the support received both financially and from other resources such as databases and the experimental laboratory. In addition, ERIM support has helped to protect the research time of its scholars and to provide a relatively low teaching load. It is clear that ERIM has taken the recommendations made by previous committees seriously and has attended to many of the areas where improvements could be made. This report summarises the result of the International Peer Review Committee's assessment over the 6-year period from 2010-2015 and our recommendations going forward for further improvements.

### 2.2 Research

#### Resources

As shown in the self-assessment, ERIM has an impressive amount of resources devoted to research activities.

In terms of faculty, 241 tenured, non-tenured, and visiting faculty members were engaged with ERIM in 2015 representing 9% growth since 2010. Nearly 60% of these faculty members are senior, tenured scholars providing an exceptionally strong base for research, co-authoring, and mentoring.

In addition, there were 121 doctoral candidates affiliated with ERIM in 2015 representing 9% growth from 2010. This large body of future scholars and the growth in the programme demonstrates ERIM's commitment to doctoral education and further resources for research collaboration.

In terms of financial resources, ERIM's 2015 budget of just over €2 million represents a significant investment by RSM and ESE. This is a very slight increase from 2010 and probably a decline in real terms. Although there was about a 13% decline in the budget from 2014, this was explained in the self-assessment as a temporary drop due to some idiosyncratic events.

The split of financial support in 2015 was 25% for research, 35% for the doctoral programme, and 40% for management, office staff, and facilities. Although the relatively low percentage devoted to research would normally be cause for concern, we note that the research budget does not include funding for research time and doctoral students, which are supplied by the schools. Of somewhat more concern is that the percentage of the budget spent on research declined over the last several years. While we are not aware of the reasons behind this, we hope that this is temporary and not structural.

The substantial resources are not just financial as ERIM provides a world-class resource infrastructure in terms of its behavioural lab and access to databases. These excellent non-financial resources were mentioned numerous times by ERIM scholars we interviewed.

Overall, it is clear that ERIM has the necessary faculty, doctoral students, and financial resources to be a highly successful centre of research.

#### Productivity

The data provided in the self-assessment report support a conclusion that the ERIM community of scholars is a highly productive group.

As stated in the self-assessment, ERIM scholars produced 1,657 articles in international language outlets over the 2010-2015 period and 241 in 2015 alone. The totals including parts of books, monographs, and other outlets were 1,998 and 280 respectively. While the 2015 figures are significant declines from the preceding years, the cumulative figures are impressive. In addition, if one divides the number of articles by the number of ERIM scholars (233 non-visiting members assuming roughly the same size faculty over the years), ERIM faculty published per capita just over 7 articles from 2010-2015 and just over one each in 2015. Given the number of faculty at different career stages and the vagaries of the journal review process, these are impressive numbers.

In the self-assessment, the publications are broken down into different levels of journal quality. ERIM scholars published 274 articles over 2010-2015 and 51 in 2015 alone in ERIM P\* journals. When P-level quality outlets are added, the totals rise to 668 and 112 respectively (omitting M\* publications which are small in number). Importantly, since many ERIM scholars publish in outlets in disciplinary journals outside of the management area, the number of Non-Core ISI 1st quartile publications are impressive as well. From 2010-2015, ERIM scholars published 260 articles in those outlets with 41 being in 2015 alone.

The fact that ERIM produces a high volume of high-quality research is further supported by data from the bibliometric analyses. A caveat is that these analyses cover the entire Erasmus University and not just ESE and RSM implying that some non-ERIM faculty are included in the data. However, we assume that relatively few faculty members outside of these two schools publish in management journals so the analyses provided in the appendices are valid measures on both quantity and quality dimensions. In addition, the bibliometric analysis is somewhat limited as it does not fully account for publications in discipline-based journals in economics, statistics, psychology, etc.

Data in the self-assessment show that in the domain of management research Erasmus is ranked #3 in the world and #1 in both Europe and the Netherlands in terms of number of publications (P criterion) in the management journals covered by the analysis. In addition, in terms of the Ptop n% criteria (the number of publications in the top n% of the journals in the management area), Erasmus continues to do very well. For example, when using the Ptop 10% criterion, Erasmus researchers are ranked #12 in the world and #1 in Europe and the Netherlands.

These results are supported when examining the volume of publications using three different journal lists: ERIM's, the University of Texas at Dallas, and the *Financial Times*. Using the ERIM list, Erasmus is #3 in the world and #1 in both Europe and the Netherlands. Although the results from Ptop n% vary somewhat, Erasmus is still consistently in the top 5 in Europe and #1 in the Netherlands. There are a large number of bibliometric analyses comparing Erasmus to other institutions and we will not repeat all of them here. A sampling of the benchmark comparisons and an examination of the horizontal axis of the graphs (P criterion) consistently shows that Erasmus is a world leader in terms of volume of publications.

An interesting finding is that international research collaborations enhance the productivity of Erasmus's scholars significantly. More than 50% of the publications from Erasmus result from authors from at least two different countries. This strongly suggests that the extensive visiting professor program currently in place should be continued.

#### Impact

The story on impact is somewhat different as, overall, ERIM/Erasmus does better in terms of quantity of publications than in terms of impact as measured by citations.

The two impact metrics used here are MNCS, the mean normalised citation score, and PPtop n%, the proportion of Erasmus publications that belong to the top n% most frequently cited publications in their field and publication year.

Returning to the bibliometric analyses shown in the self-assessment, these two metrics show generally lower rankings. Using MNCS, Erasmus is ranked 39<sup>th</sup> in the world, 12<sup>th</sup> in Europe, and 7<sup>th</sup> in the Netherlands. Using PPtop 10%, Erasmus is ranked 40<sup>th</sup> in the world, 11<sup>th</sup> in Europe, and 6<sup>th</sup> in the Netherlands. The results from the three different journal lists are qualitatively the same.

The analyses versus benchmark institutions tell pretty much the same story. While Erasmus does very well on the horizontal axis (P criterion), it does less well on the vertical axes, MNCS.

We should add that Erasmus does perform better on the TNCS criterion, which is also an impact measure. However, it is a total citation measure and, clearly, greater number of total publications will generate more total citations.

#### Overall comments on research quality

Our evaluation is not based solely on a quantitative analysis of research productivity and impact. Indeed, in our first recommendation below, we feel that ERIM has been too numbersoriented in its procedures as outlined in the membership charter and we therefore do not wish to solely rely on a numerical analysis in this report.

As another important indicator of research quality, ERIM scholars are well-represented in a number of important international professional and government organisations including many editorial positions at major international journals. In addition, they are frequent speakers at international conferences and are often invited to speak at seminars around the world.

Overall, we were very impressed with the research environment that has been created over the years through cooperation between the two schools and the consistent levels of funding noted previously. Interviews with various faculty, both senior and junior, pointed to a large number of very attractive features of ERIM:

- Faculty research collaborations across the two schools;
- · Facilitation of both grant applications and management of the grants when obtained;
- Transparency in terms of advancement criteria and access to research funds;
- The large amounts of research funds available;
- The large number of research seminars;
- Frequent visits by non-ERIM faculty members around the world;
- Independence from the two schools and departments;
- Incentives for senior faculty to remain research active;
- An environment where it is a great place to start a career;
- The creation of an interdisciplinary culture.

As a result, while we have some research-related recommendations below, overall, we feel that ERIM continues to be an outstanding organisation that produces high-quality, impactful research. We particularly commend the past and current ERIM leadership for creating an environment where junior faculty can develop and senior faculty continue to be productive scholars.

## 2.3 Relevance to society

One of ERIM's strategic priorities from its inception has been to have impact on both society and management practice. The strategic priorities set for 2016-2020 are consistent with this theme.

Although there is some variation across research programmes, it is clear that ERIM has been very successful in this area. The ERIM Impact Narratives provides considerable detail about the numerous linkages that the faculty have to companies, social organisations, and government.

A more detailed assessment of this area for each of the research programmes is provided later in this report. However, we highlight some of the projects in each of the areas to demonstrate the breadth of these activities:

Companies

Royal FloraHolland auction cooperative (LIS) Partnerships Resource Centre (ORG) Web site morphing (MKT) SME finance (F&A) Erasmus Centre for Family Business (S&E)

Society

Kidney exchange programmes (LIS) Public safety (ORG) Breast cancer communications (MKT)

Government

Improved financial reporting (F&A) INSCOPE (S&E)

We support ERIM's efforts to consider the role that senior scholars can play in broadening the impact their scholarship can have on these areas. As was noted in the 2010 report, the criteria for ERIM membership and advancement could include more writing for applied outlets like *Harvard Business Review*. Towards that end, we applaud the creation of a new publication category, M\*, to support this kind of writing activity and to acknowledge that there are different capabilities that senior faculty can provide as they advance through their careers.

## 2.4 Viability

Over the years, ERIM has created an exceptionally strong group of scholars. Assuming that internal funding levels will continue at the current level, we see no reason that it cannot continue to be one of the leading research centres in Europe if not the world. We agree that its strengths are the quality of its researchers, an excellent research environment, state-of-the art facilities, and transparent rules and policies.

A key threat noted in the self-assessment is increasing competition globally particularly from Asia. Another threat is the possibility of reduced government funding for research.

The research programmes (and schools) have suffered from faculty turnover. While we did not analyse this in detail, it does not seem to be at an alarming level. Some turnover is expected as young scholars face uncertainty in their careers, personal reasons force moves, and exceptional professional opportunities arise. A structural problem we cannot address is the salary situation in the Netherlands. However, the junior faculty we met believed that the research environment was an acceptable trade-off for the lower salary structure.

A unique problem facing ERIM is with respect to the brand. While we will argue below that it is probably under-leveraged for faculty recruiting purposes, it is clear that the brand is not well-known. Other than those on the committee who have experience in the Netherlands, the others were unfamiliar with the brand yet familiar with the University and individual scholars. In addition, some of us were unfamiliar with the distinction between the RSM and the ESE. It is unclear that resources should be put in place to build the ERIM brand as it is mainly an internal structure facilitating research. Although not strictly within our purview, some thought might be given to how to leverage the most visible brand—Erasmus—in order to gain greater visibility for the excellent research being conducted.

### 2.5 Doctoral programme

As described in the self-assessment, there are three routes to matriculating into the ERIM doctoral programme: (1) 2-year research master's plus 3 years in the doctoral programme, (2) 1-year MSc, 1-year research master's plus 3 years in the doctoral programme, and (3) 1-year MSc plus 4 years in the doctoral programme. It had 121 students enrolled in 2015, a 9% increase from 2010. There is also a part-time programme in RSM, but since that is not administered by ERIM, we did not consider it for this report.

The programme's managers work diligently to recruit students into the programme. They use all of the modern digital marketing tools (search engine marketing, search engine optimisation, social media) to attract applicants. Competition for top students is, of course, fierce and is global.

Key strengths of the programme are the pool of excellent research supervisors and the outstanding research resources provided by ERIM. This has resulted in 132 P\* and P-level articles authored and co-authored with faculty over the period 2010-2015 (self-assessment).

The key weakness has been and continues to be placing students in top research schools, particularly in the U.S. The percentage of graduates taking academic positions is 76% overall from 2010-2015 but was down significantly in 2015. Hopefully, this recent result may only be a temporary situation.

Some suggestions provided by ERIM faculty and doctoral students to improve the situation included the following:

- There was strong support for financing a 5th year in the programme. Five-year
  programmes are now common around the world. In addition to the normal arguments
  for an extra year (e.g., some papers either under review or published before going on
  the job market), many ERIM doctoral students spend at least part of an academic
  year visiting at another institution;
- There was also a consistent call for more emphasis to be placed on language and presentation skills. The latter can be accomplished by having students make more presentations in their doctoral courses and before programme faculty and at international conferences. The former should leverage existing Erasmus resources or, if unavailable, hiring private tutors;

- A suggestion is to continue to professionalise the placement services of ERIM: e.g. support and career advice for PhD students, presentation on websites, active promotion of candidates at conferences and job markets etc;
- Some international students noted that more information about housing options and assistance navigating the Rotterdam housing "system" would be useful and make the transition into the programme smoother.

Overall, the committee feels that the doctoral programme is a key strength of ERIM's research activities and contributes to its research productivity. It also helps recruiting faculty as many scholars want to be affiliated with a school that has a strong doctoral programme.

## 2.6 Research integrity

Faculty and staff of ERIM are subject to the ERIM Membership Charter in which it is formulated that ERIM expects all its members and fellows to respect academic integrity and to adhere to and uphold the general principles of professional academic practice at all times. The Netherlands Code of Conduct for Scientific Practice further details these principles.

In the opinion of the committee all programmes are well aware of the importance of research integrity. The committee noted that there were some issues in the past, but several measures were taken. One of these measures is the development of a dilemma game focusing on professionalism and integrity in research, which is freely available. The committee applauds this development. Faculty representatives from the programmes strongly supported ERIM's research integrity policies and procedures and verified that measures were being taken to ensure that the problems of the past are behind them.

The committee is pleased that at Erasmus University standard procedures have been launched to facilitate storage of research results. It recommends that ERIM will take a leading role in storage and collecting data and in making data more transparent along the general lines issued by the university.

## 2.7 Summary and recommendations

The committee's deliberations focused on the value that ERIM adds to the efforts that the RSM and the ESE would undertake if ERIM did not exist. Our conclusion based on the material provided to us and the meetings held on campus, was an unqualified "yes." These added-value dimensions of ERIM were noted earlier in this report in Section 2.2; they work together to create an outstanding research atmosphere and culture that has produced large amounts of excellent research, contributions to management and society, and doctoral students. Our recommendations below should be taken in the spirit of continuous improvement.

Our recommendations are the following (not in any ordering of priority):

1. We believe that ERIM needs to continue to re-think what "excellence" means in terms of membership and advancement to the different levels of membership. Currently, the system is numbers-oriented, in particular, volume, to the extreme. As noted previously in this report, senior faculty in particular can contribute to the overall enterprise in ways besides producing research. These kinds of contributions need to be valued without losing the research aspects of the incentive structure. We know that ERIM leadership as well as some of the research programmes are considering this already; we urge them to continue to revise the system in this direction.

- 2. Research impact is an issue. This is related to Recommendation #1, of course, as the current system rewards volume and not impact. There is no easy fix to this, of course, as scholars should and do feel that their work is important. One possibility is to create a pool of funds to support larger, high impact projects that cut across programme lines and have longer-term outcomes. Some thought should be given about how to incorporate impact into the member evaluation process.
- 3. The committee recommends that a strategic planning task force be established to look at a number of longer-term issues including what ERIM should look like in five years in terms of organisational structure, potential new income streams, and external funding issues. For example, with respect to income, it was suggested that executive education is an area in which the programmes could do more if appropriate financial incentives were put in place. The strategic priorities as currently stated look very general and not very actionable; the strategic plan should not only be for the institution but at the programme level as well.
- 4. While we felt that ERIM does an excellent job, integrating faculty across the two schools, there are still some areas that significantly differ, for example the research time system (vouchers in RSM). We understand that the schools are operating independently, but it would help inter-departmental relations even more with consistency in these areas (and others not mentioned).
- 5. Junior faculty believed that the research infrastructure could yet be improved. While the focus of this discussion was on having more help with IT issues such as programming services, we believe an internal dialogue on this topic would uncover more areas that could be improved, perhaps with little incremental investment.
- 6. We believe that ERIM is being under-utilised as a faculty recruiting tool. A number of us were extremely impressed with ERIM's research and support resources and, as noted previously, were unaware of them prior to this visit. Junior faculty varied in their experiences while being recruited in terms of how much the "sell" involved information about ERIM.
- 7. We noticed that the interviews with programme and ERIM management representatives were virtually all male and European. It would be helpful for the ERIM's "face" to be more inclusive and representative of gender and ethnicity. ERIM might perform or commission a focused analysis of the problem that identifies at what career stage the problem arises, compares the situation with leading peer universities in the Netherlands, and looks into the effectiveness of potential policies to enhance diversity.
- 8. Placement of doctoral graduates is a recurring issue. While there are not quick fixes for this, some progress is being made. A suggestion is to track where the candidates are getting interviews, an earlier stage in the placement process. It would be worth following up with colleagues at other schools for ERIM candidates who get an interview but are not invited back to campus.
- 9. The recommendations from the IPRC 2010 and the midterm review 2013 were to update the ERIM journal list and to raise the membership requirements. While some of the journal lists (e.g., LIS) were updated, it may require further updates in the future in order to achieve better alignment with some strategic objectives in its selected areas of expertise (e.g. relevance for society, worldwide visibility of academic output).

10. The committee noted (it was difficult not to) the duplication of research topics and inefficiencies created by having both the RSM and the ESE. There are two departments of marketing, finance, accounting, operations, etc. Given that few outside of Europe (the Netherlands?) can distinguish between the schools, it is perhaps time to consider a merger of the two institutions and the creation of a separate Department of Economics for those faculty who have little or no interest in management topics. This would create a more powerful single entity (Erasmus School of Management?) with one brand and concomitant increased external visibility as well as lower operating costs. There are historical and institutional factors we have not considered, of course, but it may be time given the challenges posed by the external environment. Short of this, we suggest that RSM and ESE further explore possible synergies in research areas where they have common interests but divided resources.

## 3. Assessment of the research programmes

ERIM comprises five research programmes. The committee assessed the five programmes both quantitatively and qualitatively. For the quantitative assessment a four-point scale is used, according to the standard evaluation protocol 2015-2021. The explanation of the criteria underlying the scores can be found in appendix D.

	Quality	Relevance	Viability
Business Processes, Logistics and Information Systems	2	2	1
Organisation	1	1	3
Marketing	2	2	1
Finance and Accounting	2	1	3
Strategy and Entrepreneurship	1	1	2

The qualitative assessment of all research programmes can be found in the next sections.

We note that individual programme publication numbers have to be interpreted with caution as these are not only the result of scholars from a particular programme but of <u>all</u> Erasmus scholars whose work is published in journals that count in the relevant core NL journal list. That is, there is a potential double-counting issue. For example, all Erasmus scholars whose work is published in journals that count as ORG in the core NL journal list include faculty members from other ERIM programmes such as S&E and would count in S&E as well. Of course, each programme has its own unique set of journals as well.

## 3.1 Business Processes, Logistics and Information Systems

#### Research area

The LIS objective is "to be at the forefront of the developments in logistics and supply chain management in interaction with business operations, information systems, and innovation, and to make a major contribution both to management science and management practice". The stated objective is to do this with research projects that yield both effects, i.e. a major contribution to both management science and practice. The impact narratives show that the group is definitely already very successful in doing this.

The research themes of the LIS group are:

- Logistics and supply chain optimisation (mostly quantitative methods based on industrial engineering, operations research and econometrics);
- Operations and innovation management (mostly qualitative methods like surveys and case studies);
- Next generation information systems (big data, Internet of Things).

The LIS group has grown by about 30% over the last five years, partly due to internal reorganisation in RSM, where several groups covering similar subjects were merged into a single group (dealing with innovation, information, and logistics). This RSM group together with LIS members from ESE now constitute the ERIM LIS group. In spite of its seemingly complex composition, the LIS group actually collaborates well on research projects and PhD student supervision across RSM and ESE (it may actually be the ERIM benchmark group in this respect).

#### Research quality

The research output in terms of publications in top academic and managerial journals is uneven over the different research groups in LIS. This may be partly due to historical evolution, and partly to a more or less international academic ambition of some members versus a more applied research approach of others. Further enhancement of collaboration between the groups might be beneficial to both.

To summarise research output, during the review period the LIS group published 50 P\* and 5 M\* papers, 177 so-called Core Top, and a grand total of 364 publications with 36 fellows and members, 17 associate members and 37 PhD candidates, i.e. 90 people in total, or roughly 50 FTE. The total publication output per person is not very high although it is clearly on the rise. Indeed, 177 core top publications over 5 years, divided by 50 FTE, leads to 0.71 publications per FTE per year. When considering the star publications, the number is 55/5/50=0.22 per FTE per year. These numbers are certainly respectable but they are substantially below other groups in top business schools. For instance, Wharton would expect 1.5 P\* publications per year which, granted, is extremely high. Most top schools would require 1P\* per year for tenure, and perhaps somewhat lower numbers for more senior faculty. So there is clearly room for improvement here. However, quite a few senior and junior faculty members have excellent academic output. They are well-known internationally and their work is frequently cited.

Other elements to judge research quality are editorial positions at top journals, leadership positions at professional societies, organisation of prestigious conferences, and the like. Some members of the LIS group are indeed active on these dimensions, but a lot more could be done (except perhaps for conference organisation where the group has been quite proactive). Relatively few people take on positions in professional societies and few are associate or departmental editor of prestigious journals in their field.

The LIS group has been quite successful in attracting, training and placing excellent PhD students, and has also attracted productive junior faculty. The vibrant research atmosphere and the open collaborative work environment, where juniors, seniors and PhD students work on larger research projects with industry, provide an excellent foundation to build upon.

#### Relevance to society

The LIS group has three research centres collaborating with industry: SmartPort, Erasmus Centre for Energy Business, and Supply Chain Excellence. These centres allow researchers to concentrate on important and relevant problems with large potential impact on business and society. These centres attract funding, interest from policy makers, students and faculty, and they generate international visibility and impact. The research topics of LIS make it indispensable to be close to business. Hence, the group should consolidate and perhaps even strengthen this. It is clearly their claim to fame in terms of academic reputation as well as relevance to society.

The LIS group has some pockets of international excellence and may even be close to the world's best in some specific areas. The work on warehousing, port operations, train timetabling, flower auctions, sustainability and maintenance are just a few examples of these pockets of excellence. It is important that all these subjects are coherent and somewhat related (i.e. they combine technology with end-to-end business models in order to manage complex future supply chains). This coherence is aligned with the strategic objectives of the LIS group and will allow them to collectively make a deep impact on society. These subjects are not only key research subjects for the future of the field but also fundamental to The Netherlands as a distribution and services country. Obviously, students have recognised this as reflected in the fast growing classrooms.

Summarising, the LIS group has an excellent balance between academic research and practical/societal relevance. This becomes blatantly clear when reading their highly interesting narratives. The latter also show that the group realises the importance of disseminating their findings and communicating them to business and society. It should be evident that this will be increasingly important to justify and attract funding. This effort is commendable and should definitely be reinforced in the future.

#### Viability

The LIS group has a realistic strategy and a down-to-earth approach. It created coherence, transparency and easy collaboration between subgroups. It also strengthened its young faculty and PhD intake and placement. It has increased its top academic and management publications. Academically it is strong and becoming stronger.

The LIS group works closely with industry and focuses on crucial competences for tomorrow's supply chains. This should guarantee growing interest, funding and (societal) impact. It should also guarantee more academic visibility.

The LIS group is well-placed in terms of complementary competences to handle future supply chain challenges. It has optimisation, simulation and econometric skills, but also survey and case study competences. Moreover, it combines technology with innovation, business models and supply chains. Finally, it covers transportation (logistics, ports, trains, warehouses) but also services (flower auctions, asset maintenance and spare parts), and it does so with a sustainability perspective.

In short, the LIS group is ideally positioned. In fact, its positioning is world class and any school would be jealous to have access to all the above. Of course, this does not guarantee success, but it certainly offers the opportunity to strive for an absolute top position in the future. As they say: "the stars are aligned".

#### Recommendations

The LIS group is not yet in a top position in research quality and relevance in society, but it is certainly positioned extremely well to gain such status. The future of the LIS group lies in its own hands. Focus is important in this journey to excellence.

Some specific recommendations are the following:

- 1. Continue to work across groups and across types of faculty on longer term impactful projects in close collaboration with industry, leveraging your unique combined skills;
- 2. Continue to encourage work across ERIM groups, e.g. the Marketing faculty. There are clear overlaps and complementarities to be exploited, especially when tackling big and complex business or societal problems;
- 3. Continue to provide an excellent and exciting work environment and market that heavily to all relevant stakeholders (academia, business, policy makers and the general public). People have to want to come to LIS for its recognised uniqueness;
- 4. Continue to claim a place in the academic world with both top research and managerial publications, but also with special issues in good journals, unique special interest conferences on specific topics, editorships in good journals, management positions in professional societies, and good narratives to the general public. In short, work on visibility. Be even more proactive;
- 5. Seniors: think about the leading role you need to play in the above and how to make the difference by setting the example and helping others. Top academic groups have mentors and role models, people who make it easy for others to perform. Senior members are also ambassadors to the outside world.

## 3.2 Organisation

#### Research area

The ERIM organisation programme (ORG) contains of two 'centres of gravity': Organisational Behaviour (OB) and Value-Based Organising (VBO) (which includes Corporate Social Responsibility, Business Ethics, and Sustainability). In response to the 2010 evaluation, the ORG programme was restructured and parts were moved to the S&E programme (entrepreneurship, corporate governance) and the LIS programme (innovation). OB and VBO have a distinct, but complementary research focus. They share a behavioural approach towards most of the research questions. OB is dedicated to the micro level of analysis. It concentrates on behaviour of individuals and teams in organisations, is based on theories from psychology and behavioural sciences, and applies quantitative deductive-nomological methods. VBO looks at meso- or macro-level phenomena at the extra-organizational or field level of analysis, and applies an eclectic approach with a combination of various theories and methods. OB and VBO share the interest in leadership phenomena with an emphasis on the wider societal and environmental implications of leadership behaviour.

#### Research quality

The faculty resources of the ORG programme with 33-40 Members, Fellows, and Associate members plus 20-22 PhD students over the period of 2010-2015, enable the programme to do an excellent job in the two distinct research areas with impressive quality and depth. As a result, ORG has received significant international recognition for its research, both in the OB field and in VBO. The ten representative publications listed in the report are part of the standard literature in international research in OB, Organization Theory, CSR and Sustainability that scholars in these fields have on their reading list.

Quantitative research output is very high, the output data list 636 publications for ORG faculty for the period of 2010-5 and position them no. 1 among the five ERIM programmes. Quality is also impressive as ORG faculty produced a total of 52 P\* journal publications, with significant volatility ranging from 6 to 13 P\* publications per year over the period of 2010-2015.

For the ORG domain the bibliometric analysis<sup>1</sup> lists 530 core NL journal list papers, which is the highest number of the five ERIM domains. The ORG domain enjoys also the lead with regards to impact as ORG papers are well represented in the top 1% of highly cited papers (PP top 1%; P top 1 %). Looking at the total number of top 1% publications, ORG is no. 1 in Europe and no. 5 in the world.

When looking at the research performance of individual scholars in the ORG programme, a number of observations deserve attention. One ORG scholar has over 6000 citations and 3 papers that are flagged as "highly cited papers" (top 1% quantile in each year of 2006-2016) in the ISI Web of Science (own analysis). Some others each have about 1000 citations and 1 "highly cited paper" and others each have about 500 citations. This is evidence for the world class standing of some of the scholars in the ORG programme.

The other indicators of the quality of the research culture in the ORG programme are excellent as well. Members of the programme are very well represented on editorial boards of the top journals in the field of Management or Organizational Behaviour. The senior members of the programme provide a very favourable research environment for junior faculty that gives them the best opportunity to produce their research. As a result, the ORG

<sup>&</sup>lt;sup>1</sup> As mentioned above the bibliographic data in the ORG domain include the ORG publications of all ERASMUS scholars and is not restricted to scholars who are affiliated with the ORG programme.

programme produces a steady flow of emerging scholars that successfully assume professorial positions at other universities and research schools. Like ERIM as a whole, generous research funds are available to support research and teaching loads, especially in the RSM, are very attractive. Importantly, members of the group appreciate the difference between research quantity and quality and are striving to work within ERIM, a rather numbers-oriented organisation, to appreciate that as well.

#### Relevance to society

ORG hosts a high number of centres of excellence that build bridges between research and society and respond to societal issues in a timely and flexible manner. ORG members have been very successful in receiving substantial amounts of grant money both from national and international (e.g., EU) agencies for research topics that are of high relevance for society. In particular, the OB group received the largest EU grant ever received by Erasmus faculty for a research project on the management of public safety organisations. The SBO group was able to establish the Partnerships Resource Centre and secured a funding of 4 million euro, which is the biggest government fund ever received by RSM. Scholars from the VBO group assume or have assumed influential positions in government committees, professional organisations, or transnational organisations such as the World Business Council for Sustainable Development. ORG members have also been active in publishing in managerially-oriented journals such as the *California Management Review* or various business magazines.

#### Viability

The ORG programme has outstanding senior leadership, which is a precondition for its future development and growth. As noted previously, this leadership takes special care to foster a nurturing culture that enhances the development of junior faculty. However, as a result of the 2010 restructuring and the successful placement of its own emerging scholars at other universities, the ORG programme has only two fellows and is relatively young. Currently, the programme is very much focused on and depends on the leadership of two fellows. It is highly desirable that new top level scholars integrate in the research strategy of the ORG programme in order to fully exhaust their potential. The 2010 restructuring also resulted in two quite distinct areas, OB and VBO, that perfectly complement each other, but have yet to explore and exhaust possible synergies. The leadership topic is very suitable for collaboration across the two areas, but this strategy has to be developed and implemented much further.

#### Recommendations

Overall, this is an excellent, internationally-recognised research programme with individuals who have outstanding global reputations, some of which are even world class. The faculty in the ORG programme consists of highly productive scholars who have made contributions of high impact to academia, society, and business. The group has outstanding leadership and should continue to flourish.

The committee's recommendations for future growth are the following:

- Aim to make one or two further top-level hirings in the ORG programme, i.e. to replace Whiteman in the VBO area; currently, the hierarchy of the programme is quite steep with only two fellows. As a result, much of the research performance and societal impact is concentrated on only few scholars. ERIM should aim for creating a broader basis of advanced scholars in the ORG programme as a precondition for the viability of the programme;
- Some top-level scholars who became affiliated with the ORG programme only recently have yet to be integrated in the research strategy of the ORG programme. For example, corporate communication could become either a third centre of gravity or a bridging element between the current areas;

3. Continue to intensify the cooperation between the OB and the VBO areas. Such a strategy is of mutual benefit. Leadership is a topic of common interest that should be advanced. OB scholars and PhD students can learn to apply their theories and methods to issues such as corporate social responsibility and sustainability and explore the significance of institutional context. In turn VBO scholars and PhD students can benefit from the micro-level theories and quantitative methods in OB and advance their multi-method approach. This can result in research that is highly impactful both in academe and society. To make this conjunction happen, the two groups could aim for submitting a joint proposal for a major grant.

## 3.3 Marketing

#### Research area

The ERIM marketing programme (MKT) focuses on three main areas of research: consumer behaviour, marketing management and strategy, and marketing modelling. These are generally considered to span the research domains in marketing. In response to the 2010 evaluation, the program has added some faculty with interests in an area that is growing rapidly in popularity, "big" data, which overlaps with the three main areas on substantive topics such as customer relationship management, modelling of social media, and others. Another emerging research topic within the programme is neuroscience with applications to various aspects of consumer decision-making. The programme is agnostic with respect to research methodology as scholars in the programme comprehensively use primary data collection approaches such as laboratory experiments and surveys as well as sophisticated analyses of secondary data.

#### Research quality

The significant current faculty resources of the programme with 40 Members, Fellows, and Associate members plus many more members who were at Erasmus over the period 2010-2015 enable it to do an excellent job covering all these areas of academic marketing research with quality and depth. As a result, MKT has received significant international recognition for its research.

There is quantitative support for this based upon the quantity of publications that members of the programme have produced. MKT faculty produce the most P\* and non-core ISI 1<sup>st</sup> quartile publications of any ERIM research programme. Over time, the number of P\* publications has remained fairly constant. The programme faculty also produce disproportionately more total articles than any other programme. The bibliometric analyses consistently show that the MKT programme is one of the top in the world in terms of quantity of output. In total number of publications, MKT is #1 in Europe, #1 in the Netherlands, and #7 in the world.

The impact of the research based on the bibliometric analysis tells a somewhat different story. The measures provided to the committee cover both citations normalized by field and years since publication as well as the percentage of papers published in the top 1%, 5%, and 10% of the journals in the field of marketing. Again, MKT does reasonably well in terms of total numbers. However, the programme does less well when averages or percentages are provided. Generally, MKT does very well on impact in Europe and the Netherlands, but less well in the world.

The other indicators of the quality of the research culture in the programme are excellent. Members of the programme are very well represented on editorial boards of the top journals in the field of marketing. The programme hosts a number of outstanding visitors and has a very active research seminar series. The senior members of the programme work hard to provide a very favourable research environment for junior faculty to give them the best opportunity to produce their research. Like ERIM as a whole, generous research funds are available to support research and teaching loads are very attractive. Importantly, members of the group appreciate the difference between research quantity and quality and are striving to work within ERIM, a rather numbers-oriented organisation, to appreciate that as well.

#### Relevance to society

MKT members have a number of projects that impact society including a pension planning system, improving breast cancer communications, better understanding donations to charities after disasters, and others. In addition, research from the group has had a significant impact on business through various e-commerce and digital marketing projects.

Members of the MKT programme have further co-operated with business through executive education and partnerships with companies.

MKT members have also been active in publishing in managerially-oriented journals such as the *Harvard Business Review* and various business magazines. Members of the programme are well-represented on national scientific review boards and professional organizations.

#### Viability

The MKT programme has outstanding, stable senior leadership which augurs well for its future development and growth. As noted previously, this leadership takes special care to foster a nurturing culture that enhances the development of junior faculty. Research by members of the programme cover all the major areas of marketing, and they have been able to adapt to emerging areas such as the analysis of large data sets and neuromarketing. While there has been some faculty turnover, it has not been disproportionate to other research programmes in ERIM.

#### Recommendations

Overall, this is an excellent, internationally-recognised research programme with individuals who have outstanding global reputations. The faculty in the programme are highly productive scholars who have made contributions to academia, society, and business. The group has outstanding leadership and should continue to flourish.

The committee's recommendations for future growth are the following:

- Continue to seek to improve the visibility of the research programme's research and to investigate high impact projects. Clearly, volume of published research is not an issue as the programme is a world leader on those metrics. However, the group has lagged somewhat on impact metrics;
- Continue to expand research into the newer areas like neuromarketing and data science. With respect to the latter, more cooperation with LIS would be productive;
- Continue to improve the cooperation between the RSM and ESE groups. While the two school structure has a number of ERIM-wide implications, it would benefit MKT more than most since marketing is not a big field and there are more similarities than differences between the two groups.

## 3.4 Finance and Accounting

#### Research Area

The group covers two fields, finance and accounting, that are separate but complementary in terms of research orientation. The finance group has particular strengths in asset management, asset pricing, market microstructure, corporate finance, corporate governance and executive compensation, as well as banking and financial intermediation. The accounting group has a strong presence in behavioural management accounting, with a particular emphasis on survey and experimental research, as well as in financial accounting, focusing on the impact of disclosure and accounting practices.

#### Research quality

The Finance and Accounting programme is a vibrant young research group encompassing finance and accounting faculty and research students from both RSM and ESE. However, it has been challenged by considerable turnover at the senior level, in the face of increasing student numbers. New hires have focused primarily on the rookie market, pushing the ratio of tenured ERIM fellows/members to non-tenured members, at 0.78, to a level that is markedly out of line with that of the other four programmes, 1.9. Quantity measures of output per research staff member are low relative to other programmes, with total Core-Top publications per research staff member (end of 2015) of 1.9 (relative to 3.4). This seems to be directly related to the relative shortage of established, senior researchers. The number of top publications in the current evaluation period does, however, compare very favourably to the output reached before 2010 so that the group has been successful in transitioning to a much more research-oriented culture.

The quality of the research output is excellent. The faculty's top papers are highly regarded and cited internationally. The group actively organises prominent research conferences in their focus areas and interacts with academics at international peer institutions through conferences, seminar presentations and in- and outbound visits. The faculty also holds editorial positions in well-regarded journals in the field.

ERIM has provided substantive support for the group's research by facilitating interaction between researchers in the area, who are distributed between RSM and ESE, and providing the laboratory facilities and databases needed to conduct the research.

#### Relevance to society

The programme's faculty have a distinguished record of engagement with policy makers and regulators both in the Netherlands and internationally at the European Commission, the ECB and even the US SEC. Its advice and expertise has shaped policies on banking regulation, corporate finance and governance in an advisory capacity. There is a substantive degree of engagement with the private sector through advisory functions, partnerships, targeted applied research and teaching. The faculty also actively disseminates its expertise to the private sector and the general public.

#### Viability

Attracting the faculty needed to accommodate high student numbers has not been feasible at the senior level, due primarily to salary constraints imposed on Dutch public universities. This is a serious on-going challenge to the long-run position of the group: it is almost impossible to attract star faculty. The strategy used by the group is to hire a strong base of junior faculty that will develop into senior faculty through internal promotion, so as to restore the group's seniority balance over time. However, it is not easy to retain even home-grown younger faculty when they succeed in attaining international research prominence.

#### Recommendations

- 1. Attracting high quality faculty and redressing the balance between senior and junior faculty should be a high priority. ERIM could play a role in advocating for or looking for ways to make university positions more competitive in terms of overall compensation, though there may be little scope in the Netherlands for programmes like the SFI (which supplements salaries of finance faculty in Switzerland to bring them up to internationally competitive levels), or for channelling some/more earnings from executive teaching or contract research to the faculty concerned. Visiting positions could also be more intensively used to increase the presence of top faculty. Other methods of attracting and retaining star faculty, such as reduced teaching loads and a research-supportive environment, are already provided by ERIM in an effective way;
- 2. There is a perceived need to strengthen the inflow into the Finance and Accounting PhD programme. The RSM research masters' pipeline in its current form attracts insufficient numbers of students, and perhaps provides too little grounding in advanced research techniques, to be a major source of potential entrants. Further initiatives in this area would be a good idea. These could range from strengthening course offerings, perhaps by further use of visitors and partnerships with other Dutch universities, to helping foreign candidates negotiate daily life issues such as finding housing. But more generally, advanced quantitative-finance training (in particular, for students planning to go into trading) has increasingly migrated from business schools into applied mathematics and computer science departments. It is not clear how Erasmus can best position itself with regard to this trend;
- 3. There may also be scope for building up niche areas such as energy finance, project finance, export and shipping finance, given the Rotterdam area's status as a world hub for maritime services, dredging, construction and offshore energy.

## 3.5 Strategy & Entrepeneurship

#### Research area

The ERIM Strategy & Entrepreneurship (S&E) area has three main research areas: Strategic Management, Strategic Entrepreneurship, and Global Strategy. This is a broad agenda and encompasses many research topics within each area. Topics such as foreign direct investment, alliances, innovation, top management, governance, and new start-ups are just examples of the wide span the area covers. The research methods are also very broad and range from qualitative studies to database mining to surveys and other quantitative approaches. It is typically open to interdisciplinary approaches and studies. The theoretical base can also be interdisciplinary such as international business, economics, business models, organisation theory or the resource based view, game theory and other approaches. In Europe and the United States there are many strong and competitive departments in these areas. The S&E goals to be number one in strategy and entrepreneurship in Europe and in the top ten of the world are not easily achievable but this area has a good starting point.

#### Research quality

S&E has put a lot of effort into developing research skills, finding interesting topics, and refining their writing skills such that the area has been quite successful at making it into the journals that are undisputedly the top journals for the area. Most schools around the world love for their faculty to have one or two articles in these journals.

The area has 16 tenured faculty members, 7 ERIM Fellows, 12 Associate members, and 41 doctoral students. There have been 53 academic articles or letters to the editor between 2010 and 2015. Seventy-one percent of the academic articles published are in ERIM's top core P\*, M\*, and P areas. It also had 46 in the non-core ISI 1<sup>st</sup> quartile. In the narrative S&E listed ten key publications which included 4 articles in Strategic Management Journal, one Science, two Academy of Management Journal, one Academy of Management Review, one Organization Science, one Science, and one Journal of International Business Studies—all top tier journals. One of these was single authored but the rest were collaborations of authors.

A ranking of the research programme as compared within Europe and the Netherlands, as described in the self-assessment, shows that the Erasmus University Rotterdam S&E programme ranks first in most of the Netherlands categories and frequently as first in Europe. It also shows that when Erasmus University is compared with 23 benchmark institutions worldwide, it still has work to do to be in the top ten. It may be a function of not enough visibility of the faculty and the centres of excellence. The quality and the numbers of research papers are quite good and that leads us to think that there is not enough visibility outside of the Netherlands.

The S&E identifies several areas that indicate that they are developing research capabilities within their group. By having the senior faculty plan their next steps in their careers, it keeps them connected within the group. It encourages them to stay involved in research projects and to share their research expertise with more junior faculty and doctoral students. It provides linkages for the senior faculty within the area and incentives for them to remain active professionally. Also, senior members can participate more with reaching out to businesses and to societies. The doctoral programme is multi-disciplinary and this makes a lot of sense since it draws on a variety of theoretical perspectives. This encourages creativity and alternative perspectives. S&E also expects their doctoral students to develop good research skills that will increase the reputation that S&E has a strong programme and does good research. S&E takes seriously its objective to find good international placements for their PhD students. Some of the senior level faculty are on editorial boards and are active in academic associations.

#### Relevance to society

S&E has targeted three areas they will contribute to society in ways that go beyond just their research results. This is through their three centres: (1) The Erasmus Centre for Entrepreneurship: Shaping creative ideas into successful venture; (2) The Erasmus Centre for Family Business: A safe space for reciprocal learning; and (3) INSCOPE: Rethinking firm's governance and structure to enhance competitiveness. The three centres interface and link S&E with the communities, with government officials and with business people. There is a wide range of activities. The centres involve applied research projects, training, contract research, innovation support, mentorship, panel surveys, and knowledge transfer. In addition, the three centres address areas that will improve the competitiveness of Dutch firms, the creation of new firms and innovations, and assistance for family businesses.

#### Viability

This is a strong group and a group with well thought out ideas for its future. The faculty are a good mixture of senior and junior level to ensure that the research culture will be passed along. Each area within S&E has team-based leadership. For example, the Centre on Entrepreneurship is headed by a team with one person from ESE and one from the RSM.

The major issue for S&E seems to be its need for resources. S&E is hoping that their connections with the community and the government will be able to bring in more external funding. It would like to have more funding for its Centres to give them the resources that they need. S&E has encouraged some of their doctoral students to take another year in the doctoral programme to strengthen their resumes for going out on the market.

It also thinks that to keep up with research trends in the strategy area, they need to have additional databases that are often used in strategy and entrepreneurship research. This would need to be a long-term commitment to buy and support those databases. Since ERIM already has experience at managing databases, it might make sense for it to fund the acquisition and the maintenance of these.

#### Recommendations

Based on the current review, the following suggestions are proposed for further advancements:

- 1. Continue research in all three areas of strategy, entrepreneurship, and global strategy. These are competitive areas, but the journals are there and always looking for research that is well thought out and executed;
- 2. More of the faculty need to be giving papers and seminars at conferences. Programme faculty need to make themselves more visible so that people know more about the good work being done. Take on some roles in the associations;
- 3. Encourage doctoral students to look for external funding for their dissertations. SMS gives doctoral student grants and so does the Kaufmann Foundation;
- 4. Find a way to get the necessary databases. These will be important sources of data for doctoral students and junior faculty.

## Appendix A: Curricula vitae of the Committee members

Russell S. Winer is the William Joyce Professor of Marketing at the Stern School of Business, New York University. He received a B.A. in Economics from Union College and an M.S. and Ph.D. in Industrial Administration from Carnegie Mellon University. He has been on the faculties of Columbia and Vanderbilt universities and the University of California at Berkeley, He has written three books, Marketing Management, Analysis for Marketing Planning and Product Management, a research monograph, Pricing, and has co-edited The History of Marketing Science. He has authored over 80 papers in marketing on a variety of topics including consumer choice, marketing research methodology, marketing planning, advertising, and pricing. Professor Winer has served two terms as the editor of the Journal of Marketing Research, has been an Associate editor for the Journal of Consumer Research, a Senior Editor for Marketing Science, and is currently a Senior Editor for the International Journal of Research in Marketing. He is a past Executive Director of the Marketing Science Institute in Cambridge, Massachusetts, Professor Winer is a founding Fellow of both the INFORMS Society for Marketing Science and the American Marketing Association and is the 2011 recipient of the American Marketing Association/Irwin/McGraw-Hill Distinguished Marketing Educator award.

**Marjorie Lyles** is OneAmerica Chair in Business Administration and Professor of International Strategic Management at the Indiana University Kelley School of Business. Marjorie Lyles' research addresses organisational learning and innovation, international strategies, joint ventures, and alliances, particularly in emerging economies. She has over 100 articles and chapters. Her work has appeared in top academic journals such as SMJ, SEJ, ASQ, JIBS, OSci, AMR, JMS and AMJ. She is a SMS and AIB Fellow. Lyles & Salk (1996) on learning in IJVs won the JIBS Decade Award 2006. She has also received two NSF grants. She has consulted with USIA, World Bank, USAID, UNDP and private firms in Malaysia, Hungary, Vietnam, Poland, China and Indonesia on international strategies, educational projects, and needs assessment for management. Marjorie Lyles has served SMS in many roles: 2009 Program Co-Chair of the Annual Conference in Washington, D.C., Board of Trustees of the Strategic Management Foundation; Consulting Editor for Global Strategy Journal; co-founder and Chair for the Knowledge and Innovation Interest Group, and over twenty years of attending and reviewing for the Annual Conference and the Strategic Management Journal.

**Ailsa Röell** is professor of international and public affairs at Columbia University. Her academic specialty is financial economics and the regulation of financial markets. Her research and teaching spans securities markets, corporate finance, and corporate governance. She has published extensively in the area of stock market microstructure, with empirical and theoretical papers on market trading architecture and its impact on liquidity and price formation; a textbook on the subject, Market Liquidity, is forthcoming in 2013. Her research also focuses on corporate governance, with work on topics ranging from corporate governance in banks to the history of concentration of control, shareholder rights and takeover defence mechanisms in the Netherlands, and theoretical and empirical analyses of compensation, earnings manipulation, and class action litigation in the USA. She holds a PhD in political economy from Johns Hopkins University and an MSc in economics from the University of Groningen. Previously she was a senior research scholar at Princeton University's Bendheim Center for Finance, following a career on the faculty of the London School of Economics, Université Libre de Bruxelles, and Tilburg University.

**Andreas Scherer** is Professor of Business Administration and Theories of the Firm and holds a chair at the University of Zurich (Switzerland). He has earned his doctorate in Strategic Management (1994) and his doctoral habilitation degree (2000) in International

Management both at the University of Erlangen-Nuremberg (Germany). From 2000-2002 he was Professor of Management and Public Administration at the University of Constance (Germany). His research interests are in Business Ethics, Critical Theory, International Management, Organization Theory, and Philosophy of Science. He has published nine books, e.g. the Handbook of Research on Global Corporate Citizenship (co-edited with G. Palazzo). His work has appeared in Academy of Management Review, Business Ethics Quarterly, Journal of Business Ethics, Journal of Management Studies, Management International Review, Organization, Organization Studies, and in numerous volumes and other journals. He is Associate Editor of Business Ethics Quarterly and is a member of the editorial boards of Business and Society, Journal of Management Studies, Organization, and Organization Studies.

Luk Van Wassenhove's research and teaching are concerned with operational excellence, supply chain management, guality, continual improvement and learning. His recent research focus is on closed-loop supply chains (product take-back and end-of-life issues) and on disaster management (humanitarian logistics). He is senior editor for Manufacturing and Service Operations Management and departmental editor for Production and Operations Management. He publishes regularly in Management Science, Production and Operations Management, and many other academic as well as management journals (like Harvard Business Review, and California Management Review). He is the author of many awardwinning teaching cases and regularly consults for major international corporations. In 2005, Professor Van Wassenhove was elected Fellow of the Production and Operations Management Society (POMS). In 2006, he was the recipient of the EURO Gold Medal for outstanding academic achievement. In 2009 he was elected Distinguished Fellow of the Manufacturing and Services Operations Management Society (MSOM), and received the Lifetime Achievement Faculty Pioneer Award from the European Academy of Business in Society (EABIS) and the Aspen Institute. In 2013 he became Honorary Fellow of the European Operations Management Association (EUROMA). He is a member of the Royal Flemish Academy of Sciences. Before joining INSEAD he was on the faculty at Erasmus University Rotterdam and Katholieke Universiteit Leuven, At INSEAD he holds the Henry Ford Chair of Manufacturing. He created the INSEAD Social Innovation Centre and acted as academic director until September 2010. He currently leads INSEAD's Humanitarian Research Group.

# Appendix B: Programme of the site visit

Wednesday 11 January						
Time	Part	Collocutors				
16.00 – 18.00	ERIM Management	Marno Verbeek, Dennis Fok, Marius van Dijke,				
	Team	Monique van Donzel				
18.30 – 21.00	Dinner	Committee only				

Thursday 12 Jan	uary	
Time	Part	Collocutors
09.00 - 9.45	Preparatory meeting	Committee only
9.45 – 10.00	Committee meeting	
10.00 – 10.45	ERIM Fellows	Daan van Knippenberg, Rob van Tulder
	Research	
	Programme ORG	
10.45 – 11.00	Committee meeting	Committee only
10.00 – 11.15	Break	
11.15 – 12.00	ERIM Fellows	Eric van Heck, Albert Wagelmans, Jan van den
	Research	Ende, René de Koster
	Programme LIS	
12.00 – 12.30	Committee meeting	Committee only
12.30 – 13.30	Lunch	ERIM Management Team: Marno Verbeek,
		Monique van Donzel
		ERIM Programme Advisory Committee: Hans van
		Oosterhout, Albert Wagelmans, Benedict Dellaert,
		Rob van Tulder, Mathijs van Dijk
13.30 – 14.15	ERIM Fellows	Gerrit van Bruggen, Ale Smidts, Benedict Dellaert,
	Research	Stefan Stremersch
	Programme MKT	0
14.15 - 14.45	Committee meeting	Committee only
14.45 – 15.30	ERIM Fellows	Hans van Oosterhout, Henk Volberda, Justin
	Research	Jansen, Pursey Heugens, Enrico Pennings, Roy
	Programme S&E	Thurik
15.30 - 15.45	Committee meeting	Committee only
15.45 - 16.15	Break	
16.15 – 17.00	ERIM Fellows	Mathijs van Dijk, Dick van Dijk
	Research	
	Programme F&A	
17.00 – 18.00	Committee meeting	Committee only
18.00 – 21.00	Dinner	

Friday 13 Januar	y	
Time	Part	Collocutors
09.00 - 9.45	Early career	Marie Schmidt (LIS), Remy Spliet (LIS), Inga
	researchers	Hoever (ORG), Gabriele Paolacci (MKT), Nuno
		Almeida Camacho (MKT), Rogier Quaadvlieg
		(F&A), Stephan Kramer (F&A), Mirko Benischke
		(S&E)
9.45 - 10.00	Committee meeting	Committee only
10.00 – 11.00	Meeting on Impact	Eric van Heck (LIS), Gabriele Jacobs (ORG), Gui
	Narratives	Liberali (MKT), Maarten Pronk (F&A)
11.00 – 11.15	Break	
11.15 – 12.00	Doctoral programme	ERIM Scientific Director: Marno Verbeek ERIM
		Director of Doctoral Education: Marius van Dijke
		ERIM Doctoral Programme manager: Natalija
		Gersak
12.15 – 13.30	Lunch	Paul Wiegman (PhD, LIS), Hodar Lam (PhD,
		ORG), Manissa Gunadi (PhD, MKT), Ilaria Orlandi
		(PhD, S&E), Santanu Kundu (RM, F&A)
13.30 – 16.30	Committee meeting, writing draft	Committee only
16.30 – 17.00	Presentation of	Dean ESE: Philip Hans Franses
	preliminary results	Dean RSM: Steef van de Velde
		ERIM Management Team: Marno Verbeek, Dennis
		Fok, Marius van Dijke, Monique van Donzel

## Appendix C: Quantitative data

### Table 1 Research staff in fte

	2	010	2	011	20	12	2	013	20	)14	20	015
	#	fte										
Tenured												
Fellows & members	136	46.8	135	45.4	139	48.7	143	50.5	138	49.3	142	50.3
Non-tenured												
Visiting member	8	0.59	8	0.44	9	0.44	9	0.44	7	0.34	8	0.20
Associate member	78	31.5	82	34.7	84	33.0	89	34.1	84	34.2	91	35.0
Total research												
staff	222	78.9	225	80.6	232	82.1	241	85.1	229	83.8	241	85.4
PhD candidates	111	88.8	113	90.4	135	108.0	132	105.6	128	102.4	121	96.8
Total staff	333	167.7	338	171.0	367	190.1	373	190.7	357	186.2	362	182.2

## Table 2 Main categories of research output

	2010	2011	2012	2013	2014	2015
PhD dissertations						
ERIM PhD's	24	27	14	23	25	25
Other PhD's	12	5	4	6	8	7
Total dissertations	36	32	18	29	33	32
Academic publications						
International language						
Article/letter to the editor	291	270	315	277	263	241
Book	10	5	10	9	10	5
Part of a book	77	53	49	39	40	34
Dutch language						
Article/letter to the editor	8	10	12	11	6	6
Book	-	3	4	5	3	1
Part of a book	5	3	7	6	4	1
Total academic	391	344	397	347	326	288
Professional publications						
International language						
Article/letter to the editor	22	28	32	27	27	27
Book	-	1	-	1	-	1
Part of a book	6	4	1	3	11	2
Dutch language						
Article/letter to the editor	35	20	15	11	13	11
Book	1	-	-	3	2	1
Part of a book	6	5	8	3	8	2
Total professional	70	58	56	48	61	44
Other						
Article/letter to the editor	15	6	7	14	6	13
Book	-	2	-	-	2	2
Part of a book	2	1	1	-	6	4
Total other	17	9	8	14	14	19
Total	414	443	479	438	434	383

#### Table 3 Budget realisation in €

	2010	2011	2012	2013	2014	2015			
A. Research (excl personnel/vouchers									
Support programmes	304,030	332,480	380,847	445,407	399,782	315,575			
Infrastructural investments	221,929	230,382	223,249	204,395	266,387	206,538			
Subtotal A	525,959	562,862	604,096	649,802	666,169	522,113			
Courses	256,439	220,432	285,620	343,421	302,537	263,106			
Support programmes	356,365	421,346	377,324	488,957	398,532	376,576			
General costs	125,351	185,585	98,824	107,474	85,379	72,436			
Subtotal B	738,155	827,363	761,768	939,852	786,448	712,118			
Management and office	593,385	548,840	611,692	636,711	794,237	676,085			
Facilities	156,380	98,284	221,455	218,853	122,578	146,329			
Subtotal C	749,765	647,124	833,147	855,564	916,815	822,414			
totol	2 012 970	2 027 240	2 100 011	2 4 4 5 2 1 9	0.060.400	2.056.645			
total	2,013,879	2,037,349	2,199,011	2,445,218	2,369,432	2,056,645			

# Appendix D: Explanation of the SEP scores

Category	Meaning	Research quality	Relevance to society	Viability
1	World leading/ excellent	The research unit has been shown to be one of the few most influential research groups in the world in its particular field	The research unit makes an outstanding contribution to society	The research unit is excellently equipped for the future
2	Very good	The research unit conducts very good. internationally recognised research	The research unit makes a very good contribution to society	The research unit is very well equipped for the future
3	Good	The research unit conducts good research	The research unit makes a good contribution to society	The research unit makes responsible strategic decisions and is therefore well equipped for the future
4	Unsatisfactory	The research unit does not achieve satisfactory results in its field	The research unit does not make a satisfactory contribution to society	The research unit is not adequately equipped for the future