Preface

The 2012 annual research report of the University of Amsterdam School of Economics (ASE) provides information on the organisation, activities and results of ASE-RI. With the funding of the institute, staff members publish in and edit international journals, attend and organise international conferences and workshops, and write and supervise dissertations.

The past year has been exceptionally good in terms of completed dissertations: in total 25 students supervised by ASE faculty members successfully defended their thesis. Furthermore, the ASE continues to attract a large number of new PhD students, not only from the MPhil programme of the Tinbergen Institute, but also from the European Doctorate in Economics program funded by Erasmus Mundus (EDEEM). Because this is a continuation of a trend, this implies that we may expect the number of completed dissertations to remain high in the years to come.

In the past two years, the number of publications in international A and B journals by ASE faculty members has decreased, after many years of steady increase. This may be explained by a decrease in research staff as a consequence of the recent faculty reorganisation, but also by the changing composition of the research staff, with an increasing proportion of PhD students.

2012 has been a successful year in terms of external funding, with a new Chair in Pension Economics sponsored by MN in the Macro and International Economics group, and a new Chair in Risk and Insurance sponsored by the Dutch Association of Insurers in the Actuarial Science group. Furthermore, researchers from the ASE continue to be highly visible in public debates on issues such as pension reform and the financial and sovereign debt crisis. Our research priority area on Behavioural Economics has continued to flourish, and various researchers continue to develop new initiatives to apply for large national and European research funds. I would like to end in thanking all research staff for their contributions.

Prof. dr. H. Peter Boswijk
Director of the Amsterdam School of Economics Research Institute
October 2013
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<td></td>
<td></td>
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<td></td>
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</table>
A

THE RESEARCH INSTITUTE
CHAPTER 1: INSTITUTIONAL OVERVIEW

1.1 MISSION STATEMENT

ASE-RI (Amsterdam School of Economics Research Institute) facilitates and promotes research at ASE to foster the academic ideal of intertwined university teaching and research. The institute aims for research results that significantly improve our understanding of the operation of economic systems, the behaviour of agents in the economy and the effects of economic policies. ASE-RI aims to appraise researcher performance and to provide a directive for further research with its standards for research. Research time is allocated to researchers based on their performance.

1.2 ORGANISATION

ASE-RI, the research institute of the Amsterdam School of Economics, is one of the two research institutes of the Faculty of Economics & Business (FEB); the other being the research institute of the Amsterdam Business School (ABS-RI). ASE-RI is the successor of RESAM (Research in EconomicS and econometrics Amsterdam), which was established in 1998 after the MUB (Wet Modernisering Universitair Bestuur: law on the modernization of university management) came into effect. ASE-RI covers the wide area of economics and econometrics.

Research is organised in Research Programmes, which are directed by Programme leaders who are experts with core positions in the curriculum. Stimulating research that significantly improves our understanding of the economy is meant as a focus on fundamental research. In many cases, the inspiration for research questions derives from practical problems in business and society as well as from pressing problems for government policies, as is only natural for a social science. But the research results should primarily be reported to the international academic community and assessed against the quality standards that apply there. Such permanent quality assessment feeds back into the quality of teaching and of advise given to business and the government. Contributions to public debates should be a consequence of developing reliable knowledge about the economy rather than a primary goal.

ASE-RI closely co-operates with the Tinbergen Institute, where many of ASE-RI’s researchers are appointed as fellow. The Tinbergen Institute also acts as the graduate school for ASE-RI students.

1.3 STRATEGY AND POLICY

ASE-RI aims to reach its goals by organising, stimulating and monitoring Research Programmes. Annually, programme performance is assessed. Means are allocated to programmes based on performance. Research coverage is not directed and controlled by the Faculty’s management, but develops in an open competitive environment. General policy issues are discussed by the Council of Programme Directors.

Faculty members in the Amsterdam School of Economics are assigned time annually for research based on their publication records in the past three years. In this way ASE-RI provides incentives to increase the quality and quantity of output. Publications are graded by quality level of the outlet. For journals, ASE-RI distinguishes:
A: excellent, international top level. Publications set directions for research, by approach and by method, select topics and set standards for analytical and methodological level.

B: good international level. Publications meet high analytic and methodological standards but have far less influence on direction and standards for future research.

Other refereed and non-refereed journals. Journals satisfy the minimum norm of aiming for an international or national audience, applying blind refereeing, and publish in an accessible language. Analytical and methodological standards satisfy a generally accepted minimum level.

ASE-RI has drawn up a list of rankings of publication outlets (journals, publishing houses, conference proceedings (see the ASE-RI website www.aseri.uva.nl). The minimum norm for adequate research performance is formulated as 100 points over the past three years. An A-level publication counts for 100 points and a B-level counts for 50 points. Other publications are worth no points. Individual authors of a publication with N authors each get a share of 2/(1+N) points of the publication. Research time assigned to individuals is related to publication points over the past three years as follows:

<table>
<thead>
<tr>
<th>Points</th>
<th>0.5 fte</th>
<th>0.25 fte</th>
<th>0.125 fte</th>
<th>0 fte</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 or more</td>
<td>0.5 fte</td>
<td>0.25 fte</td>
<td>0.125 fte</td>
<td>0 fte</td>
</tr>
<tr>
<td>50-99</td>
<td>0.25 fte</td>
<td>0.125 fte</td>
<td>0 fte</td>
<td>0 fte</td>
</tr>
<tr>
<td>0</td>
<td>0 fte</td>
<td>0 fte</td>
<td>0 fte</td>
<td>0 fte</td>
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</tbody>
</table>

For faculty members with part-time positions, norms and research time are adjusted proportionally. Fellows of the Tinbergen Institute, the graduate research school in which UvA, EUR and VU co-operate, are allotted the maximum research time for a period of three years, at 0.5 of their working hours. Admission as a TI Fellow is based on A- and B-level publications only (TI has its own grading of publications).

ASE-RI also stimulates concentration of the School’s research in Research Programmes by other means (such as providing an annual budget for conference visits and other academic activities to the Research Programmes).
CHAPTER 2: INPUT

2.1 RESOURCES AND OTHER PERSONNEL

Personnel policy and human resource management are the domain of the department chairs and section heads. ASE-RI encourages the sections to hire good researchers and to stimulate faculty to increase the quality and quantity of academic publications, and has a vote in promotion and tenure decisions. Broader strategy issues concerning hiring and firing are discussed within the Amsterdam School of Economics management team and this has resulted in a document on personnel policies in which the requirements that current and new staff should meet are clearly defined. Tenured positions are only awarded to people who meet the admission requirements for fellowship of an accredited research school (preferably the Tinbergen Institute).

The tables below give information on ASE-RI faculty. Table I shows that the overall research capacity was increasing until 2011. Overall, the consequences of a major reorganisation of the Faculty of Economics and Business showed in 2011. A cut in numbers of scientific staff took place and the result was a decrease of 19% of total research staff. The total research staff slowly picked up again in 2012, due to inflow of staff hired in the second and third flows of funds and of PhD students.

Table I: Input research staff at institutional level (FTE)

<table>
<thead>
<tr>
<th></th>
<th>fte 2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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<tbody>
<tr>
<td>WP 1 (first flow of funds, excl. Ph.D.’s)</td>
<td>24,94</td>
<td>25,83</td>
<td>21,31</td>
<td>18,83</td>
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<tr>
<td>WP 2 (second flow of funds, excl. Ph.D.’s)</td>
<td>5,82</td>
<td>6,87</td>
<td>6,32</td>
<td>7,83</td>
</tr>
<tr>
<td>WP 3 (third flow of funds, excl. Ph.D.’s)</td>
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<td>36,36</td>
<td>23,78</td>
<td>33,76</td>
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<tr>
<td>Ph.D. students</td>
<td>19,14</td>
<td>18,45</td>
<td>18,91</td>
<td>22,13</td>
</tr>
<tr>
<td>Total Research staff</td>
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<td>87,51</td>
<td>70,32</td>
<td>82,55</td>
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<tr>
<td>Support staff ASE-RI(bureau)</td>
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<td>0,84</td>
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<tr>
<td>Total Staff</td>
<td>85,70</td>
<td>88,35</td>
<td>71,32</td>
<td>83,55</td>
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</table>

Table II: Input research staff at programme level (FTE)

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<th>UvA-Econometrics</th>
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<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
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<td>0,60</td>
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<tr>
<td>Ph.D. students</td>
<td>1,80</td>
<td>0,00</td>
<td>1,45</td>
<td>3,20</td>
</tr>
<tr>
<td>Total Research staff</td>
<td>6,61</td>
<td>5,83</td>
<td>6,01</td>
<td>6,68</td>
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</tbody>
</table>

<table>
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<td>WP 1 (first flow of funds, excl. Ph.D.’s)</td>
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<tr>
<td>Ph.D. students</td>
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<tr>
<td>Total Research staff</td>
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<td>2009</td>
<td>2010</td>
<td>2011</td>
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<td>Total Research staff</td>
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<td>Human Capital</td>
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<td>Total Research staff</td>
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<td>0.20</td>
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<td>Experimental &amp; Political Economics</td>
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<td>4.30</td>
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<td>Total Research staff</td>
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<td>1.40</td>
<td>1.27</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>WP 3 (third flow of funds, excl. Ph.D.'s)</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td></td>
<td>Ph.D. students</td>
<td>1.14</td>
<td>1.10</td>
<td>0.80</td>
</tr>
<tr>
<td></td>
<td>Total Research staff</td>
<td>3.73</td>
<td>5.27</td>
<td>2.73</td>
</tr>
</tbody>
</table>
Most faculty are in the ranks of professor and PhD student (the number of researcher (oz) fte is highest, but the majority are working at SEO Economic Research). Overall there seems to be a healthy mix of researchers in different stages of their career, although the numbers of Uhd’s and Postdocs are low.

Table III Ranks at programme level

<table>
<thead>
<tr>
<th>Research programme</th>
<th>Hgl</th>
<th>Uhd</th>
<th>Ud</th>
<th>Oz</th>
<th>Pdoc</th>
<th>Ph.D.</th>
<th>Guest</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># fte</td>
<td># fte</td>
<td># fte</td>
<td># fte</td>
<td># fte</td>
<td># fte</td>
<td># fte</td>
<td># fte</td>
</tr>
<tr>
<td>UvA- Econometrics</td>
<td>5 0,63 3 1,30 4 1,55 0 0,00 0 0,00 4 3,20 2 0,00 18 6,68</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Equilibrium, expectations &amp; dynamics</td>
<td>3 1,54 2 0,50 2 0,44 0 0,00 4 2,63 5 2,73 3 0,00 19 7,84</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Actuarial science</td>
<td>6 2,00 0 0,00 2 0,76 0 0,00 1 0,47 3 0,99 1 0,00 13 4,22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial Statistics</td>
<td>2 0,80 0 0,00 0 0,00 3 1,30 0 0,00 2 0,25 1 0,00 8 2,35</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MInt</td>
<td>8 1,84 1 0,50 5 0,94 0 0,00 3 1,18 9 1,78 3 0,00 29 6,24</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human Capital</td>
<td>5 2,29 0 0,00 4 0,00 3 1,87 0 0,00 9 4,94 7 0,00 28 9,10</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental &amp; political economics</td>
<td>4 1,71 1 0,25 3 0,74 1 0,50 1 0,79 9 4,81 6 0,00 25 8,80</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Industrial org., Competition pol. &amp; Regulation</td>
<td>5 1,94 0 0,00 7 3,03 0 0,00 0 0,00 6 3,43 0 0,00 18 8,40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEO economic research</td>
<td>2 1,28 0 0,00 0 0,00 31 27,64 0 0,00 0 0,00 0 0,00 33 28,92</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>40 14,03 7 2,55 27 7,46 30 31,31 9 5,07 47 22,13 23 0,00 191 82,55</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2.2 RESOURCES, FUNDING AND FACILITIES

A substantial part of the faculty’s research budget is spent on the Tinbergen Institute, where it is used to cover the expenses of the MPhil programme, courses for students and the organisation of seminars. Another large part of the budget concerns funding of the research priority area ‘Behavioural Economics’. Furthermore, the sections of ASE are allocated a budget for matching and a budget for its Research Programmes based on the size of the programme (fte) and on the numbers of PhD graduations. This budget can be used for the funding of research fte’s and for any research related activities of programme members, such as visiting conferences, conducting experiments and collecting data.
CHAPTER 3: CURRENT STATE OF AFFAIRS

3.1 PROCESSES IN RESEARCH, INTERNAL AND EXTERNAL COLLABORATION

As explained in previous chapters, ASE-RI allocates resources based on past performance. ASE-RI stimulates and facilitates application for external funding (NWO, KNAW, EU). In general, the research institute tries to stimulate an active research environment, by organising a weekly general seminar, where participants from all Research Programmes meet, and it tries to assist programme members, when necessary, by providing them with information and administrative support. The overall quality of the various seminar series is good. Especially in the Tinbergen series foreign speakers are usually invited and the debates are lively.

Actual research management takes place within the Research Programmes. Decisions on research strategies, research topics, joint work, participation in international networks, publication outlets are all taken within these Programmes, sometimes by the Programme director, but mostly in an informal way by direct communication and interaction within these groups. Research groups are typically small and interaction is frequent, direct and effective.

Box 1: Seminar series organised in co-operation with ASE-RI

Tinbergen Institute Economics Colloquia
Organisation: Marco van der Leij & Jo Seldeslachts

Tinbergen Institute / CREED Seminars series
Organisation: Jeroen van de Ven & Gönül Dogan

Tinbergen Institute Econometrics Seminars & Workshops series
Organisation: Michael Massmann en Simon Broda

Tinbergen Institute PhD Lunch Seminars Series
Organisation: Lydia Geijtenbeek en Mark Kagan

Tinbergen Institute Empirical Microeconomics Seminars
Organisation: Sander Onderstal en Jose L. Moraga-Gonzalez

Tinbergen Institute Macro Seminars
Organisation: Christian Stoltenberg en Björn Brügemann

KAFEE Lunch seminar
Organisation: Noemi Peter, Matthias Weber & Dávid Kopányi

CeNDEF Seminars
Organisation: Marco van der Leij

Another way in which ASE-RI creates a stimulating research environment is by participating in the Tinbergen Institute (TI). Two other Dutch universities (Erasmus University and VU University) participate in the TI. It is their joint graduate school and facilitates exchange amongst its fellows (top researchers of the three participating faculties) by hosting seminar series and publishing a discussion paper series.

As a graduate school, the Tinbergen Institute offers a two-year research master (Master of Philosophy in Economics). These two years are part of a five-year track. The advantage of
this system is that it offers students an excellent research-oriented two-year programme with good opportunities to meet top-level supervisors (TI-fellows).

Table IV: Inflow 2002-2012 (ASE-RI)

<table>
<thead>
<tr>
<th>Cohort</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st flow of fund projects</td>
<td>18</td>
<td>2,75</td>
<td>6</td>
<td>1</td>
<td>4,5</td>
<td>4</td>
<td>7</td>
<td>5</td>
<td>4</td>
<td>3</td>
<td>10</td>
<td>5.8</td>
</tr>
<tr>
<td>2nd flow of fund projects</td>
<td>3</td>
<td>0</td>
<td>4</td>
<td>0</td>
<td>3</td>
<td>2</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td>2.1</td>
</tr>
<tr>
<td>3rd flow of fund projects</td>
<td>0</td>
<td>0.25</td>
<td>0</td>
<td>2</td>
<td>1.5</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>2</td>
<td>3</td>
<td>1.1</td>
</tr>
<tr>
<td>Total projects started</td>
<td>21</td>
<td>3</td>
<td>10</td>
<td>3</td>
<td>9</td>
<td>8</td>
<td>11</td>
<td>8</td>
<td>7</td>
<td>12</td>
<td>14</td>
<td>9.0</td>
</tr>
</tbody>
</table>

The number of PhD students starting a PhD project within ASE-RI was uneven in previous years and stabilized around an annual inflow of around ten since 2006. The inflow increased to 14 in 2012. As can be seen from Table IV, there are major differences between the flows of fund.

The strong drop in 2003, 2004 and 2005 was a consequence of a financial shortage and, since all projects run at least four years, because of the high number of projects started in 2002 that were still weighing down on the budget. In recent years the outflow of PhD students from the Tinbergen Institute who completed their MPhil was sufficient to fill in all vacancies.

Table V: graduations by cohort (FEB)*

<table>
<thead>
<tr>
<th>FEB</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>Total/Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects started</td>
<td>13</td>
<td>4</td>
<td>28</td>
<td>7</td>
<td>13</td>
<td>8</td>
<td>17</td>
<td>14</td>
<td>19</td>
<td>123</td>
</tr>
<tr>
<td>Graduated/Total</td>
<td>9/13</td>
<td>4/4</td>
<td>20/28</td>
<td>5/7</td>
<td>9/13</td>
<td>4/8</td>
<td>15/17</td>
<td>12/14</td>
<td>12/19</td>
<td>90/123</td>
</tr>
<tr>
<td>Fraction graduated from total</td>
<td>69%</td>
<td>100%</td>
<td>71%</td>
<td>71%</td>
<td>69%</td>
<td>50%</td>
<td>88%</td>
<td>86%</td>
<td>75%</td>
<td>75%</td>
</tr>
<tr>
<td>Graduated within 60 months</td>
<td>4/9</td>
<td>1/4</td>
<td>11/20</td>
<td>2/5</td>
<td>5/9</td>
<td>3/4</td>
<td>7/15</td>
<td>5/12</td>
<td>12/12</td>
<td>50/90</td>
</tr>
<tr>
<td>Fraction grad. within 60 months</td>
<td>44%</td>
<td>25%</td>
<td>55%</td>
<td>40%</td>
<td>56%</td>
<td>75%</td>
<td>47%</td>
<td>42%</td>
<td>100%</td>
<td>54%</td>
</tr>
<tr>
<td>Av. duration to completion in m.</td>
<td>79</td>
<td>60</td>
<td>65</td>
<td>67</td>
<td>62</td>
<td>55</td>
<td>57</td>
<td>57</td>
<td>44</td>
<td>61</td>
</tr>
</tbody>
</table>

* Including all FEB students (also those now under the Amsterdam Business School Research Institute)

Table VI: graduations by cohort (ASE-RI)

<table>
<thead>
<tr>
<th>ASE-RI</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
<th>2004</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>Total/Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projects started</td>
<td>10</td>
<td>2</td>
<td>19</td>
<td>3</td>
<td>9</td>
<td>4</td>
<td>9</td>
<td>11</td>
<td>8</td>
<td>75</td>
</tr>
<tr>
<td>Graduated/Total</td>
<td>8/10</td>
<td>2/2</td>
<td>16/19</td>
<td>2/3</td>
<td>6/9</td>
<td>1/4</td>
<td>7/9</td>
<td>9/11</td>
<td>7/8</td>
<td>58/75</td>
</tr>
<tr>
<td>Fraction graduated from total</td>
<td>80%</td>
<td>100%</td>
<td>84%</td>
<td>67%</td>
<td>67%</td>
<td>25%</td>
<td>78%</td>
<td>88%</td>
<td>88%</td>
<td>75%</td>
</tr>
<tr>
<td>Graduated within 60 months</td>
<td>3/8</td>
<td>0/2</td>
<td>10/16</td>
<td>0/0</td>
<td>4/6</td>
<td>1/1</td>
<td>2/7</td>
<td>9/9</td>
<td>2/7</td>
<td>31/58</td>
</tr>
<tr>
<td>Fraction grad. within 60 months</td>
<td>38%</td>
<td>0%</td>
<td>63%</td>
<td>0%</td>
<td>67%</td>
<td>100%</td>
<td>29%</td>
<td>100%</td>
<td>29%</td>
<td>47%</td>
</tr>
<tr>
<td>Av. duration to completion in m.</td>
<td>81</td>
<td>64</td>
<td>63</td>
<td>79</td>
<td>64</td>
<td>54</td>
<td>60</td>
<td>43</td>
<td>62</td>
<td>63</td>
</tr>
</tbody>
</table>

As can be seen in Table V, on average, PhD students at the FEB needed 61 months from start of the contract to actual graduation. From Table VI, we see similar figures for the ASE-RI PhD students. It is expected that the percentage of graduations (75%) will rise in the near future, when a larger proportion of projects started are carried out by PhD students with a completed two-year research-training programme. Also, the average duration of these students to complete the PhD has been decreasing in recent years.
3.2 ACADEMIC REPUTATION

In 2012, CentER, the research institute in economics of Tilburg University, drew up the Top 100 Worldwide Economics Schools Research Ranking based on research contributions over the period 2008-2012. The University of Amsterdam ranked 2nd in the Netherlands, 5th in Europe, and 23rd worldwide. This differs from the results of the ESB Economen-top 40 of 2012, where UvA ranked 5th in the Netherlands. Furthermore, the 2012 QS World University Rankings by Subject puts FEB between ranks 51-100 for the discipline Economics and Econometrics (4th in the Netherlands).

Another measure to assess the quality of ASE-RI’s academic reputation is to look at the editorial positions of its staff. Table VII indicates that many faculty members take up many positions as editors or associate editors of international journals. Membership of editorial boards is also frequent.

Table VII: Editorial positions in academic international journals

<table>
<thead>
<tr>
<th>Name</th>
<th>Editorial position</th>
<th>Journal</th>
<th>Ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assenza, T.</td>
<td>Guest editor</td>
<td>REPLHA Special Issue of Journal of Economic Dynamics and Control</td>
<td>A</td>
</tr>
<tr>
<td>Baarsma, B.E.</td>
<td>Member editorial board</td>
<td>Tijdschrift voor Toezicht</td>
<td></td>
</tr>
<tr>
<td>Beetsma, R.M.W.J.</td>
<td>Chairman editorial board</td>
<td>NetSpur</td>
<td></td>
</tr>
<tr>
<td>Burghouwt, G.</td>
<td>Member editorial board</td>
<td>Journal of Air Transport Management</td>
<td></td>
</tr>
<tr>
<td>Diks, C.G.H.</td>
<td>Associate editor</td>
<td>Studies in Nonlinear Dynamics and Econometrics</td>
<td>B</td>
</tr>
<tr>
<td>Diks, C.G.H.</td>
<td>Associate editor</td>
<td>Studies in Nonlinear Dynamics in Econometrics</td>
<td>B</td>
</tr>
<tr>
<td>Does, R.J.M.M.</td>
<td>Member editorial advisory board</td>
<td>International Journal of Lean Six Sigma</td>
<td></td>
</tr>
<tr>
<td>Does, R.J.M.M.</td>
<td>Member editorial board and member advisory board</td>
<td>Quality Engineering</td>
<td></td>
</tr>
<tr>
<td>Does, R.J.M.M.</td>
<td>Column editor</td>
<td>Quality Engineering</td>
<td>B</td>
</tr>
<tr>
<td>Does, R.J.M.M.</td>
<td>Member editorial board</td>
<td>Quality Technology and Quantitative Management</td>
<td></td>
</tr>
<tr>
<td>Ewijk, C. van</td>
<td>Editor</td>
<td>De Economist</td>
<td>B</td>
</tr>
<tr>
<td>Goovaerts, M.J.</td>
<td>Editor</td>
<td>Insurance: Mathematics and Economics</td>
<td>A</td>
</tr>
<tr>
<td>Goovaerts, M.J.</td>
<td>Editor</td>
<td>Journal of Computational and Applied Mathematics</td>
<td>B</td>
</tr>
<tr>
<td>Guerriero, C.</td>
<td>Editor</td>
<td>International Review of Law and Economics</td>
<td>B</td>
</tr>
<tr>
<td>Hartog, J.</td>
<td>Member editorial board</td>
<td>Economics of Education Review</td>
<td>B</td>
</tr>
<tr>
<td>Hartog, J.</td>
<td>Member editorial board</td>
<td>International Journal of Happiness and Development</td>
<td></td>
</tr>
<tr>
<td>Hartog, J.</td>
<td>Member editorial board</td>
<td>ISRN Education</td>
<td></td>
</tr>
<tr>
<td>Hommes, C.</td>
<td>Member editorial board</td>
<td>Complexity Economics</td>
<td>B</td>
</tr>
<tr>
<td>Hommes, C.</td>
<td>Associate editor</td>
<td>Computational Economics</td>
<td>B</td>
</tr>
<tr>
<td>Hommes, C.</td>
<td>Editor</td>
<td>Journal of Economic Dynamics and Control</td>
<td>A</td>
</tr>
<tr>
<td>Hommes, C.</td>
<td>Associate editor</td>
<td>Journal of Economic Interaction and Coordination</td>
<td></td>
</tr>
<tr>
<td>Hommes, C.</td>
<td>Associate editor</td>
<td>Macroeconomic Dynamics</td>
<td>B</td>
</tr>
<tr>
<td>Kaas, R.</td>
<td>Managing editor</td>
<td>Insurance: Mathematics and Economics</td>
<td>A</td>
</tr>
<tr>
<td>Kiviet, J.F.</td>
<td>Member editorial board</td>
<td>Foundations and Trends in Econometrics</td>
<td></td>
</tr>
<tr>
<td>Laeven, R.J.A.</td>
<td>Associate editor</td>
<td>Insurance: Mathematics and Economics</td>
<td>A</td>
</tr>
<tr>
<td>Leij, M. van der</td>
<td>Associate editor</td>
<td>Network Science</td>
<td></td>
</tr>
<tr>
<td>Mast, J. de</td>
<td>Member editorial board</td>
<td>Quality Engineering</td>
<td></td>
</tr>
<tr>
<td>Offerman, T.J.S.</td>
<td>Associate editor</td>
<td>Games and Economic Behavior</td>
<td>A</td>
</tr>
<tr>
<td>Offerman, T.J.S.</td>
<td>Member editorial board</td>
<td>Experimental Economics</td>
<td>B</td>
</tr>
<tr>
<td>Praag, C.M. van</td>
<td>Associate editor</td>
<td>IZA Journal of European Labor Studies</td>
<td></td>
</tr>
<tr>
<td>Praag, C.M. van</td>
<td>Associate editor</td>
<td>Small Business Economics</td>
<td>B</td>
</tr>
<tr>
<td>Schram, A.</td>
<td>Advisory editor</td>
<td>Experimental Economics</td>
<td>B</td>
</tr>
<tr>
<td>Soetevent, A.R.</td>
<td>Associate editor</td>
<td>De Economist</td>
<td>B</td>
</tr>
<tr>
<td>Sonnemans, J.</td>
<td>Associate editor</td>
<td>European Economic Review</td>
<td>A</td>
</tr>
<tr>
<td>Sonnemans, J.</td>
<td>Member editorial board</td>
<td>Journal of Economic Psychology</td>
<td>B</td>
</tr>
<tr>
<td>Sonnemans, J.</td>
<td>Member editorial board</td>
<td>Quantitative Finance</td>
<td>B</td>
</tr>
<tr>
<td>Tuinstra, J.</td>
<td>Associate editor</td>
<td>Journal of Economic Dynamics and Control</td>
<td>A</td>
</tr>
<tr>
<td>Ven, J. van der</td>
<td>Associate editor</td>
<td>International Review of Law and Economics</td>
<td>B</td>
</tr>
<tr>
<td>Winden, F.A.A.M. van</td>
<td>Member editorial board</td>
<td>Public Choice</td>
<td>B</td>
</tr>
</tbody>
</table>

3.3 OVERVIEW OF RESULTS

Figure I: Number of publications 2007-2012

Table VIII: Publications 2007-2012

<table>
<thead>
<tr>
<th></th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>7y Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>A= publications in A-journals</td>
<td>19</td>
<td>32</td>
<td>59</td>
<td>47</td>
<td>41</td>
<td>25</td>
<td>39</td>
</tr>
<tr>
<td>B= publications in B-journals</td>
<td>64</td>
<td>49</td>
<td>49</td>
<td>56</td>
<td>48</td>
<td>49</td>
<td>54</td>
</tr>
<tr>
<td>Other = publications in other refereed journals</td>
<td>28</td>
<td>43</td>
<td>45</td>
<td>58</td>
<td>33</td>
<td>33</td>
<td>39</td>
</tr>
<tr>
<td>B = in/of books</td>
<td>31</td>
<td>44</td>
<td>44</td>
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Figure I and Table VIII show an increasing total output between 2007 and 2010. In 2011 and 2012 the output decreased, which is partly due to a reorganisation in the Faculty of Economics and Business. This reorganisation led to a decrease in scientific staff. Furthermore, PhD students take up an increasing proportion of the research input (see Table I), and the corresponding substitution of senior research faculty for PhD students provides another reason for the decline.

Table IX: Aggregated results of the institute

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<th>Book chapters</th>
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In comparison to 2010, which was not a very successful year in terms of dissertations, 2011 showed a again a higher number dissertations. The year 2012 showed a particular high increase of completed dissertations. It is expected that this number will continue to be around the same level in the years to come.

3.4 RELEVANCE TO SOCIETY

Although the main aim of ASE-RI is to let its research contribute to the international academic discourse, most research done within ASE-RI programmes contributes in several ways to society at large. Some examples are given here but more detailed information can be found in the programme sections in part B of this report.

The Human Capital Research Programme participates in TIER, an inter-university top Institute that conducts research in the field of evidence based education. The Top Institute wants to develop knowledge of ‘evidence based education’ that can be utilised by: 1) the Ministry of Education, Culture and Science in policy preparation and evaluation; 2) the educational practice – for example in educational institutions – in the allocation of resources and in the decision making process when choosing between educational theories; and 3) parents and students when choosing a school or training.

Researchers from the programmes MInt and Actuarial Science have strong ties with NETSPAR (network for studies on pensions, aging and retirement) and their research results will strongly impact the ways in which government and society will deal with the problems in these areas. In 2012 the Chair in Pension Economics was established, sponsored by MN. In addition, MInt has PhD students financed by De Nederlandsche Bank.

SEO Economic Research carries out contract research for ministries and public organisations, private companies and non-profit institutions, nationally and internationally. SEO distinguishes itself from other research bureaus by its analytical approach. Modern economic analysis is applied to practical issues. Empirical questions are tackled with the econometrics toolkit.
CHAPTER 4: RESEARCH PRIORITY AREA:
BEHAVIOURAL ECONOMICS

4.1 BACKGROUND

The Board of the University of Amsterdam set out a policy to create a number of Research Priority Areas ("onderzoekszwaartepunten") to move already promising areas to further excellence. Behavioural Economics had been selected as one of them. Behavioural Economics is an important field within the Amsterdam School of Economics (ASE). The ASE has the advantage that it has already had a center for experimental economics performing laboratory experiments (CREED) for more than 15 years. Within the Amsterdam School of Economics, CREED is clearly the most successful research group in terms of publications in highly ranked international journals.

The Amsterdam School of Economics wants to keep its leading position in Behavioural Economics in the Netherlands and in Europe. Now that it is a Research Priority Area, additional resources are available. These resources are allocated wisely through a committee. Researchers who need money for running experiments can apply and the committee allocates resources to promising research proposals. Furthermore, some of the resources will be used to improve the research environment. Examples include visiting costs in case of joint projects with researchers abroad, the training of students and organising workshops.

4.2 FOCUS

The Research Priority Area Behavioural Economics started late 2008. The goal of the Priority Area is to promote research in the field of Behavioural Economics. Behavioural Economics focuses on economic decision-making and goes beyond traditional economic theories that assume rationality and narrow self-interest: social preferences, emotions and bounded rationality are taken seriously. Behavioural economists therefore make extensive use of insights and theories of adjacent disciplines like psychology, sociology and political science. However, it is a typical economic science by the choice of topics and the way data are analysed and models are developed.

4.3 ORGANISATION

Research in Behavioural Economics has a strong empirical foundation; data are gathered in laboratory or field experiments. The department already had a standing tradition in laboratory experiments (CREED was founded in 1991) and in recent years researchers from various fields in our department (e.g. industrial organisation, labour economics, non-linear dynamic systems, personnel economics, law and economics, finance) have found their way to the laboratory. Nevertheless, to start with experimental research is not that easy. One needs to acquire practical knowledge and abilities, and one needs funds (e.g. to pay participants of experiments). The Research Priority Area Behavioural Economics helps by providing funds and dissemination of knowledge. In internal seminars researchers comment on each other’s plans (compulsory for funding), a workshop is organised annually and international visits from or to co-authors are financed.

In 2012, the committee dealing with the allocation of resources, consisting of Theo Offerman, Erik Plug, Adriaan Soetevent, Joep Sommens and Jan Tuinstra, funded 20 applications and the workshop ABEE Symposium 2012. In addition, the committee funded an exchange of students of the Research priority Area and students of NYU. Both the workshop in New York
where the Amsterdam-based students presented and the one in Amsterdam where the New York based students presented led to a fruitful exchange of ideas and were very successful.


The topic of the ABEE Symposium 2012 was ‘Behavioural Economics in Markets and Organizations’. Presentations were held by Bjorn Bartling, Anna Dreber, Uri Gneezy, Lorenz Goette, Hans Hvide, Pedro Rey Biel, Armin Schmutzler, Sigrid Suetens, Dirk Sliwka, Catherine Tucker, Roberto Weber and Daniel Zizzo. Also Amsterdam-based researchers presented their work.
B

THE RESEARCH PROGRAMMES
5. UvA-ECONOMETRICS

Programme director: Prof.dr. H.P. Boswijk & Dr. M.J.G. Bun
METIS-code: uva/feb/ase/uva-e
JEL-classification: C1, C2, C3, C4, C5
Starting date: 1997
Website: www.aseri.uva.nl/uva-econometrics

5.1 MEMBERS OF THE RESEARCH GROUP AND RESEARCH IN FTES

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Total 1st flow of funds 6,51 5,73 4,56 3,48
Total 2nd flow of funds 0,00 0,00 1,45 3,20
Total 3rd flow of funds 0,10 0,10 0,00 0,00

Total 1st f.o.f. excl. Ph.D.’s 4,71 5,73 3,96 2,68
Total 1st-3rd flow of funds 6,61 5,83 6,01 6,68
Ph.D. students 1,80 0,00 1,45 3,20
5.2 PROGRAMME DESIGN

Objectives
The UvA-Econometrics programme aims at improving the accuracy, efficiency and robustness of econometric inference methods.

Motivation
Empirical economic data are usually not obtained from markets or agents in static equilibrium. Typically they give a random and disturbed indication at a certain moment in time, or over a relatively short period, of dynamic jointly dependent adjustment processes. Also they usually concern just a few aspects of the underlying complex (non-) linear economic system.
The various projects united in this programme all try to gear statistical techniques to the typical characteristics of empirical economic data. Main interest is the development of accurate and efficient econometric inference to test economic theory, to support decision making and for policy evaluation.

Techniques
Both analytic and experimental methods are used in this programme to improve understanding of the available statistical inference techniques, and to develop alternatives. The analytic aspects often involve the derivation of asymptotic distributions, the approximation of finite sample moments or distribution functions, the elimination of nuisance parameters etc. In computer simulations of completely specified systems the existing standard procedures and the newly developed techniques are then compared and evaluated experimentally. Occasionally the alternative techniques as such are of an experimental nature, because they involve computer-intensive methods (bootstrap resampling, randomization techniques, simulation-based inference). Actual data often serve to illustrate the empirical relevance and practical usefulness of the theoretical findings, but at times empirical issues are the prime motivation of the research projects engaged in.

Applications
The fundamental problems of econometrics indicated above are studied in interplay with actual applied econometric research. These applications come from economics, finance or business. We do not intend to give an exhaustive overview of specific applications, but UvA-Econometrics is active in labour economics (wage determination, job mobility and allocation, returns to schooling), development economics (exports and productivity, infant mortality), health economics (organization of health care, intelligence and mortality), finance (measurement and modelling of stock return volatility, option pricing, credit risk), international economics (effects of trade policy and economic integration), monetary economics (demand for money, term structure of interest rates) and business (marketing activities). The economic behaviour of individual agents is analysed on the basis of observational or experimental data of various dimensions (cross-section, time series or panel data).

Subprogrammes, themes
Within the general programme described above, the following sub-themes can be distinguished:

- **Econometric Theory.** Within this sub-theme, analytical finite sample approximations, simulation-based inference, inference based on IV/GMM with weak instruments, conditional inference, methods from differential geometry as well as semi- and non-parametric methods are studied for and applied in models that may be dynamic, simultaneous or non-linear.
- **Microeconometrics.** Econometric analyses within this sub-theme often entail a quantitative assessment of the effectiveness of a policy intervention. Outside controlled experiments policies are usually
endogenous. Unbiased assessment of effectiveness requires adequate modelling of the causality, handling of any unobserved heterogeneity and understanding of the identification issues. Applications within this sub-theme often include panel data, which calls for the development of accurate inference methods for dynamic panel data models.

- **Financial Econometrics.** Topics are ARCH and stochastic volatility models, the econometrics of the CAPM and factor models, econometric models of the term structure of interest rates, econometric analysis of credit risk, the analysis of option data and implied volatilities, and the analysis of high-frequency data and realized volatility. Applications within this sub-theme often include non-stationary data. This leads to the analysis of unit roots, cointegration and error correction models, the role of (weak) exogeneity in such models and structural change.

### 5.3 Programme Evaluation

The (partial) early retirement of three full professors (Bethlehem, de Gooijer and Kiviet) has led to a decline in research time available to the programme in recent years. This decline is further amplified by the fact that not all members of the research programme have realised sufficient publications in recent years to qualify for a Tinbergen Institute research fellowship, or for the maximal research time awarded by the ASE-RI. Because of publication lags, this situation is not easy to remedy in the short run, and threatens the programme’s viability. In 2012, the group has again exploited the possibility of taking a sabbatical, which is expected to increase research output. The appointment of a temporary assistant professor in September 2011 has offered some compensation. More importantly, plans to appoint a new full professor in econometrics have recently been developed, which will lead to a substantial increase in research input and output of the group.

Almost weekly, a Friday afternoon (mostly external) seminar is organised at (and funded by) the Tinbergen Institute, jointly with econometricians from VU University Amsterdam. This is a very lively seminar series, with high-quality international speakers. In addition, occasionally an internal informal workshop is held on Thursdays at lunch time, where research projects which are still in an early stage are discussed. These meetings stimulate the coherence of the research programme and should lead to more joint research projects; however, their frequency has recently declined, which is a point for concern. All activities and achievements of UvA-Econometrics are communicated via its web-site (http://aseri.uva.nl/research-programmes/content/uva-econometrics/uva-econometrics.html).

It is the ambition of UvA-Econometrics to find further international recognition as one of the major strongholds in theoretical econometrics worldwide. The activities and achievements over the last decade (number and quality of publications, presentations at and invitations for international meetings, responsibilities regarding journals and conferences, hosting of visiting scholars, exposure at peer institutions, etc.) have been substantial, but leave ample room for further qualitative and quantitative improvements. In particular, the continued high teaching loads in the group have had a negative impact on the research output of some of its members, and consequently on the research time available to the programme. Most individual members of UvA-Econometrics continue to operate in intensive formal and informal national and international networks. In 2012, Nikolaos Kourogenis (University of Piraeus) visited the UvA-Econometrics group on a sabbatical, and Maurice Bun was a visiting scholar at Monash University, which is an indicator of such networks. As part of a strategy for improvement of research output, UvA-Econometrics continues to aim at strengthening the ties with other faculty research programs, in the form of joint applied research projects in micro-econometrics and financial econometrics.
No new PhD student were appointed 2012, but given the fact that five new students started in 2011, this was to be expected. Furthermore, it is expected that the UvA-Econometrics programme will continue to attract graduates from the Tinbergen Institute’s MPhil programme in Econometrics for a PhD position, as initial contacts have been made with two second-year MPhil students in the second half of 2012, which are expected to result in two new PhD positions in 2013.

The above evaluation can be summarized in the following SWOT analysis regarding the activities and current position of UvA-Econometrics:

**Strengths:**
- Good reputation
- A relatively steady stream of publications
- Quality of human capital
- Expertise in a broad range of cutting edge areas of econometric (and statistical) theory
- Recently improved prospects regarding external funding
- Coherence of and atmosphere within the group
- Active seminar and workshop series
- Exposure via own discussion paper series
- Tight but appropriate facilities regarding computing and travel

**Weaknesses:**
- Relatively few links with other units of the FEB outside the QE department
- Declining percentage of publications in A-journals

**Opportunities:**
- Recently developed MPhil programme and Fast Track in Econometrics within the Tinbergen Institute
- Developing a more applied profile within ASE and with the ABS
- Attracting a new full professor in econometrics

**Threats:**
- Decreased research input due to faculty members having reached (early) retirement age
- Decreased research output (and hence eventually input) by some senior faculty members due to high teaching loads

### 5.4 RESOURCES AND FUNDING

The current ASE-RI facilities allow the active researchers (and also first and second year Ph.D. students) to attend at least one international conference per year; in practice more is possible, so the research group does not experience binding constraints in this respect.

In recent years, UvA-Econometrics has been quite successful in obtaining external funding for research activities. Therefore, the 0.8 fte research time of one senior faculty member (Maurice Bun), and the appointments of three of the five currently active PhD students (Milan Pleus, Rutger Poldermans and Arturas Juodis) is funded by NWO grants. A fourth PhD student is funded by the EDEEM network.

### 5.5 OUTPUT

**Key publications**


**Forthcoming**


**Publications in numbers**

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**Article in journal – refereed**

A


**Book / book chapter – refereed**


**Working- and discussion papers**


**UvA dissertation – internally prepared**


**Recognition**

Çakmakli, C. (2012). AXA post-doc research fund with 120,000 Euros for two years.

Garderen, K.J. van (2012). European Doctorate in Economics Erasmus Mundus programme organized by a consortium of seven universities and coordinated by Universite Paris 1, Sorbonne Pantheon, was selected by the EU (EACEA) under Erasmus Mundus Action 1 Call for proposals (/29/09).
Conference organiser
Garderen, K.J. van (2012). Co-ordinating Committee Member of the Netherlands Econometric Study Group (NESG).

Editorship

Keynote/invited talk

Other lectures


Garderen, K.J. van (2012, 4 October). Seminar University of Southampton “Conditional Bimodality in a Simple Structural Equations Model”.


Kiviet, J.F. (2012, 23 February). Lunch seminar on “Exploiting strong instruments unduly neglected by standard GMM” at the University of Amsterdam.


Kiviet, J.F. (2012, 21 June). Lunch time seminar organized by the Department of Economics of Melbourne University at the “La Spagетatта” restaurant on: “To IV or not to IV?: the answer to that question is KLS”.


Kiviet, J.F. (2012, 24 October). Presentation at the NTU-Yonsei joint workshop at NTU on the paper “Refraining from instrumental variables by exchanging orthogonality conditions for simultaneity assumptions”.

Kiviet, J.F. (2012, 21 November). Lunch seminar at the NTU Division of Economics on “Refraining from instrumental variables by exchanging orthogonality conditions for simultaneity assumptions”.


**Membership academies**
Boswijk, H.P. (2012). Member of PhD committee of Cem Çakmaklı (Erasmus University Rotterdam, 26 January 2012), and of Pawel Janus (VU University, 16 February 2012).
Boswijk, H.P. (2012). Member of the international evaluation panel of the Graduate School Of Social Sciences, University Of Copenhagen (13–15 November 2012).
Cramer, J.S. (2012). Resting member of the Royal Netherlands Academy of Arts and Sciences
Çakmaklı, C. (2012). Research Associate at Center for Economics and Econometrics, Bogazici University, Turkey.
Garderen, K.J. van (2012). Member Doctoral Board of EDEEM (European Doctorate in Economics- Erasmus Mundus).
Kiviet, J.F. (2012). Elected member of the Royal Netherlands Academy of Arts and Sciences
Kleibergen, F. (2012). Associate research fellow Tinbergen Institute.

**Relevant positions**
Boswijk, H.P. (2012). Member of the Board of the Tinbergen Institute.


Kiviet, J.F. (2012). Visiting professor at the Department of Econometrics and Business Statistics of Monash University, Melbourne (Australia) from 11–22 June 2012 to give a short course on “Monte Carlo simulation for econometricians; methods, accuracy, methodology”.


6. EQUILIBRIUM, EXPECTATIONS & DYNAMICS

Programme director: Prof. dr. C.H. Hommes & dr. ir. F.O.O. Wagener
Metis-code: uva/feb/ase/eed
JEL-Classification: C, D, E6
Starting date: 1998
Website: http://cendef.uva.nl

6.1 MEMBERS OF THE RESEARCH GROUP AND RESEARCH IN FTES

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6.2 PROGRAMME DESIGN

The objective of the programme is the development of (mathematical) economic theory, focussing on the understanding of economic processes. The programme aims at developing models of economic behaviour in different areas of economics, including microeconomics, macroeconomics and finance. Emphasis is given to behavioural models of dynamic market phenomena.

The research group employs a multi-disciplinary approach. The models are studied both from a theoretical and a computational perspective, and the validity of the models is tested in laboratory experiments with human subjects as well as empirically using real data. The NWO-Vernieuwingsimpuls Information Flows in Financial Markets, the EU STREP project Financial Markets and Complexity and the NWO-VIDI programme Structural Stability in Economic Dynamics are part of the research programme.

The programme can be subdivided into five closely related and interacting research themes:

**Equilibrium theory:** Individual optimising behaviour of economic agents generates aggregate supply and demand of commodities, as a function of prices and individual expectations. In equilibrium supply and demand are equal. Many types of equilibrium can be studied: partial versus general, competitive versus monopolistic, dynamic versus static, temporary equilibrium, single, representative agent as well as heterogeneous, interacting agents equilibria. The existence of equilibria is studied, as well as conditions for stability or instability of dynamic adjustment processes.

**Game theory & Industrial organisation:** This part of the programme focuses on modelling strategic behaviour of economic agents in markets with imperfect competition, such as duopoly and oligopoly. Equilibria in non-cooperative games (e.g. duopoly, oligopoly) as well as cooperative games (costs sharing, general equilibrium) are studied. Evolutionary games with heterogeneous, boundedly rational strategies competing against each other are also studied.

**Expectations and learning:** Bounded rationality models of expectation formation and learning schemes are becoming a serious alternative to rational expectations, which was the dominating paradigm until quite recently. The fully rational representative agent is replaced by a large heterogeneous population of boundedly rational interacting agents, who form expectations based upon time series observations and update their forecasting rules according to new observations and new information about market fundamentals. Conditions under which learning schemes converge to rational expectations or to a
boundedly rational expectations equilibrium with excess volatility are investigated. Formation of expectations is studied in theory, in laboratory experiments with human subjects and in real markets.

**Nonlinear economic dynamics**: This part of the programme focuses on nonlinear complexity models of dynamic market phenomena. Are market fluctuations mainly caused by random exogenous shocks, or can endogenous nonlinear economic laws of motion explain (a significant part of) the fluctuations? Various deterministic and stochastic economic models are studied theoretically, computationally as well as empirically, attempting to explain the most important stylised facts observed in real economic and financial time series. Emphasis is given to *complex adaptive systems* where markets consist of a large population of agents selecting simple strategies according to their relative success in the recent past. In these evolutionary adaptive systems endogenous variables such as prices and agents’ beliefs co-evolve over time.

**Dynamic optimisation**: Emphasis is given to *dynamic optimisation problems in environmental economics, characterised by a conflict between economic benefits and ecological costs*. Tools from nonlinear dynamics and bifurcation theory are employed to investigate non-convex dynamic optimisation problems. The main thrust is a structural analysis, that is, investigation of the global solution structure of dynamic optimisation problems and dynamic games. The qualitative changes of these solutions are studied under changes of the parameters. Geometrical methods, like bifurcation theory, normal form theory and perturbation theory, as well as numerical methods yield insights that hold not just at isolated parameter values, but for the complete parameter set.

### 6.3 PROGRAMME EVALUATION

This program grew out of a mathematical economics program Equilibrium and Dynamics, led by Weddepohl, which was quite small until the mid nineties. The group was extended considerably at the end of 1998, thanks to an NWO-MaG Pionier grant awarded to Hommes, to set up the Center for Nonlinear Dynamics in Economics and Finance (CeNDEF). At that time the program changed from a small specialized mathematical economics program into a multi-disciplinary research program with an emphasis on economic theory, but also running laboratory experiments (in cooperation with Joep Sonnemans at CREED) to test behavioural theories and doing empirical work as well (in cooperation with Peter Boswijk at UvA-Econometrics), in particular nonlinear time series analysis, to test behavioural models empirically. Weddepohl retired in 2002 while Furth and Koster joined the group in the same year; at that point game theory has been included as one of the research themes of the program. At the end of 2003, the CeNDEF postdocs Diks, Tuinstra and Wagener obtained tenured positions, ensuring the continuation of the research program. In 2009 the research program was ranked as one of the three top programs at the FEB by the VSNU "Visitatiecommissie" (Quality 4.5, Productivity 4.5, Relevance 5, Viability 5). From the report of the committee: "The group (...) is developing very fruitful projects on highly topical current issues."

The publication record of the year 2012 is very good. The output was 10 articles in international refereed journals (of which 3 A and 7 B publications) and two B publications in books. Moreover, three PhD students, Te Bao, Domenico Massaro and Saeed Mohammadian Moghayer, defended their thesis successfully; Domenico Massaro was even awarded the doctorate cum laude.

The programme is internationally established, as is shown by excellent citation statistics (e.g. according to the Science Citation Index (SCI) in 2012 almost 400 citations of published work
by group members), many invited and several keynote lectures at international seminars, conferences and workshops by various members of the research group. In the IDEAS/RePEc ranking of Top 20% institutes (http://ideas.repec.org/top/top.netherlands.html), CeNDEF ranks as number 13, two positions up from last year. This ranking contains faculties of economics and departments; among the small institutes of the order of a research group (about 10 researchers) CeNDEF ranks 3rd on the list (after the UvA Finance Group and SCHOLAR, ex aequo with CREED).

In 2012, two of the group members were promoted to Full Professor, Cees Diks and Jan Tuinstra. Moreover, a former PhD student, Marius Ochea, joined the group as Assistant Professor, as well as two prospective PhD students: Anghel Negriu and Florian Sniekers.

The evaluation can be summarized in the following SWOT analysis of the CeNDEF activities.

**Strengths:** international reputation as an excellent research group on nonlinear dynamics and complexity applications in economics and finance, high scientific impact (e.g., with more than 400 citations, Brock and Hommes, Econometrica 1997, is one of the best cited journal articles co-authored by a Dutch economist), regular international visitors, active seminars and international workshops, own working paper series, frequently visited website, good facilities for computing and travel.

**Weaknesses:** relatively few publications in top mainstream journals, where multi-disciplinary work and non-mainstream approach such as agent-based modelling and complexity modelling are far from being well accepted; the number of links with practitioners and policy makers has been relatively low, but is now increasing.

**Opportunities:** development of UvA Graduate School in Economics; application of group-specific know-how to core economic problems, to demonstrate in this way the value of the programme's characteristic approach; developing more policy oriented research, e.g. through a new project on heterogeneous expectations in macro economics and monetary policy; for example, the NWO-complexity project is a research project jointly with researchers and policy makers at DNB.

**Threats:** A multidisciplinary group is likely to be handicapped when evaluated in a mono-disciplinary environment; and the complexity of the tools used may turn out to be an impediment at disseminating the research approach.

### 6.4 RESOURCES AND FUNDING

The budget received from ASE-RI every year (about 12,000 Euro) only covers on average one conference per researcher per year. In the last couple of years the remaining CeNDEF budget (from the NWO-Pionier grant 1998-2003) was able to cover additional conferences, workshops, etc., if desired. A budget of the Faculty covers some of the costs for the Economics Colloquia; another budget of the Tinbergen Institute covers the costs of joint research seminars Cooperative Behaviour, Strategic Interaction and Complex Systems - CSC together with the VU mathematical economics group.

The group has been quite successful in obtaining additional external funding. In July 2005 Wagener obtained a NWO-MaGW VIDI grant for the research proposal “Structural Stability in Economic Dynamics”, which ended in December 2010. This project employs tools from nonlinear dynamics and bifurcation theory to investigate non-convex dynamic optimisation problems characterized by a conflict between economic benefits and environmental externalities. In September 2006 two PhD students (Kiseleva and Mohammadian Moghayer) started working on this project and a postdoc (Heijnen) started in December 2006.
CeNDEF is part of a consortium of six research groups who obtained an EU FP7 grant for the collaborative project Monetary, Fiscal and Structural Policies with Heterogeneous Agents (POLHIA), which started November 2008 and ended October 2011. Mei Zhu has been appointed as postdoc under this program. In 2010, Cees Diks and Cars Hommes have obtained a NWO-Complexity grant of €440 for the research proposal “Understanding financial instability through complex systems”, jointly with DNB. Marco van der Leij and Daan ‘t Veld are funded as post-doc and PhD student respectively through this grant.

In 2011 and 2012, CeNDEF has been part of several European consortia that obtained grants: the EU FP7-ICT project “Complexity Research Initiative for Systemic InstabilitéS” (CRISIS), the EU COST action IS1104 “The EU in the new complex geography of economic systems: models, tools and policy evaluation”, and two newly funded INET projects, “Coordination of Expectations”, led by Roger Guesnerie and “Heterogeneous Expectations and Financial Crises”, led by Cars Hommes. A newly funded EU FP7 Collaborative project Macro-Risk Assessment and Stabilization Policies with New Early Warning Signals (RASTANEWS) will start in 2013.

6.5 OUTPUT

Key publications

Forthcoming
Massaro, D. Heterogeneous expectations in monetary DSGE models. *Journal of Economic Dynamics and Control*.


**Publications in numbers**

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**Article in journal - refereed**

**A**


**B**


**Other**


**Article in journal – professional**


**Article in magazine or newspaper – popular scientific**


**Book / book chapter – refereed**


**Book / book chapter – non-refereed**


**Report – working- and discussion papers**


UvA Dissertation – internally prepared


Conference organiser


Veld, D. in ‘t (2012). Organizer of the CeNDEF reading group Networks in Markets, University of Amsterdam.


Recognition


Hommes, C.H. (2012). 3 papers in the 25 most cited papers list of the 25th anniversary Tinbergen Institute:

- A rational route to randomness (joint with W.A. Brock), Econometrica 65(5), 1059-95, 1997; 312 SSCI citations, best cited TI paper 1997-2001;
- Heterogeneous beliefs and routes to chaos in a simple asset pricing model, (joint with W.A. Brock), Journal of Economic Dynamics & Control 22(8-9), 1235-74, 1998; 267 SSCI citations, second best cited TI paper 1997-2001;


**Media appearance**

**Editorship**


Leij, M.J. van der (2012). Associate editor for *Network Science*.

Tuinstra, J. (2012). Associate Editor for *Journal of Economic Dynamics & Control*.

**Keynote/invited talk**


Other lectures


Leur, M. van de (2012, 4 December). The role of available information under Individual Evolutionary Learning in a Continuous Double Auction. CeNDEF PhD Lunch Seminar. Amsterdam.


Membership academies
Koster, M. (2012). Dutch representative in SING.
Wagener, F.O.O. (2012). Fellow Tinbergen Institute. Member of Management Committee COST action IS1104.

Relevant position
### 7. ACTUARIAL SCIENCE

**Programme director:** Prof. dr. ir. M.H. Vellekoop  
**METIS code:** uva/feb/ase/act  
**JEL-classification:** C, G2  
**Starting date:** 1989  
**Website:** www.aseri.uva.nl/act  
**VSNU-scores 2001-2007:** Quality: 4, Productivity: 4, Relevance: 5, Viability: 3.5

#### 7.1 MEMBERS OF THE RESEARCH GROUP AND RESEARCH IN FTES

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**Total 1st flow of funds:** 1,99 1,85 0,96 1,02  
**Total 2nd flow of funds:** 0,50 0,00 0,60 1,82  
**Total 3rd flow of funds:** 1,51 1,11 1,24 1,38  
**Total 1st-3rd flow excl. Ph.D.'s:** 1,79 1,75 0,96 0,75  
**Total Ph.D. students:** 4,00 2,96 2,80 4,22  
**Ph.D. students:** 1,10 0,70 0,47 0,99
7.2 PROGRAMME DESIGN

The programme concerns both fundamental and applied research in the field of financial institutions. It is mainly directed at insurance companies (for life, non-life, pension and social insurance), but also at banks and other financial intermediaries. Research is performed on the mathematical modeling, estimation, appraisal and control of financial risks of such financial institutions under complete and incomplete information and for complete and incomplete markets. For long term insurance contracts, especially pensions, saving by insurance is significant, which leads to the study of optimal investment and consumption problems. An increasingly important aspect is the influence of the "risk of longevity" on the policies of life insurance, social insurance and care insurance. Newly reported statistics show that life expectancy continues to rise faster than predicted both in the Netherlands and abroad, and the modeling of this effect and its consequences for life insurance policies and pension contracts therefore remains an important area of investigation. Present-day challenges for non-life insurance contracts include decreasing profit margins, increasing competition and selective behaviour of the insured and of insurance companies. In social insurance, there are specific problems that emerge from the privatisation of social insurance contracts. Apart from studying problems in the separate fields of life, non-life, pension and social insurance, work is also done on the theoretical research subject which concerns the unification of several distinct actuarial theories in these fields, and their connection with stochastic financial mathematics.

Supervision and regulation of insurance companies and pension funds form an important part of the field of actuarial research. Methods for risk measurement and the determination of solvency requirements have come under intensified scrutiny in the wake of the recent financial crisis. The new European regulatory framework Solvency II for insurers and the Dutch FTK regulation for pension funds lead to many important new research questions. The Actuarial Science group therefore works on the further development of actuarial risk theory, in particular the development of new mathematical and economic models in the fields of market-consistent valuation, market-consistent pricing and market-consistent embedded value for insurance portfolios.

Other significant fields of research are the interaction between credibility theory, models for the estimation of unreported claims (IBNR) and actuarial ordering of risks, and their consequences for the determination of insurance premiums (risk classification). Credibility models can be viewed as Generalized Linear Mixed Models, having both random (subject-specific) and fixed effects in the linear predictor. Generalized Linear Models and Generalized Linear Mixed Models can be used for a variety of actuarial statistical problems like survival modelling, graduation, multiple-state models, loss distributions, risk classification, premium rating and claims reserving in non-life-insurance. Other aspects are the homogeneity and heterogeneity of insurance portfolios, the probabilistic and subsidising solidarity imposed on the insured, the voluntary or compulsory character of the insurance, and the auto-selection and anti-selection of those insured.

7.3 PROGRAMME EVALUATION

The year 2012 saw the arrival of three new members of our group. PhD student Zhenzhen Fan will perform research which is partially funded by APG, Sami Umut Can joined us from Cornell on a postdoc position and Roger Laeven was appointed as full professor for the chair ‘Verzekeringseconomie’ which is sponsored by het Verbond van Verzekeraars (the Dutch Association of Insurers). Laeven’s research interests, which include axiomatic characterization of risk measures, models for stochastic dependence and decision under uncertainty, concern fundamental theoretical questions but they are also of increasing importance for actuarial practice. This year’s publications therefore included abstract results on entropy coherent and entropy convex risk measures in the Mathematics of Operations
Research, but also contributions on premium calculations and recursive computation methods in Insurance: Mathematics and Economics.

The interplay between finance and insurance remains one of the main research subjects of the group. This is witnessed, for example, in the Netspar Research Theme *Reconciliation of Short Term Risks and Long Term Goals for Retirement Provisions*. This project came to an end in 2012 but funding for a new Netspar theme was acquired for the period 2013-2016. This new project, called *Risk Management for Funded Pension Systems* aims to “quantify the effects of changes in pension contracts, in risk measurement procedures and in the regulatory framework for different stakeholders in both the second and third pillar, using models which take explicit account of uncertainties in financial and demographic parameters.” Research will be done in cooperation with the universities of Tilburg and Edinburgh and with industrial partners APG, AEGON and Cardano. Cardano also participated in a ICPM Research Project on the use of derivatives in pension funds; this project was completed in 2012 but mathematical models for derivatives will play a major role in the new Netspar project as well.

Contacts with other research groups and financial institutions have been organized both in an international setting and in the Netherlands. Examples of the first include an international conference on backward stochastic differential equations (organized by Laeven), a summer schools at the KU Leuven (Antonio and Vellekoop) and the appointment of Antonio as chairman of the ASTIN scientific committee. The group also contributed to the organisation of the international conference on Insurance Mathematics and Economics in Hong Kong and the AFMATH conference in Brussels. Closer to home, the effects of new regulatory regimes were discussed during a mini symposium on Risk, Regulation and Supervision for Insurers and Pension Funds at the Royal Netherlands Academy of Arts and Sciences (KNAW) and at a workshop hosted by the Dutch Central Bank (DNB) on Countercyclical Regulation (in cooperation with the Finance group of the FEB and other universities in the Netherlands).

**Strengths:** New staff members have strengthened the position of the group with respect to its main research themes: stochastic loss reserving, mortality modeling, financial risk management, risk measures and dependence, regulatory design and pension reform. The group is therefore expected to continue to play an important role in the national and international research networks which study these issues.

**Weaknesses:** The group is small and it has become harder to attract new staff members, both for tenure tracks and for PhD positions. Many excellent students choose to pursue a professional career outside academia.

**Opportunities:** Research in the group comprises some traditional actuarial subjects but also looks at the interplay between finance and insurance which has received increased attention since the beginning of the financial crisis. This combination is very relevant for subjects such as pension reform and regulatory issues, which are expected to play an important role in the field the coming decade.

**Threats:** The group has been successful in attracting more Master students for both Executive and regular programmes but numbers are relatively small compared to other programmes in the faculty. This leads to further pressure on the time available for research.
7.4 RESOURCES AND FUNDING

Below are several Research grants awarded to members of the group:


01/2012 – 01/2015 Chair ‘Verzekeringseconomie’ sponsored by Verbond van Verzekeraars (Dutch Association of Insurers), €400.000.

01/2012 – 01/2014 Sponsored PhD Research Grant, APG (Position of Zhenzhen Fan).

2013: Sponsored PhD Research Grant, Van Ameyde (Position to be filled).

7.5 OUTPUT

Key publications

Forthcoming
**Publications in numbers**

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**Article in journal – refereed**

A


**Other**


**Article in journal – professional**


Article in magazine or newspaper – popular scientific

Inaugural Lecture

Report – professional

Report – working- and discussion papers

Conference organiser
Laeven, R.J.A. (September 6, 2012). Organizer of a Mini Symposium on Risk, Regulation and Supervision for Insurers and Pension Funds, Royal Netherlands Academy of Arts and Sciences (KNAW).


Recognition
Antonio, K. Supervisor of the MSc paper of Laurence Verheye and Siska Depril, ‘Een analyse van het AG-AI sterfatemodel’, Master in de verzekeringen, KU Leuven. Awarded the AFI thesis award (1,000 euro) for the best MSc thesis in insurance (June 2012).


Laeven, R.J.A. Best EMAS Teacher 2012 awarded by TIAS NIMBAS Business School to the teacher with the highest student evaluations in the Executive Master of Actuarial Science (EMAS).

Laeven, R.J.A. Van Ameyde PhD Research Grant 2012.

Laeven, R.J.A. APG PhD Research Grant 2012.

Laeven, R.J.A. Sponsorship Chair of Risk and Insurance by the Dutch Association of Insurers.

Laeven, R.J.A. Netspar Theme Grant 2012 (one of eight participants).

Laeven, R.J.A. VIDI Research Grant 2009 awarded by the Netherlands Organization for Scientific Research (NWO).


Media appearance
Laeven, R.J.A. (Februari 2012). Interview en Profielschets (3 pagina’s) in De Onderlinge, Een uitgave van de Federatie van Onderlinge Verzekeringmaatschappijen in Nederland, Jaargang 22, Nummer 2.

Laeven, R.J.A. (September 2012). Interview en Profielschets (2 pagina’s) in Infoplus, Uitgave voor leden van het Verbond van Verzekeraars, Nummer 8.


Editorship


Laeven, R.J.A. Insurance Markets and Companies: Analyses and Actuarial Computations, Associate Editor.
Keynote/invited talk
Laeven, R.J.A. (June 18, 2012). Measuring systemic risk, Invited Speaker, Universita Ca' Foscari Venezia, Venice, Italy.
Other lectures


Cui, J. (June 29, 2012). IME annual conference presentation on “When do derivatives add value in asset allocation problems for pension funds?”, Hong Kong.


Cui, J. (September 11, 2012). Netspar Pension Day presentation on “From intergenerational risk sharing to intergenerational risk trading”, Amsterdam.


Membership academies

Relevant positions
Antonio, K. (April 15-May 5, 2012). Research stay at University of Lyon (France), ISFA.
Laeven, R.J.A. (2012). Visiting Professor at the Bendheim Center for Finance, Princeton University, US.
Laeven, R.J.A. (2012). Fellow and Director of the Insurance Supervision Research Program of the Amsterdam Center for Insurance Studies (ACIS).
Laeven, R.J.A. (2012). Extramural Fellow of CentER.
Tamerus, J.H. (1992-). Member of the Pension Committee of the Dutch Labour Foundation on behalf of the Union for Middleclass and Higher Employees (MHP)
Vellekoop, M.H. (2012). Director of Research for the Derivatives Technology Foundation, Amsterdam
Vellekoop, M.H. (2012). Member of Commissie Sterfte Onderzoek (CSO) of the Actuarial Association (AG).
8. INDUSTRIAL STATISTICS

Programme director: Prof. dr. R.J.M.M. Does
METIS-code: uva/feb/ase/ibis
JEL-Classification: C1 (Econometric and Statistical Methods and Methodology: General)
Starting date: 1994
Website: www.aseri.uva.nl/is

8.1 MEMBERS OF THE RESEARCH GROUP AND RESEARCH IN FTES

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8.2 PROGRAMME DESIGN

The research is tightly associated to the commercial activities of IBIS, which is an independent consulting firm owned by the UvA. The interaction of scientific research on the one hand, and its application in the service of IBIS UvA’s clients on the other, is seen as the crux of the institute.

Industrial statistics aims to develop techniques and methods, and build methodological knowledge in support of their effective application, for the pursuit of operational effectiveness in businesses and industry. Industrial statistics has strong ties with statistics, operations research, management science and industrial engineering.

Research focuses on four themes, elaborated as 1.2.1 through 1.2.4 below.
8.2.1 Statistical process control and control charting methodology
Statistical process control (SPC) offers methods for detecting when a system transits from a normal state to a disturbed state (named out-of-control). Methodology for SPC in the manufacturing industry has, in the previous two decades, reached a mature stage. Attention is now shifting to control chart methods for robust monitoring and for detecting small shifts in the parameters. Such applications require an integration of SPC with robust statistics and adding additional runs rules to the control charts.

8.2.2 Methodologies for improvement of operational effectiveness, especially in healthcare
Industry and consulting firms develop methodologies for process, quality and efficiency improvement, some of which are applied on an extremely wide scale. Examples include Six Sigma, Lean Manufacturing, Business Process Reengineering, and Statistical Process Control. A critical and scientific study of these commercially offered methodologies aims to assess their merits, and where possible suggest improvements.

In recent years, the research has focused on improvement of operational effectiveness in healthcare institutions in particular. Pressure on healthcare to improve quality, efficiency and safety is high. The consultancy activities of IBIS UvA, as well as the excellent network of contacts in healthcare, provide a good empirical basis for the research, and ample opportunities to test methods in practice.

Another special focus is on methodologies for diagnostic problem solving, including frameworks and prescriptions for exploratory data analysis, and the identification and specification of strategies for efficient diagnosis.

8.2.3 Measurement system analysis
The precision of measurement devices, as well as the reliability of diagnostic tests and quality inspections, can be established by means of a statistical evaluation. Especially the evaluation of measurements and tests that produce results on binary and categorical scales struggles with fundamental and practical hiatuses in insight, for which it is plausible that industrial statistics can make contributions and possibly even induce breakthroughs. Among the objectives for the next 10 years, is the challenge to improve the industrial standard for measurement systems analysis (as laid down in AIAG, 2002), and to improve the international legal standard for modeling measurement precision (as specified in ISO, 1995).

8.2.4 Stochastic scheduling in services and healthcare
Efficient scheduling of hearings in a court house, of patients in a dental practice, or in general: of customers waiting for a service, must deal with random variation in arrival times and availability of the servers. Research aims to expand and apply the theory of stochastic scheduling to improve efficiency, optimizing and improving the balance between utilization of the resources, and waiting time for the customers. The research aims to advance the mathematical treatment, stochastic analysis of queues, and the practical usefulness in service and healthcare systems.

8.3 PROGRAMME EVALUATION

8.3.1 Group, formation and activities
There are two chairs in IBIS: Industrial Statistics (prof. Does) and Methods & Statistics for Operations Management (prof. De Mast). Further, since 2012 the group has three senior researchers (dr. Erdmann, dr. Kemper, dr. Schoonhoven), and two junior researchers (drs. Akkerhuis, drs. Zwetsloot) have accepted a position in IBIS. One junior researcher (dhr. Kuiper) is expected to accept a position in IBIS in 2013. Prof.dr. Mandjes, professor of Applied Probability at the Faculty of Science of the UvA, has accepted a 0.1 FTE position at IBIS starting January 1st, 2013.
In addition, prof.dr. Steiner has joined the group for a period of 11 months (Sept 2012 through June 2013) as visiting professor. Stefan Steiner is professor in the Dept. of Statistics & Actuarial Sciences in Waterloo University, Canada. Stefan collaborates with junior and senior researchers of IBIS in research projects.

The group has collaborated extensively with researchers from other institutions, most notably: the University Medical Center in Groningen; the Faculty of Economics and Business, University of Groningen; the King Fahad University of Petroleum and Minerals, Dhahran, Saudi Arabia; the Quaid-i-Azam University Islamabad, Pakistan; University of Sargodha, Sargodha, Pakistan. Waterloo University, Canada; and the Institute of Psychology, Leiden University. Also, the group has benefited from close collaborations with several hospitals and companies that allowed researchers of IBIS to do field tests and collect data for their research, and professionals from these organizations have co-authored several case studies with IBIS researchers.

SWOT:
- Compared to previous years, we think the research group has managed to build sufficient critical mass to allow us to aim for high impact research projects.
- All senior and junior researchers of IBIS combine their academic work with a position as consultant in IBIS’s commercial activities; this combination represents a unique strength of the group, as research is inspired by and thoroughly grounded in its application context in the field, and consulting services provide an effective channel for research output to be of benefit for society.
- But the combination of highly professional work in consultancy and academic work represents a challenge for time management.

8.3.2 Achievements in 2012
Among the best achievements of 2012, the group considers:
- 6 refereed papers (2xA, 3xB), 4 non-refereed papers, 1 book, 1 book-chapter
- Inaugural address by prof.dr. Jeroen de Mast.
- 3 MSc theses: drs. Thomas Akkerhuis, Alex Kuiper, drs. Inez Zwetsloot.
- 9 forthcoming papers (5xB)

SWOT:
- The research output of the group is good considered the limited size of the group, and it is impressive considered that the group is almost entirely funded (directly or indirectly) by revenues generated by group members themselves.
- The output is again high like previous years (2011: 9 refereed papers, 2 dissertations and 7 forthcoming papers). This is remarkable because prof. Does is highly involved in the Executive Programmes, and prof. De Mast has substantial teaching activities.

8.3.3 External evaluations
Most recent evaluation (note that the group was part of the KdV Institute for Mathematics in the period that was evaluated):

8.3.4 Relevance for society and valorization
The research is aimed at developing effective methods and techniques for various ambitions in operations improvement in commercial firms and nonprofit organizations:
- Quality control and improvement;
- Operational effectiveness and productivity;
- Safety and reliability of processes;
- Product development.

SWOT:
- The consulting activities of IBIS offer opportunities for cross-fertilization that are recognized internationally as unique.
- Much research is directly inspired by problems encountered in our consulting activities. These activities and the courses that we teach offer an effective outlet for the results of research.
- In its publication policy, IBIS aims to strike a balance between prestigious academic journal, and applied and professional journals.

8.4 RESOURCES AND FUNDING

Prof.dr. Does’s full professor position at the FEB is partially (0.2 fte) paid for by funds of the 1st flow and by funds of the 3rd flow of IBIS (0.2 fte). All other positions are paid for by funds of the 3rd flow. Prof.dr. De Mast has a 0.2 fte position as full professor, which is paid for from the dividend of IBIS. Prof.dr. Steiner’s visiting professorship is paid by Waterloo University. The other personnel costs are directly paid by IBIS.

8.5 OUTPUT

Key publications

Forthcoming


**Publications in numbers**

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**Article in journal - refereed**

A


B


Other


(Book / book chapter – popular scientific


(UvA dissertation – externally prepared


(Editorship


Does, RJMM (2012). Member Editorial Board, and Member Advisory Board, Quality Engineering.

Does, RJMM (2012). Column Editor, Quality Engineering.

Does, RJMM (2012). Member Editorial Board, Quality Technology and Quantitative Management.


(Keynote/invited talk


Other lectures

Membership academies
De Mast, J. (2012). Associate Member, International Academy for Quality.
De Mast, J. (2012). Senior Member, American Society for Quality (ASQ).
Does, RJMM (2012). Board member, Dutch Academy for Quality.
Does, RJMM (2012). Fellow, American Society for Quality (ASQ).
Does, RJMM (2012). Member of the ASQ Shewhart Medal Nomination Committee.
Does, RJMM (2012). Member of the ASQ Statistics Division Hunter Award Nomination Committee.
Does, RJMM (2012). Council Member, European Network for Business and Industrial Statistics (ENBIS).

Relevant position
9. MINT - MACRO AND INTERNATIONAL ECONOMICS

Programme director: Prof.dr. F.J.G.M. Klaassen
METIS-code: uva/feb/ase/mint
JEL-classification: E, F, H
Starting date: 2001
Website: www.aseri.uva.nl/mint

9.1 MEMBERS OF THE RESEARCH GROUP AND RESEARCH IN FTES

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9.2 PROGRAMME DESIGN

Objective
The programme uses empirical and theoretical methods to analyse important economic issues in the areas of macroeconomics and international economics. Special emphasis is given to the evaluation of existing fiscal and monetary policies and the question how these policies can be improved upon. Dissemination of the results takes place mainly via international, refereed scientific journals, but also via more policy-oriented outlets.

Motivation
The growth that a country experiences not only has direct effects on the available resources, it can also have important indirect effects through, for example, the stability of the social and political environment. Similarly, the business cycle fluctuations countries face can have far-reaching consequences to many, especially if these fluctuations mainly fall on subgroups within the population. It is therefore crucial to thoroughly understand the characteristics of economic developments, the factors that are behind them, and to what extent and how governments can affect these developments. The current international sovereign debt crisis and discussions on the sustainability of pension systems exemplify this.

Themes
Major international economic developments and policy debates generate a constant stream of research ideas for our group. The resulting projects are often intertwined, but we choose to categorize them into the following (interrelated) themes.

**Monetary economics and policy**
Monetary policy is used throughout the world to accomplish important macroeconomic objectives such as price stability, exchange rate stability, and/or full employment. In one project Christian Stoltenberg has studied monetary policy in the United States. Since the mid-1980s the interest-rate policy of the Federal Reserve System has been more aggressive in fighting inflation than in the past. He explains this with a decreasing role of cash in transactions. Sajjad Zaheer focuses on Islamic banking, a fast-growing part of the financial sector. He compares the transmission of a monetary contraction through Islamic and
conventional banks and finds that the former cut their lending less, weakening the monetary policy transmission. He also finds that for dual banks, which have both Islamic and conventional banking branches, Islamic branches are financially more stable and better capitalized but also less efficient than conventional ones.

Fiscal policy and sovereign debt
Fiscal policy is a crucial aspect of macroeconomics. Given that government expenditures are a substantial fraction of GDP, they play an important role in welfare redistribution, and financing these expenditures through debt and taxes is likely to have important effects on, for example, financial markets, labour force participation, and investment. Christiaan van der Kwaak and Sweder van Wijnbergen study fiscal policy and address the issue that macroeconomic models have ignored financial fragility and sovereign risk, which is problematic given the policy questions we are facing today. Early results indicate the severe limits on fiscal policy when banks are in distress and expansion is debt financed in a high-debt environment. Fiscal policy may even become counterproductive. Roel Beetsma and Massimo Giuliodori focus on the interest rates that governments have to pay on public debt, with particular emphasis on the GIIPS countries (Greece, Ireland, Italy, Portugal, Spain). They show how news from the daily newsflash of Eurointelligence, an independent internet-based news service, affects interest rate spreads on public debt. Bad news on one country not only drives up the spread for that country, but also for other countries, and this propagation is stronger for the so-called GIIPS countries.

Financial fragility and macroeconomics
This theme was also stimulated by the recent crises, showing the interaction between banking distress, fiscal policy to mitigate financial crisis, public debt, sovereign risk, international spillovers, and banking supervision. Regarding the latter, there is widespread agreement that banks need tighter supervision and control, but there is an equally widespread concern that implementing higher capital requirements will abort the recovery before it has even started. Yet we know very little about the macroeconomic effects of bank regulation. Lucyna Gornicka and Sweder van Wijnbergen focus on a key element: how do banks adjust to more stringent regulation? Early results show that stronger requirements lead to less leverage. Lex Hoogduin, in his capacity as adviser to the International Monetary Fund (IMF), works on the relation between micro and macroprudential policies to maintain financial stability. Of particular interest is the macro part, which concerns the financial system as a whole instead of only individual institutions, because that part is empirically very relevant, yet seriously under researched.

Foreign exchange market
The foreign exchange market is the largest financial market in the world. Many countries have managed or fixed exchange rates, and these are our research focus. Speculative attacks on them can have serious economic and societal consequences. Franc Klaassen has improved the measurement of pressure in the foreign exchange market, that is, the pressure on a currency to depreciate, and how to estimate the effectiveness of monetary policy to ward off pressure. Konstantinos Mavromatris has examined the real appreciation of currencies of transition economies, with particular focus on the composition of capital inflows: the larger inward foreign direct investment relative to portfolio investment, the more productivity increases and the stronger the real appreciation. Dirk Veestraeten has studied the effect of switches in the dynamic process of financial prices, for instance due to fixing the price by adopting a fixed exchange rate or a common currency. Such switching generates strong effects on expectations and thus the dynamics of prices in forward-looking markets. Deeper understanding of these effects is of vital importance.

Pensions and macroeconomic developments
Research projects of Roel Beetsma, Boele Bonthuis, Damiaan Chen, Casper van Ewijk, Ward Romp, and Siert Jan Vos focus on the sustainability of pension systems and the consequences
of changing them, and on the optimal design of pensions systems, as is heavily debated at present. One project stems from the fact that calls for abolishing mandatory participation are becoming louder, as young generations see their contribution payments rise and doubts about their own future pensions are getting stronger. Is a funded pension system with intergenerational risk sharing feasible when participation in the system is no longer mandatory? For many plausible parameter combinations the answer is negative: mandatory participation is a necessity, because otherwise the young would leave the system.

Business cycles and macroeconomic models
Several projects mentioned above deal with business cycles and macro models. Here we mention some additional projects. Petr Sedláček has a framework with heterogeneous firms that face inefficiencies and shows that in such a model aggregate fluctuations can have serious negative welfare consequences. Sweder van Wijnbergen and Tim Willems explain why in recent times employment takes so long to reach pre-recession levels during the recovery. Roel Beetsma and Franc Klaassen study the asymmetry of business cycles, with particular reference to the effectiveness of policy in downturns.

9.3 PROGRAMME EVALUATION

In 2012 MInt published 12 articles in international refereed journals and there are 10 of such publications forthcoming. The students of the group have also done well. Siert Jan Vos (supervised by Roel Beetsma) graduated and took up a position at MN. He remains affiliated with MInt. Tim Willems (supervisor Sweder van Wijnbergen) graduated and started as a postdoc at the University of Oxford. From the many invitations Petr Sedláček received at the international job market, he decided to accept the job offer from the University of Bonn. His has recently received the Joop Hartog Award for best FEB dissertation over 2010 and 2011. That was his third award this year, after winning the first prize at a congress hosted by the Society for Computational Economics and the 2nd place in the Young Economist of the Year of the Czech Economic Society. For MInt these prizes came on top of the second and third prizes that Christian Stoltenberg and Dirk Veestraeten, respectively, won in the Van der Schroeff Contest 2012 for the best teacher of the FEB as a whole.

During 2012 some researchers left, but the group as a whole grew substantially. Arturo Ormeno Sanchez decided to move to Credit Suisse after his postdoc position expired. Henk Jager retired but is still affiliated with MInt. We were successful in recruiting several promising young researchers. From the international job market Konstantinos Mavromatis decided to move from the University of Warwick to MInt after his graduation. Ward Romp came back from APG to MInt on a full-time basis. Several new students started their PhD research: Boele Bonhuis and Damaiaan Chen funded by MN, Lucyna Gornicka and Christiaan van der Kwaak from the Tinbergen Institute MPhil program, Zina Lekniute as an employee of APG and supported by a grant from ICPM, and Lin Zhao funded externally and by the Duisenberg School of Finance. MInt members are also in contact with interested external partners to attract additional external funds to further strengthen the group. We continue to stimulate the coherence of the group by seminars, joint lunches, drinks, and other activities.

The visibility of the group and the interaction with the academic community have been further enhanced through numerous external presentations, conference participations, and participation in networks such as Netspar. We have a seminar series with renowned speakers, which is organised jointly with the VU University Amsterdam and funded by the Tinbergen Institute. The programme is being noticed by the outside world, for instance reflected by invitations for presentations, contributions to research volumes, referee activities, the high quality of applicants in the latest international recruitment rounds.
There are intensive contacts with policy institutions via visitorships and joint research papers (European Commission, ECB, IMF, BIS, OECD, WTO, Dutch Finance Minister, among others), joint appointments (Coen Teulings as director and Casper van Ewijk as deputy director at CPB Netherlands Bureau of Economic Policy Analysis), joint positions (Joris de Wind and Ed Westerhout working at the CPB), via seminars and teaching (by employees of the Dutch Central Bank), and memberships of several advisory committees for the Dutch government. There are also collaborations with the business sector, such as APG, Atradius, MN, and Rabobank. And we take part in public debates on issues such as pension reform and the financial and sovereign debt crises. Particularly Roel Beetsma, Lex Hoogduin, and Sweder van Wijnbergen are frequently asked by radio and television channels to comment on such topics, and they regularly write for opinion pages of quality newspapers. Another sign of the societal relevance is that many undergraduate students take our courses and write their theses at MInt. Those students also offer ways to disseminate insights from research on key (inter)national events and debates to society.

The 2009 QANU Research Review assessed the program over the 2001-2007 period (under its previous name “The Transformation of Europe”). The results of this research visitation were: Quality 4, Productivity 4, Relevance 5, and Viability 4.5. All productivity indicators were found to be highly satisfactory, with the possible exception of student numbers which had declined somewhat, despite a high number of theses defended. We can now say that after the review period we have continued in line with our strong points, and our efforts to recruit students through the Tinbergen Institute as well as external funding have paid off.

**Strengths:** Good and relevant productivity and good (inter)national reputation. Numerous contacts with policy makers, businesses, media, and so on. Solid funding base, not only because we serve many undergraduate students, but also because of our connections to the non-academic world. Coherent group. Good seminar series, jointly with the VU.

**Weaknesses:** We experience severe competition in the job market, especially from financial and policy institutions. Because of good outside options it is easy to lose good researchers and not always easy to convince excellent undergraduate students to pursue a PhD.

**Opportunities:** We are trying to raise external funding so as to enlarge the group. Our expanding contacts with the financial industry generate opportunities in this regard. The new hire on the international job market will hopefully provide a further boost. We have contacts with many undergraduate students, creating opportunities for the research group, both directly and indirectly through the students’ contacts at policy institutions and businesses. We wish to further exploit our international contacts.

**Threats:** Financial distress at FEB and the resulting faculty reorganisation with vacancy stop have substantially increased the teaching load and administrative duties for MInt researchers. This is particularly relevant due to the number of undergraduate students that we serve. To avoid a negative impact on research output, this situation needs to be improved.

### 9.4 RESOURCES AND FUNDING

To finance our conferences, traveling, seminars, visitors, and so on, we use first-stream resources from the government, funds from the research institute, the Tinbergen Institute, and the following other sources. A major success was the cooperation between Roel Beetsma and MN, one of the largest pension administrators and pension wealth managers in the Netherlands. The company sponsors the MN Chair in Pension Economics and two PhD students. Moreover, Roel Beetsma and Casper van Ewijk have a grant from Netspar for their pension research. The former has also obtained a grant from the International Centre for Pension Management at the Rotman School of Management, Toronto. Casper van Ewijk
succeeded in obtaining a grant for a postdoc from the NWO Open Research Area Plus as of 2013. Sweder van Wijnbergen has used funds for research on credit crisis consequences from the Gieskes-Strijbis Foundation, and he has grants for a student from EBN, a Dutch holding company for national gas interests of the Dutch state, and the Duisenberg School of Finance. In addition, one student was financed by the Dutch Central Bank, one by the Pakistan government, and one by Rabobank. It was unfortunate that the proposal for the big research project FuturICT, an EU Future and Emerging Technologies (FET) flagship in which the UvA-FEB including MInt participated, was rejected in the final round.

9.5 OUTPUT

Key publications

Forthcoming


**Publications in numbers**

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**Article in journal – refereed**

A


B


**Other**


**Article in journal - non-refereed**


**Article in journal – professional**


**Article in journal – popular scientific**


**Article in magazine or newspaper – popular scientific**


72
Book / book chapter – refereed


Book / book chapter – non-refereed


Report – professional


Working- and discussion papers


UvA Dissertation – internally prepared

Conference organiser

Recognition
Beetsma, R.M.W.J. (2012). MN Chair in Pension Economics – sponsoring of Chair and two AIO research projects.
Ewijk, C. van (2012). Open Research Area in Europe of the Social Sciences (ORA)/ NWO grant on research proposal The Impact of Social Security Contributions on Earnings (0.25 mln euro, post-doc for 3 years).

Media appearance


Hoogduin, L. (2012). Discussion with Leen Meijaart, Room for Discussion.
Hoogduin, L. (2012). Discussion with Ewald Engelen, Room for Discussion.
Hoogduin, L. (2012). Interview, Prospect.
Hoogduin, L. (2012). Interview, AM.

Editorship
Keynote/invited talk


**Other lectures**


**Membership academies**

Beetsma, R.M.W.J. (2012, 19 September). Member of Ph.D. committee of Igor Fedotenkov, Tilburg University, Tilburg.

Beetsma, R.M.W.J. (2012). Research Fellow CEPR.


Ewijk, C. van (2012). Member board of advisors, NZA (Dutch Healthcare Authority).
Ewijk, C. van (2012). Member Social Economic Council (plaatsvervangend kroonlid SER).
Ewijk, C. van (2012). Member of Committee on discounting rules for pensions (UFR), Ministry of Social Affairs.

Relevant position
Beetsma, R.M.W.J. (2012). Member of Supervisory Board of BNG Vermogensbeheer.
# 10. HUMAN CAPITAL

**Subprogrammes:** ACE, TIER & AIID  
**Programme director:** Prof. dr. E. Plug  
**METIS code:** uva/feb/ase/hum  
**JEL-classification:** I, J, L  
**Starting date:** 2001  
**Website:** www.aseri.uva.nl/hum  

## 10.1 MEMBERS OF THE RESEARCH GROUP AND RESEARCH IN FTES

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### 10.2 PROGRAMME DESIGN

**Objective**
The program is an empirically driven research program which relies on microeconometric techniques to study important microeconomic issues in the areas of labour economics, economics of education, family economics and development economics. Particular emphasis is paid to the identification of causal mechanisms, the analysis of existing policies and policy changes on a variety of microeconomic outcomes, and the design and implementation of experiments to carefully evaluate policy interventions and their microeconomic consequences.

**Motivation**
Microeconomic models play an important role in understanding individual behavior in many economic areas; that is, predictions taken from microeconomic theories are often used to explain and understand individual economic circumstances, how differences between individuals can possibly account for differences in economic outcomes, and to what extent
policies can influence individual economic circumstances. But predictions are not easily verified and possibly false, with huge consequences for (the development of) microeconomic theory, policy and policy design. It is therefore crucial to test predictions of individual economic behavior with careful empirical work, using the most rigorous methods in applied microeconometrics.

Themes

Economics of Education

The economics of education program is the most active and prominent research area. In it, we study a variety of aspects of the intersection between economics and education: human capital formation, human capital returns, school choice, education and markets, inputs and education production, evaluations of education reforms.

Recent educational topics analyzed in the human capital group include the long-term consequences of class size (Hessel Oosterbeek), the role of school size and school competition (Hessel Oosterbeek, Monique de Haan), peers and the education production function (Hessel Oosterbeek, Adam Booij), sunk costs and study effort (Nadine Ketel, Jona Linde, Hessel Oosterbeek), returns to medical school (Nadine Ketel, Hessel Oosterbeek), matching primary school students to secondary schools (Hessel Oosterbeek, Nienke Ruijsch), the influence of previous test taking on current test scores (Jona Linde), information, overconfidence and student achievement (Adam Booij), immigrants in primary and secondary education (Liesbeth van Wely), teacher quality and student achievement (Erik Plug), the effectiveness of excellent programs in secondary education (Adam Booij, Ferry Haan and Erik Plug), the consequences of Montessorie education (Nienke Ruijsch), competitiveness and school choice (Thomas Buser, Hessel Oosterbeek), drop outs in lower secondary education (Henriette Maassen van den Brink), student compensation, school resources and student achievement (Monique de Haan, Hessel Oosterbeek, Noemi Peter).

Labour economics

The human capital group is originally a labour orientated economics program which investigates various aspects of labour economics, including the determinants of labour supply and demand, personnel economics, distribution of income, labour market policies, the intersection between labour markets and demographics. Over the years, however, the labour economics program has expanded and today it is less clear what is exactly covered by labour economics and what is not. There is substantial overlap with the other themes in the human capital group.

The labour economic topics that are currently addressed in the human capital group include the genetic and environmental origins of economic inequality (Erik Plug), tax evasion (Stephen Kastaryano), labour market returns to uncertainty and risk (Joop Hartog), immigrants and labour market outcomes (Joop Hartog), labour market discrimination against sexual minorities (Erik Plug), the labour market of medical specialists (Nadine Ketel, Hessel Oosterbeek), fertility and labour supply (Erik Plug).

Family economics

The family economics program covers empirical research on the economic behaviour of families, including labour supply and other related sources of time use, family formation and dissolution, fertility and child investment decisions, and intergenerational mobility of economic outcomes. The recent availability of large administrative data sources combined with family driven identification strategies (relying on twins, siblings and adoptees) has spurred family research considerably.

Current examples include the nature and nurture of economic outcomes (Thomas Buser, Erik Plug), the origins of gender differences in education (Thomas Buser, Ferry Haan, Hessel Oosterbeek), gender roles in twins (Noemi Peter), time allocation within families (Henriette
Maassen van den Brink), the economics of sexual orientation (Lydia Geijtenbeek, Erik Plug), fertility, labour supply and marital stability (Erik Plug), parental investments and children (Thomas Buser, Monique de Haan, Hessel Oosterbeek, Erik Plug, Jose Rosero) and the heritability of cancer (Erik Plug).

**Development economics**

The development economics program focuses on microeconomic issues in low income countries. In particular, the program tries to uncover the micro-economic causes of poverty and to provide the means and tools to eradicate it.

Recent issues addressed include the evaluation of a variety of school interventions on student outcomes including the allocation of free school uniforms, the introduction of child care centers (Diana Hidalgo, Hessel Oosterbeek, Jose Rosero), birth order effects on child schooling and child labour (Monique de Haan, Erik Plug and Jose Rosero), the consequences of a cash transfer program change on a variety of child and adult outcomes (Thomas Buser, Hessel Oosterbeek, Erik Plug and Jose Rosero), the impact of public health spending (Menno Pradhan), utility and price dependence in equivalence scales (Menno Pradhan), the evaluation of a preschool intervention in Indonesia (Menno Pradhan), targeting micro-credit to poor family enterprise (Diana Hidalgo and Hessel Oosterbeek).

**Organization**

As already mentioned, we are an applied microeconometrics group, covering various themes of research, with scope for individual research projects, internal and external joint work and cooperation and more formal cooperations.

There are currently two more formally defined research groups. The education and labour economists in the human capital group were integrated into TIER (Top Institute for Evidence Based Education Research) in 2008. Henriette Maassen van den Brink, director of TIER Amsterdam, saw the successful blend of scientific quality with policy relevance recognized through a large grant from NWO. TIER is now funded by the Ministry of Education (and matching by participating universities), but the grant is fully administered by NWO. The Institute is joint with RU Groningen and RU Maastricht. Research focuses on the effectiveness of policy interventions in education. At the end of 2012 the grant will expire.

TIER has ambitious goals: it wants to contribute to the improvement of the quality of education in the Netherlands by promoting the evidence based approach as a guiding principle in education policy and practice. It intends to accomplish this by developing (cost) effective education interventions that are grounded in scientific research and scientific insights. The research is funded through the NWO and must comply with the NWO formulated rules of evaluation.

The aim of the institute is to conduct excellent scientific research, to operationalise the results of this research and to put the results at the disposal of education policy and practice. The institute wants to develop knowledge of evidence based education that can be applied by: 1) the Ministry of Education, Culture and Science, in policy preparation and evaluation; 2) the educational practice - such as teachers and educational institutions - in the allocation of means and when making educational choices; 3) parents and students, when choosing a school or training. TIER aims to be an element that binds research, practice and policy in the field of education.

AIID (Amsterdam Institute for International Development) is a joint initiative of the University of Amsterdam and the VU University Amsterdam. AIID is a multidisciplinary research network with a strong focus on generating evidence to improve the design of policies to reduce poverty. Menno Pradhan and Jacques van der Gaag are AIID researchers who with
their research on human capital and health and with impact evaluation of sector-wide programmes.

The two institutes, TIER and AIID, share the same ambition to perform research at the highest academic standards on issues with high societal relevance: education, labour, economic development of poor nations.

10.3 PROGRAMME EVALUATION

In 2012 the human capital group has turned into a small-scale research programme. All human capital members of ACE have left and moved to the IO group, which offers a research profile better suited to their methods and interests. Monique de Haan, a talented and successful postdoc at TIER, faced an expiring contract and left us to take up the position of associate professor at University of Oslo. Four PhD students faced the end of their PhD terms. Three of them left the group to take up positions elsewhere; Jacopo Mazza has a tenured track position at University of Manchester, Stephen Kastoryano has a tenured track position at University of Mannheim, and Jose Rosero has left academia and is now working as the director of Statistics Ecuador. Thomas Buser has been offered a postdoc at TIER and stays member of the human capital group. Lydia Geijtenbeek has also joined as a first year PhD student.

Despite the large reduction in size, the group keeps on delivering high quality research; that is, 2012 has been a good year in terms of scientific output. The human capital group has published 8 articles in international refereed journals and has 8 articles accepted for publication. Of the 8 published articles, 3 articles were published in A level journals. Of the 8 forthcoming articles, 4 of them will end up in A level journals. Highlights include the exceptional performance of Thomas Buser and high quality publications (either published this year or forthcoming) in world leading economics journals. Thomas Buser has defended his thesis successfully with the distinction cum laude and got three paper published in highly esteemed journals. In addition, Hessel Oosterbeek, together with Peter Fredriksson and Bjorn Ockert, has a paper forthcoming in the Quarterly Journal of Economics, which is an AA-level journal on the Tinbergen list. Erik Plug, together with Dinand Webbink and Nick Martin, has a forthcoming publication the Journal of Labor Economics, which is one of the most esteemed field journals with a top-10 article influence score among all economics journals.

The human capital group provides a stimulating research environment. This environment is partially shaped through national and international connections, external seminar series, internal work-in-progress meetings, and international visitors. Human capital members have close research contacts with researchers at ASE, Free University Amsterdam and Tinbergen Institute, work together with researchers from Europe and US, and are regularly invited to give seminars and (keynote) speeches throughout the world. Members of the human capital group organize a successful weekly seminar series at Tinbergen Institute. The seminar series is internationally renowned, and, in 2012, included presentations of Luigi Pistaferri (Stanford), Fabian Lange (Yale), Dan Black (Chicago) and Henrik Kleven (London LSE). Members of the human capital group (including senior researchers, PhD students and visitors) also come together weekly to discuss their work in various stages. The human capital group has been attractive to visiting professors, post-doc researchers and PhD students. In 2012 the human capital group has welcomed Rune Borgan Leigan.

The human capital group attracts and delivers many PhD students. This year Lydia Geijtenbeek has joined us. This year Jacopo Mazza, Stephen Kastoryano and Jose Rosero left us and are placed successfully elsewhere. This year Thomas Buser also graduated but stays on working as a postdoc at the human capital group. PhD students are doing well in terms of performance and placements. Noemi Peter, a PhD student of Hessel Oosterbeek, has already a
paper published in Empirical Economics, which is a B level journal. Jacopo Mazza and Stephen Kastoryano are currently employed in tenured track position at the University of Manchester and Mannheim, respectively. There are currently 7 PhD students working at the human capital group.

Apart from scientific relevance, the work of human capital members addresses practical policy issues with societal relevance. In addition, most research is empirically orientated and can be formulated such that it is relatively easy to comprehend for policy makers. Members of the human capital group are in close contact with the Ministry of Education, Culture and Science and regularly come together to communicate their scientific work with insights and recommendations. Members are also frequently invited to consult on a variety of governmental policy issues. Henriëtte Maasen van den Brink is member of the higher education committee of the KNAW which focuses on trends and developments in higher education that are relevant for science and society. Henriette Maassen van den Brink also chairs the division of social sciences (MaGW) at the Dutch science foundation (NWO). Hessel Oosterbeek has been a member of a committee to advise the education minister Marja van Bijsterveldt on the effects of performance pay for teachers.

In sum, the human capital group experienced a good year in terms of academic output. In addition, the large change in group composition has improved the internal coherency and visibility of the research programme; that is, the human capital research programme covers mainstream topics in applied microeconomics (including the economics of education, family and demographic economics, health economics, labor economics and development economics) with a strong focus on microeconometrics.

But at the same time there are serious concerns about group size and structure. In particular, the large reduction in group size has led to an unbalanced research group with only PhD students, postdocs and full professors; a viable and serious research programme requires at least one or two tenured assistant/associate professor positions.

To maintain the high level of research in future years, our aim is to resolve the unbalancedness in staff. One way is to find additional funding. Resources to finance extra staff should come from internal and external sources. Internal funds come largely from teaching core courses, which are currently not allocated to the human capital group. External funds are uncertain. The human capital group therefore faces the challenge to raise extra funds through teaching core courses (such as for example statistics and/or econometrics) in bachelor curriculum or through targeted research grant applications. Another way is to collaborate (more) with closely related research programmes. The human capital group will therefore intensify its collaboration with the labour economics group at Free University.

This evaluation can be summarized in the following SWOT analysis:

**Strengths:** high quality research addressing issues of *societal relevance*; stimulating research environment; good reputation; healthy inflow and outflow of PhD students; substantial external funding; internal coherent and visible research theme.

**Weaknesses:** unbalanced research staff; largely dependent on external funding.

**Opportunities:** to raise extra funds either through teaching core courses in bachelor curriculum or through research grant applications; seek closer collaboration with labour economics group at Free University Amsterdam.

**Threats:** human capital group has turned into small-scale and unbalanced research programme.
10.4 RESOURCES AND FUNDING

TIER-research is funded through NWO and must comply with NWO formulated rules of evaluation. Over a period of 5 years (2008-2013) TIER will receive €5.3 million. All researchers at TIER are (in part) financed by TIER. Erik Plug has received a 3-year grant for research on gifted students in secondary education by PROO-NWO. In this project one PhD student and one postdoc are partly financed. Two PhD students are/have been cofinanced with Free University Amsterdam (VU). Several visiting researchers participate in the program, without financial compensation. AIID also receives substantial external funding.

10.5 OUTPUT


Forthcoming
Publications in numbers

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Article in journal - refereed

A


B


Other


Article in journal – non-refereed


Article in journal – professional

Report – working- and discussion papers


Heers, M., Klaveren, van C., Groot, W. & Maassen van den Brink, H. (2012). The Impact of Community Schools on Student Dropout in Pre-vocational Education. TIER working paper series TIER WP 12/08.


UvA Dissertation – internally prepared


Recognition


Media appearance

Haan, F. ‘Het docententekort is weg, leve het overschot’, Volkskrant, November 22.


Haan, F. ‘De tragiek van de eindexamens, is vergelijkbaar met de tragiek op het spoor’, Volkskrant, Juni 1.


Haan, F. ‘Maak van Wikiwijs echte wiki’, Column OnderwijsInnovatie, Juni.

Haan, F. ‘It's the teacher stupid’, Column OnderwijsInnovatie, April.


Haan, F. Regular appearance on Radio 1, DiDD.

Maassen van den Brink, H. ‘Solidariteit vereist economische groei’, Het Financieele Dagblad 9 januari 2012.

Maassen van den Brink, H. ‘Het sprookje van de apotheker en de drie wensen’, Het Financieele Dagblad 2 april 2012.
Maassen van den Brink, H. ‘Links af en de weg kwijt’, Het Financieele Dagblad 16 april 2012.
Maassen van den Brink, H. ‘Bezuinigen op zorg is niet moeilijk’, Het Financieele Dagblad 14 mei 2012.
Maassen van den Brink, H. De miljarden van Klink komen er niet, Opinie & Debat/ de Volkskrant, augustus 2012.
Maassen van den Brink, H. Wij subsidiëren de buitenlandse student, Opinie & Debat/ de Volkskrant, mei 2012.
Maassen van den Brink, H. Nederland wordt rijp voor antibelastingpartij, Opinie & Debat/de Volkskrant, 7 november 2012.

Keynote/invited talk
Buser, T. (2012). Invited talk, Castellon (March), Trier (May), Maastricht (June), New York (June), Stockholm (August), Stanford University (September).
Plug, E. (2012). Invited talk, Barcelona (December), Bern (June), Paris (June), Oslo (May), Essex (May), Mannheim (March), Wageningen (February).

Other lectures

Membership academies
Buser, T. (2012). Invited talk, Castellon (March), Trier (May), Maastricht (June), New York (June), Stockholm (August), Stanford University (September).
Hartog, J. (2012). *Fellowships* Tinbergen Institute, IZA, AIAS, CESifo, CrEAM, Member KNAW Royal Dutch Academy of Sciences.


Plug, E. (2012). *PhD committees* J Mazza (UvA), J Rosero (UvA), I Solli (University of Stavanger, Norway).

**Relevant position**


Maassen van den Brink, H. (2012). Other activities: Amsterdam Economic Board, Amsterdam, Columnist Financieele dagblad, Member Board of Governors Leids Universitair Medisch Centrum, Scientific co-ordinator Institute for Evidence Based Education Research (TIER), Lead partner NICIS Institute, Urban Research and Practice, Board of Governors HAN Hogeschool Arnhem en Nijmegen, NVAO committee VLIR Economics and 3 subcommittees (Vlaanderen).

Oosterbeek, H (2012). Member Editorial Boards of *Economics of Education Review; Effective Education*.

Plug, E (2012). Organizer of Tinbergen Labour Economics Seminar,


Peter, N. (2012). Organizer of KAFEE seminar series at UvA.

11. EXPERIMENTAL & POLITICAL ECONOMICS (CREED)

Programme Director: Prof. dr. A.J.H.C. Schram
METIS-code: uva/feb/ase/epe
JEL-classification: D7, D8
Starting date: 1991
Websites: www.aseri.uva.nl/creed
www.creedexperiment.nl/creed

11.1 MEMBERS OF THE RESEARCH GROUP AND RESEARCH IN FTES

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11.2 PROGRAMME DESIGN

Objective
Improving the understanding of the behavioural determinants and consequences of economic decision making by (a) focusing on political economic issues, (b) allowing for bounded rationality, and (c) using laboratory experimentation as research method.

Motivation
Political decision making plays an important role in economies. Governments, for example, are essential for the functioning of markets, may be called upon to correct for market failures, but also have their own dynamics. Positive welfare effects of policies cannot be taken for granted. It is, therefore, important to study political decision making and the way in which policies can be applied beneficially. These observations provide the motivation for the first project: “Economics of political decision making”, a long standing project at the FEB dating back to 1983. It is related to public choice and the more recent upsurge in political economics.

Economic models, also when concerned with political decision making, typically make strong assumptions about the rationality, sophistication, and selfishness of individual behaviour. Experimental and other empirical evidence suggests, however, that the predictive power of the standard ‘homo economicus’ model is often disappointing and depends on the institutional character of the decision making environment. There is a need for greater knowledge and a more satisfactory treatment of the bounds on rationality generated by the nature of cognition and emotion, and the influence of institutions. This motivates the second project: “Bounded rationality and institutions”, which fits into the emerging field of behavioural economics.

For the advancement of theory, empirical feedback is crucial. This may hold in particular for new research areas, when sorting out the most promising ways to go. Empirical analysis is seen as an important ingredient of this programme. For many of the issues studied in the aforementioned two projects, however, adequate field data are hard to come by or even
nonexistent. Laboratory experimentation is a helpful complementary research method, especially in these cases, for exploration or the testing of models focusing on fundamental behavioural aspects or mechanisms. This motivates the third project: “Experimental economics”, which is stimulated by, and provides feedback for, the other two projects.

**Institutional embedding**

The research of this programme is carried out within the Center for Research in Experimental Economics and political Decision-making (CREED), a research institute of the FEB. CREED was established in 1991 by a PIONIER-grant from the Netherlands Organisation for the Advancement of Scientific Research (NWO) for the development of experimental economics in the Netherlands. An important facility is the CREED-laboratory for experimental economics, one of the few dedicated computer laboratories in Europe. Its focus on political decision making and experimental economics distinguishes CREED internationally.

**Projects**

*I Economics of political decision making*

This project is concerned with the demand for and the endogenous supply of government policies, the ways in which coordination takes place through the political decision-making process, and the effects thereof on the economy. Major research topics are:

- Political participation and influence (voting, activity and influence of interest groups);
- Interaction between the public sector and the private sector (e.g. the development of social capital and its importance for the provision of public goods);
- Political economy of public and private institutions (e.g. issues of fiscal federalism).

*II Bounded rationality and institutions*

In this project fundamental aspects of individual decision making, with economic relevance, are investigated. More particularly, attention is focused on the impact of cognitive limitations and emotions. In addition, responses to the complexity and institutional characteristics of the decision environment are studied. Among the topics investigated are:

- Group formation in complex environments (e.g. development of political preferences through social interaction, development of interest groups);
- Economic significance and modelling of emotions (e.g. anger, anxiety, happiness);
- Performance of various auction formats;
- Irrationalities in risk attitudes, and efficiency gains by avoiding or reckoning with these.

*III Experimental economics*

The main purpose of laboratory experiments in economic research is to create a (political) economic process in a laboratory environment which allows for sufficient control and accurate measurement. Experiments are used for three purposes: (a) the testing of behavioural assumptions and predictions of existing (competing) theories; (b) the searching for facts that are instrumental in the construction of descriptive and explanatory theories; and (c) the evaluation of (new) institutions to assist policy makers. Research in this project is particularly stimulated by, and provides feedback for, the aforementioned two projects. Major lines of research are:

- Voting and electoral competition (behaviour of voters and political candidates/parties);
• Lobbying and political pressure (ways and means, and determinants of effectiveness);
• Emotions and economic behaviour (impact, and modelling);
• Markets and institutions (functioning of markets and, the design of, institutions);
• Evolution of cooperation (development of cooperative behaviour over time);
• Biases in risk attitudes.

11.3 PROGRAMME EVALUATION

2012 was a solid year for CREED, marked by continued high-level publications and, notably, a good many successful PhD defenses.

Two permanent personnel changes characterize 2012. Nadège Bault finished her postdoctoral position and Roel van Veldhuizen completed his PhD position. Nadège has found a position at the University of Lyon and Roel at the Wissenschaftszentrum Berlin. We are pleased to report that Roel successfully defended his thesis in January, 2013. In addition, Marcelo Tyszler, Alilko van der Veen, Jona Linde, Joris Gillet, Thomas de Haan, Adrian de Groot Ruiz and Ben Pelloux all successfully defended their theses in 2012. This is the first time in the 21-year history of CREED that seven PhD theses were completed in a single year. We also welcomed three new students who finished their MPhil at the Tinbergen Institute and have started their PhD training at CREED. These are Max Hoyer, Aaron Kamm and Ben Loerakker. Max and Ben will be supervised by Frans van Winden and collaborate with the Cognitive Science Center Amsterdam. Aaron will be supervised by Arthur Schram. We look forward to working with all three of them in the coming three years. Finally, Gönül Dogan took time off for the happy occasion of her maternity leave and Matthijs van Veelen was (again) invited for an extended stay at Harvard University.


Aside from 17 publications in top-tier peer-reviewed journals and 7 papers accepted for publication in 2013, external recognition of the research undertaken at CREED was received in various ways. These include 14 invitations to present seminars or keynote lectures, various associate editorships and (declined) invitations to become editor, two NWO-research talent grants (for the PhD positions of Anita Köpanyi-Peuker and Matthias Weber), funding from the research priority area Brain and Cognition (to support PhD candidate Ben Loerakker) and a continued membership of the Junior Academy of the Royal Netherlands Academy of Arts and Sciences Matthijs van Veelen. In addition, two members of CREED (Schram and van Veelen) were amongst the three UvA economists on the ESB top 40 list of economists in the Netherlands.

Research contacts were continued, i.a., by a successful seminar series that included presentations by renowned scholars such as Ariel Rubinstein, Jean-Robert Tyran, Martin Sefton, Sanjeev Goyal, Ayellet Gneezy, Roland Benabou, Joachim Weimann, Marie-Claire Villeval, Andreas Ortmann and Michael Kosfeld. CREED also co-organized the Amsterdam workshop on Behavioral and Experimental Economics (ABEE 2012), which falls within the framework of the faculty’s Research Priority Area Behavioral Economics. Research contacts also include our participation in the cognitive science center (CSCA) and our yearly PhD
exchanges with the Universities of Nottingham and East Anglia and with New York University. These exchanges provide excellent opportunities for CREED PhD students to present their work (at all stages of the project) to an audience consisting of PhD students and world-renowned professors of the participating institutes.

11.4 RESOURCES AND FUNDING

The program again received modest funding from the research institute RESAM, which was largely spent to cover (part of the) traveling costs to attend conferences. Additional means were obtained from external funding and the Tinbergen Institute (for PhD-students).

Substantial additional means came from the UvA-Research Priority Area Behavioral Economics. This provides a solid foundation for paying participants in experiments at the CREED laboratory.

As for NWO funding, the VENI grant for Aljaž Ule came to an end.

CREED continued to receive funding from contracted research for governmental institutions and business. In 2012 a major project was completed for the Dutch CPB, in which Aljaž Ule and Arthur Schram studied the effects on infrastructural investments of uncertainty caused by electoral competition.

11.5 OUTPUT

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Andersen, S., Ertac, S. Gneezy, U., List, J. & Maximiano, S. (2013). Gender, Competitiveness and Socialization at a Young Age: Evidence from a


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### Article in journal – refereed

A


Veelen, M. van (2012). Robustness against indirect invasions. *Games and Economic Behavior* 74, 382-393.
B


Other


*Article in magazine or newspaper – popular scientific*


*Conference paper (proceedings) – non-refereed*


*Report – working- and discussion papers*


Veelen, M. van & Garcia, J. (2012). In and out of equilibrium II: evolution in repeated games with discounting and complexity costs, TI discussion paper series, # 12-089/I.


Yang, Y. Onderstal, S & Schram, A (2012). Inequiality Aversion Revisited, University of Amsterdam & Tinbergen Institute, CREED working paper, October 4.

UvA Dissertation – internally prepared

Gillet, J. (12 April 2012). Groups in Economics.


Tyszler, M. (3 February 2012). Political Economics in the Laboratory.

Veen, A. van der (28 Februari 2012). Inducing Good Behavior.

Conference organiser


Recognition


Media appearance


Veelen, M. van (2012). Radio 1, naar aanleiding van installatie als lid van De Jonge Akademie, 16 maart.
Veelen, M. van (2012). Amsterdam FM. Swammerdam over de wetenschap in Amsterdam. Uitzending over altruisme, 18 november.

**Editorship**

Winden, F. van (2012). *Public Choice*, member editorial board.

**Book review**


**Keynote/invited talk**

Onderstal, S. (May 9, 2012). Seminar Erasmus University Rotterdam.
Schram, A. (5 Nov. 2012). *Stars need Benefits*. Seminar, Georgia State University, Atlanta, U.S.A.
Winden, F. van (20 April, 2012). *Affective social ties, missing link in governance theory*, THEEM conference, Konstanz, keynote lecture.
Winden, F. van (5 October, 2012). *Towards a new model of choice under uncertainty, Ambiguity in the Economy and in Economics Conference*, University of Nijmegen, keynote lecture.
Other lectures
Kopány-Peuker, A. (20 April 2012). Endogenizing punishments in social dilemmas – Fostering cooperation through the enhancement of own vulnerability. ACLE Competition & Regulation Meeting, Amsterdam.
Kopány-Peuker, A. (14 September 2012). Endogenizing punishments in social dilemmas – Fostering cooperation through the enhancement of own vulnerability. ESA European Conference, Cologne, Germany, Maastricht.

Membership academies
Onderstal, S. (2006-). Fellow ACLE.
Onderstal, S. (2006-). Fellow ENCORE.
Offerman, T.J.S. (2012). Fellow CESS, NYU.
Offerman, T.J.S. (2012). Fellow CeDEx, University of Nottingham.
Offerman, T.J.S. (February 2, 2012). Member PhD committee E.Maasland, Tilburg University.
Veelen, M. van (2012). Member De Jonge Akademie.
Winden, F. van (2012). Fellow Tinbergen Institute, CEPR, CESifo.
Winden, F. van (2012). Membership NWO Program Committee Social Infrastructure Agenda – Governance.
Winden, F. van (2012). Member of: Koninklijke Hollandsche Maatschappij der Wetenschappen.

Relevant position


12. INDUSTRIAL ORGANIZATION, COMPETITION POLICIES & REGULATION

Programme director: Prof.dr. A.R. Soetevent & Prof.dr. J. Hinloopen

METIS-code: uva/feb/ase/mo

JEL-classification: L

Starting date: 2005

Website: www.aseri.uva.nl/mo


12.1 MEMBERS OF THE RESEARCH GROUP AND RESEARCH IN FTES

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12.2 PROGRAMME DESIGN

Objective
Improving the understanding of the working of imperfectly competitive markets and the possible role for government intervention on these markets by focusing on issues within the sphere of Industrial Organization and using applied oligopoly theory, field experiments and laboratory experimentation as research methods.

Motivation
Industrial Organization (IO) studies imperfectly competitive markets, in particular how firms compete with each other on these markets and what the effects are of policy interventions aimed at affecting market performance. The natural focus of IO is on oligopolies where firms have some market power. Topics of interest thus include pricing strategies, strategic interaction, collusion and tacit collusion, spatial competition, research and development, inter-firm relationships, competition policies, market design, auctions, and regulation. IO is a field that uses all three types of research strategies: theoretical, empirical, and experimental. The research program does not preclude any of these research methods.

Projects
The activities within the research program can be subdivided into four strands of research, which are interrelated:

Research and development.
Research cooperations are key for businesses to successfully innovate and prosper, and firms increasingly rely on extensive networks to achieve their goals. It is, however, still poorly understood how these R&D cooperatives are formed, how they evolve, what their impact is on R&D activities, and what should constitute an optimal R&D policy. These questions drive several research lines. For instance, group members are developing a theoretical framework of research network formation. This framework is tested against a database that includes all large research collaborations in the U.S. Other group members work on dynamic models of R&D, the novelty being here the application of bifurcation methods. This allows for a global analysis, including (transitory) parameter configurations that preclude single-stage equilibria. Yet other group members assess the welfare implications of sustaining R&D cooperatives. Again, the fundamental trade-off between static and dynamic efficiency is addressed, giving additional insights as to what should constitute an optimal R&D-stimulating policy.

Behavioral industrial organization
Empirical and experimental evidence has mounted that people do not always comply with the assumptions of traditional economic models of ‘optimal’ behavior. These “anomalies” gave rise to the ever growing subfield of behavioural economics. A next important avenue of research in behavioral economics is whether firms in specific market contexts can and do exploit the bounded rationality of consumers. For example, can firms sell more or soften competition by increasing the number of product that serves no purpose except for confusing buyers. In current research, group members empirically investigate the use of gift certificates (VVV Cadeaubon) by Dutch consumers: Do people spend gift certificates they receive differently than they spend monetary gifts, and does it matter whether they received the certificate from friends or from their employer? In another project, a series of experiments is conducted to study the relationship between competition, the size of a loss and firm profits in insurance markets.

Auctions
In the past few decades, the study of auctions has become one of the most active research areas in economic sciences. We aim at answering questions such as: How to prevent cartel formation in auctions? What is the effect of limited liability on bidding behavior? How to design auctions of multiple objects? What are optimal mechanisms in quasi-markets such as
welfare-to-work markets and health care markets? What is the effect of license auctions on the performance of markets? For example, group members studied experimentally the effectiveness of antitrust policies against bidding rings in auctions. Others have examined the impact of fundraising mechanisms on charitable giving in a door-to-door fundraising field experiment.

Regulation and Competition Policies
Since 2005, group members have collected detailed price information on the Dutch market for retail gasoline. With these data, the competitive effects of the governmental program of auctioning licenses to operate gasoline sites at highways have been quantified. Currently, the data are used to develop an automated procedure to identify regional clusters of low price variation, an indicator of possible collusive practices. Other current empirical projects on competition policy deal with potential deterrence effects of merger policy tools, based on data from the U.S. Department of Justice and the U.S. Federal Trade Commission. Furthermore, group members investigate whether firms that collaborate in research joint ventures, use these collaborations to collude in product markets. Also the impact of antitrust policy at larges was investigated. This was done by further refining the methodologies to estimate price cost margins and by applying the methodology to data from the Indonesian economy. In addition to the nation-wide impact of the introduction of antitrust policy, also the change in the behavior of targeted firms was investigated by a difference in difference method.

12.3 PROGRAMME EVALUATION

Strengths:
- The group has a very broad orientation, both in terms of the choice of research topics as in terms of methodologies used (theoretical/(lab/field)experimental/empirical).
- Group members are each other’s complements, which regularly yields papers that are co-authored by several group members.
- The group is well-embedded in ASE and in Tinbergen Institute; group members thus have co-authored papers with members from other ASE research groups.
- The research performed by the group is very visible and of great practical importance. Group members have close links with governmental bodies such as ministries and antitrust agencies.
- The group is young and has a high growth potential.

Weaknesses:
- The connections with US universities could be strengthened.
- The group is not prominent in the arena of theoretical industrial organization, except for the field of auction theory.

Opportunities:
- Within Europe, the group has close contacts with research groups in industrial organization at other universities. The challenge is to establish a more formal network with these other departments in order to pool research projects and resources.
- Jeroen Hinloopen will spent the first six month of 2013 at Purdue University.

Threats:
- Group members have been requested to carry out heavy administrative duties. This may endanger the internal coherency of the research theme because of the reduced availability of these members.
- The group has a small-scale, with only a few PhD students and no postdocs; a viable research program needs a continuous inflow and outflow of PhD students.
Scientific successes

- Ailko van der Veen and Adrian de Groot-Ruiz successfully defended their Ph.D. theses in 2012. Both theses were supervised by Theo Offerman (promoter) and Sander Onderstal (co-promoter).
- Grega Smrkolj will defend his Ph.D.-thesis in the Summer of 2013, which was written under the supervision of Jeroen Hinloopen (promoter) and Florian Wagener (co-promoter).

Societal relevance

Research by the group on the deterrence effects of merger policy tools and the effectiveness of leniency programs is directly relevant to competition agencies and governmental bodies such as the ACM. Besides, the group's empirical projects target specific markets the functioning of which is of major importance to social welfare, such as the banking sector, insurance markets, retail gasoline pricing and public procurement. For this reason, research by the group regularly features in national newspapers and international magazines. Group members also appear on television to contribute to the debate by commenting on the developments in specific markets and the effects of these on competition. Group members also participate in governmental expert committees and provide targeted advice for particular policy issues. For instance, Sander Onderstal advised the Ministry of Economic Affairs on the design of the auction for mobile telecommunications that took place at the end of 2012, and Jo Seldeslachts was member of the expert committee “Toekomst van toezicht” of the Dutch Wetenschappelijke Raad voor het Regeringsbeleid (WRR).

12.4 RESOURCES AND FUNDING

Jo Seldeslachts obtained a human development grant from the European Union that amounts to about €180,000.

12.5 OUTPUT

Key publications


Forthcoming


Hinloopen, J. & Wagenvoort, R. On the exact finite sample distribution of the $L_1$FCvM test statistic. *Communications in Statistics.*


**Publications in numbers**

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**Article in journal – refereed**

**A**


**B**


**Other**


**Article in journal – professional**


**Article in magazine or newspaper – popular scientific**

Praag, C.M. van (October 12, 2012). Ons onderwijs selecteert niet op talent maar op zwakte. *NRC Opinie*.


Praag, C.M. van and D. van den Brink (May 2012). Bezuinigen en groeien (opinie artikel). *Het Financieele Dagblad*.

Praag, C.M. van and D. van den Brink (December 27, 2012). Maak kredietgarantie MKB niet permanent (opinie artikel). *Het Financieele Dagblad*.

Praag, C.M. van (March 16, 2012). Te weinig ondernemersambitie. *Het Financieele Dagblad*.

Praag, C.M. van (March 31, 2012). Maxima ontvangt onderzoeksrapport op UvA. *Volkskrant*.

Praag, C.M. van (January 2012). Das motiv des Loney-Rider. *Handelsblatt*.


Praag, C.M. van. (March 31, 2012). Maxima ontvangt onderzoeksrapport op UvA. *Metro editie Amsterdam*. 

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110
Report – professional

Report – working- and discussion papers

UvA Dissertation – internally prepared

Recognition
Praag, C.M. van (July 18, 2012). Folia maakt kennis met…. Mirjam van Praag. Folia radio Amsterdam and Folia Website Portret.
Praag, C.M. van (March 19, 2012). “Innovatiedip baart hoogleraren zorgen”, interview for article in Intermediair.
Sloof, R. MaGW Onderzoekstalent 2011 grant from NWO for the PhD position of Anita Kopányi-Peuker (co-supervised with Theo Offerman).

Media appearance
Schinkel, M.P. (September 14, 2012). Zembla-uitzending “Uw Hypotheek als Melkkoe”.
Praag, C.M. van (December 26, 2012). Wetenschapsprogramma hoe? zo? Radio NTR.

Keynote/invited talk
Onderstal, S. (February 24, 2012). Bidding to Give in the Field: Door-to-Door Fundraisers Had it Right from the Start. Seminar Tilburg University.
Praag, C.M. van (January 18, 2012). Invited Seminar at Ivey Business School, University of Western Ontario, Canada on “The effect of early entrepreneurship education on the development of entrepreneurial competencies and intentions” (with Laura Rosendahl Huber and Randolph Sloof).
Praag, C.M. van (January 26, 2012). Invited Key Note Lecture at the Norwegian Research Council, Research and Innovation Policy Conference, Oslo, Norway on ‘It’s the opportunity cost, stupid! How self-employment responds to financial incentives of return, risk and skew’ (with P. Berkhout and J. Hartog).
Praag, C.M. van (June 12, 2012). Invited Lecture on ‘Field Experiments in Entrepreneurship Economics’ at the IZA Entrepreneurship Economics PhD Workshop in Potsdam.


Praag, C.M. van (June 15, 2012). Invited seminar on ‘Why do entrepreneurial parents have entrepreneurial children?’ (with J. Sol and M. Lindquist) at ISEG – School of Economics and Management Technical University of Lisbon, Portugal.

Praag, C.M. van and C.M. Hsieh (August 6, 2012). Presentation at the Academy of Management ‘Risk, Balanced Skills and Entrepreneurs’, Boston, USA.


Praag, C.M. van (September 10, 2012). Invited seminar on ‘Why do entrepreneurial parents have entrepreneurial children?’ (with J. Sol and M. Lindquist) at the Norwegian Business School, Economics Department, Oslo, Norway.

Praag, C.M. van (September 14, 2012). Invited discussant at the First CEPR Workshop on Incentives, Management and Organization at Bocconi University, Milan, Italy.


Praag, C.M. van (September 22, 2012). Invited participant in Round Table Policy Discussion (with R. Fairlie and S. Parker) 3rd HEC Workshop on Entrepreneurship on ‘Entrepreneurship Education Evaluation’.

Praag, C.M. van (October 19, 2012). Invited workshop lecture ‘Why do entrepreneurial parents have entrepreneurial children?’ (with J. Sol and M. Lindquist) at the Nederlandse Economendag, De Nederlandsche Bank, Amsterdam.


Schinkel, M.P. (September 2-4, 2012). Presentation on State-aided Price Coordination in Dutch Mortgage Banking at the 2012 Congress of the European Association for Research in Industrial Economics (EARIE), Rome, Italy.

Schinkel, M.P. (June 20, 2012). Presentation on State-aided Price Coordination in Dutch Mortgage Banking at the 8th annual ELEA Symposium, College of Europe, Bruges, Belgium.


Soetevent, A.R. (March 5, 2012). Bidding to Give in the Field: Door-to-Door Fundraisers Had it Right from the Start. Seminar EIPE, Erasmus University Rotterdam.


Other lectures


Praag, C.M. van (February 1, 2012). SER Symposium De Kracht van de Stille Arbeidsrevolutie Keynote lecture.


Praag, C.M. van (July 3, 2012). Invited lecture/discussion on Self-employed Entrepreneurship (ZZP) at the Wiardi Beckman Stichting of the PvdA, Den Haag.

Praag, C.M. van (September 3, 2012). Minicollege Glazen Huis Spui, UvA, Start of the Academic Year “Ondernemerschap, kun je dat leren?”.

Praag, C.M. van (November 3, 2012). SER/NCR Symposium “Wat is De Kracht van de Cooperatie?”.

Praag, C.M. van (October 10, 2012). ERIM Erasmus PhD Course on Entrepreneurship, Rotterdam.


Ven, J. v.d. (May 31-June 2, 2012). Buying lies: The effects of interaction and context on the ability to detect deceit, paper ASFEE, Montpellier, France.

Ven, J. v.d. (June 4, 2012). Buying lies: The effects of interaction and context on the ability to detect deceit, paper. MBEES, Maastricht.

Ven, J. v.d. (June 21-24, 2012). Buying lies: The effects of interaction and context on the ability to detect deceit, paper. ESA, New York, USA.


Conference organiser

Praag, C.M. van (February 1, 2012). SER Symposium De Kracht van de Stille Arbeidsrevolutie (joint with Esther Raats-Coster and Linde Gonggrijp).

Praag, C.M. van and L. Rosendahl Huber (May 30, 2012). ACE event “Effecten van Onderwijs in ondernemen op de basisschool”, Aula UvA, where we offered the research report to Crown Princess Maxima. Other speakers Caroline Gehrels (City of Amsterdam), Chris Buijink (Ministry of Economic Affairs), Alexander Rinnooy Kan (SER) and various young entrepreneurs.

Praag, C.M. van (July 8-14, 2012). Organizer of the First Residence Week of Scholars in Entrepreneurship, Oxford, (joint with Prof S. Estrin, LSE and Prof D. Audretsch, Indiana University in Bloomington).


Praag, C.M. van (2012-2013). Organizer of the lecture/discussion series on Behavioral Economics in the AAC (Amsterdam Academic/Faculty Club), (joint with Prof J. Hartog).

Praag, C.M. van (October 8, 2012). FEB Seminar Peter Thompson Markets & Organizations group seminar: New firm performance and the replacement of founders, organized by ASE and ACE.

Schinkel, M.P. (April 20, 2012). Member of the 8th annual ACLE Competition & Regulation Meeting on Behavioral Competition and Regulation, Amsterdam.

Schinkel, M.P. (2012). Member of the ACE steering committee.

Schinkel, M.P. (2012). Member of the Program Committee of the IIOC.


**Editorship**
Praag, C.M. van (2005-). Associate Editor *Small Business Economics*.
Praag, C.M. van (2012-). Associate Editor of *IZA Journal of European Labor Studies*.
Soetevent, A.R. (2012). Associate editor *De Economist*.

**Membership academies**
Praag, C.M. van (2003-). Research Fellow Tinbergen Institute.
Praag, C.M. van (2005-). Research Fellow IZA Institute for Labour Market Research, Bonn.
Praag, C.M. van (2005-). Research Fellow IZA Institute for Labour Market Research, Bonn.
Praag, C.M. van (2010-). Research Fellow ACLE.
Praag, C.M. van (2010-). Member of the Koninklijke Hollandsche Maatschappij der Wetenschappen.
Praag, C.M. van (January 24, 2012). Member of the Small PhD Committee of Xavier Baeten “Firm Level Corporate Governance Characteristics and CEO Remuneration: A Cross-National European Study”, Ghent University, Belgium (supervisor Prof Lutgart van den Berghe).
Praag, C.M. van (2009-). Member of the Curatorium of the Chair “Ethnic entrepreneurship”, IMES UvA (Sponsored by VNO NCW).
Praag, C.M. van (2007-). Member of the Supervisory Board of the EIM scientific program ‘SME’s and entrepreneurship’.
Praag, C.M. van (2010-). Research Affiliate, Statistics Norway, Oslo, Norway.
Praag, C.M. van (September 28, 2012). Member of the PhD Committee of Bart Sleutjens, Utrecht University.
Praag, C.M. van (2011-2012). Chair of the Supervisory Committee of the Academic Study Group (led by Prof dr E. Stam) that was commissioned by the AWT (Adviesraad voor het Wetenschaps- en Technologiebeleid) to study Ambitious Entrepreneurship: A review of the academic literature and new directions for public policy. Based on this the AWT wrote an advisory letter to the Minister of Economic Policy and Innovation.
Praag, C.M. van (2005-). Founding academic Director of the Amsterdam Center for Entrepreneurship.
Praag, C.M. van (2008-). Member of the Supervisory Board of APG Group NV.
Praag, C.M. van (2010-). Member of the Board of SEO Economisch Onderzoek.
Praag, C.M. van (2011-). Member of the CPC (Supervisory Board of the CPB).
Praag, C.M. van (2011-). President of the Amsterdam Academic Club.
Praag, C.M. van. (2010-). Member Raad van Toezicht Kriterion.
Praag, C.M. van (2009-). Member of the Board of the Dutch Friends of the Tel Aviv University.
Praag, C.M. van (2012-). Member of the Advisory Council of Social Enterprise Netherlands.
Seldeslachts, J. (2012). EARIE, EEA.
Sloof, R. (September 2012). Member of PhD committee Adrian de Groot Ruiz, University of Amsterdam, Essays on Bargaining and Strategic Communication.
Sloof, R. (2008-). Fellow of the Amsterdam Center for Law and Economics.
Soetevent, A.R. (2006-). Fellow ENCORE.
Soetevent, A.R., (2008-). Fellow ACLE.

**Relevant positions**

116


Seldeslachts, J. (2012). Wetenschappelijke Raad voor het Regeringsbeleid (WRR), The Hague, Member of Expert Committee on Antitrust.


13. SEO ECONOMIC RESEARCH

**Subprogrammes:**
- Labour Economics & Education
- Health Economics & Social Security
- Regulation & Competition Policy
- Aviation Economics
- Cost-benefit & Business
- Market and Government

**Programme director:** Prof. dr. B.E. Baarsma

**METIS-code:** uva/feb/ase/seo

**JEL-classification:** I, J, L, Q, R

**Website:** www.seo.nl

### 13.1 MEMBERS OF THE RESEARCH GROUP AND RESEARCH IN FTES

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13.2 PROGRAMME DESIGN

SEO Economic Research was founded in 1949, as a research institute of the Faculty of Economics at the University of Amsterdam, to encourage applied research. Since the 1980s it has been financially independent from the university, while retaining close links with the academic community.

SEO carries out contract research for ministries and public organizations, private companies and non-profit institutions, nationally and internationally. SEO distinguishes itself from commercial research bureau’s by its analytical approach. Modern economic analysis is applied to practical issues. Empirical questions are tackled with the econometrics toolkit.

SEO is not linked to vested interests or political parties and research questions are approached with an independent scientific mindset.

SEO Economic Research is a medium-sized horizontal organisation. It has an academic staff of about 40 economists and econometrists. When a research question has multiple dimensions SEO can call upon specialists from other disciplines – often from within the University of Amsterdam - such as the Amsterdam Institute for Advanced Labour Studies (AIAS) and the Institute for Information Law (IViR).

Structure

SEO Economic Research consists of six research groups or sections organised along fields of economic research. A first section is Labour Economics & Education which specialises in labour market, labour market policy, schooling and training research. Research topics deal with employability, transition from school to work, temporary work, re-integration and exit from unemployment, wage differentials, employment benefits, migration, schooling and work and the evaluation of educational policies.

The section Health Economics & Social Security analyses developments in healthcare and social security, with research often shaped by the highly regulated nature of these two sectors. This section specialises among others in market analyses, effectiveness and cost-benefit studies and budgeting and costing systems.

Research in the section Regulation & Competition Policy concentrates on the design, analysis and evaluation of competition and government intervention. The section deals with issues related to the structure, conduct and performance of markets and sectors, regulation and deregulation, economic aspects of cartels, mergers, market dominance and other topics in the field of competition. It assesses new or established regulations and policy from the perspective of law and economics.

Aviation Economics is a section specializing in aviation economics. It advises governments, airlines, airports, financial institutions and other interested parties on the economic issues related to aviation. Aviation Economics activities include operations research, econometric
analyses and forecasting, feasibility studies and research into competition and market issues, as well as work in transport and regional economics. The Market & State section specialises in the economic analysis of state aid and public tenders. Economic organization and the boundaries between public and private economic activity are other issues that are dealt with in this section.

Organisation
SEO Economic Research is governed by a six-member Executive Board. Day-to-day policy is in the hands of the general director and the scientific director and of the management team, which consists of both directors and the section heads. SEO Economic Research also has an Advisory Board which meets yearly to review its research programme.

13.3 PROGRAMME EVALUATION

Academic publications by researchers at SEO Economic Research are often a spin-off from contract research which is SEO’s core activity. This year 31 articles were published in refereed journals or refereed books. The number of non-refereed academic publications was substantial. In 2012 SEO researchers published 57 commissioned reports and 123 other publication such as popular publications and newspaper articles.

13.4 RESOURCES AND FUNDING

SEO Economic Research has set up an internal fund for scientific research (WEO) which allots time to researchers working at SEO and which enables them to prepare papers for scientific publications and to participate in economic conferences. This fund has also a provision to finance time spend on preparing a doctoral dissertation and to participate in (international) economic conferences. Researchers at SEO Economic Research publish regularly in national and international professional journals. Only by publishing and lecturing, a research institute stays ‘alert’ and keeps abreast of the newest developments in applied economic research. Core activity is contract research and the majority of research funding originates from contract parties.


13.5 OUTPUT

Key publications
Lammers, M., Bloemen, H. & Hochguertel, S. (2012). Job search requirements for older
unemployed: Transitions to employment, early retirement and disability benefits. European Economic Review. 


Publications in numbers

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Article in journal - refereed

B


123


**Other**


**Article in journal - non-refereed**

**Article in journal – professional**


*Het Financieele Dagblad*, 7.


Paridon, M. van (2012). *De zin aan het werk; over bezieling in het leven en werk*. Interview met B. Baarsma. (pp. 78-81) Amsterdam: uitgeverij Wereldbeeld.


Wilbrink, M. (2012, 28 February). Planbureau 'We moeten het koesteren, het disciplineert het debat' - Binnenhof wacht op pijnlijk verhaal CPB. B. Baarsma over de economische ramingen van het CPB. De Stentor.


**Book / book chapter – refereed**


**Book / book chapter – non-refereed**


**Book / book chapter – professional**


**Book / book chapter – popular scientific**


Conference paper – non-refereed

Report – professional


Report – working- and discussion papers


Burghouwt, G. & Dobruszkes, F. (2012). The (mis)fortunes of exceeding a small local air market: comparing Amsterdam and Brussels.


Media appearance


Editorship
Baarsma, B. (2012). Member of the Editorial Board Tijdschrift voor Toezicht.

Keynote/invited talk


Baarsma, B.E. (2012, 18 October). Make them an offer they can’t refuse: Over de uitdagingen en kansen van de asset manager. Waterside Convention, Amsterdam.


Krul, J. (2012, 8 May). *By plane of course: the role of air transport in the development of international tourism. VUGS symposium The future of tourism, Utrecht.*


Other lectures

Membership academies
Baarsma, B. (2012). Member of the Academisch Genootschap Aanbesteden.

Burghouwt, G. (2012). Member of Ph.D. committee of Franziska Kuper, University of Antwerp, Antwerp.

Relevant position
Baarsma, B. (2012). Crown member of the SER, Member of the Supervisory Board of Loyalis NV (member Audit Committee), Member of the Supervisory Board of the St. Elisabeth Hospital Tilburg, Member of the Supervisory Board of BNN, Member of the Supervisory Board of Espria, Member of the Supervisory Board of Woonzorg Nederland, Member of the Audit Committee of FNV Bondgenoten, Member of the Advisory Board of Peak Invest (education), Member of the Supervisory Board of the G500 (political youth movement), Non-governmental expert on behalf of the


